

**Draft Environmental Assessment for an Air Tour
Management Plan for
Canyon de Chelly National Monument**

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1 PURPOSE AND NEED

1.1 Introduction

The Federal Aviation Administration (FAA), the National Park Service (NPS) (together, “the agencies”), are working together to develop an air tour management plan (ATMP) pursuant to the National Parks Air Tour Management Act of 2000 (the Act) and a draft Environmental Assessment (EA) for Canyon de Chelly National Monument (hereafter referred to as the “Park”). Due to the unique nature of the Park being entirely located on Navajo Nation Tribal trust lands, the agencies have worked cooperatively with the Navajo Nation in developing the ATMP. The Act was signed into law on April 5, 2000. The Act applies to all commercial air tour operations over a unit of the National Park System. The Park encompasses approximately 84,000 acres in northeastern Arizona within the Defiance Plateau on Tribal lands held by the United States in trust for the Navajo Nation. Roughly 40 families reside within the Park boundaries.

The Navajo Nation serves in three roles on this project. First, they are a sovereign, or independent, nation in the nation-to-nation consultation with the agencies. The Navajo Nation was invited to be a cooperating agency, and although no formal acceptance was received, they participated as a cooperating agency and engaged in the development of the ATMP. Finally, the Nation is a consulting party for compliance with Section 106 of the National Historic Preservation Act (NHPA). Throughout this document, the terms Navajo Nation, Navajo, and Diné are used. Navajo Nation refers to the government; Navajo refers to the Tribe prior to the formation of the Navajo Nation, and Diné refers to the people, or members, of the Navajo Nation. Navajo/Diné can be used interchangeably.

The Act requires the FAA, in cooperation with the NPS, to develop an ATMP or Voluntary Agreement for parks and Tribal lands where operators have applied to conduct commercial air tours. The Act provided for existing commercial air tour operations occurring at the time the law was enacted to continue until an ATMP for the Park was implemented by expressly requiring the FAA to grant interim operating authority (IOA) to existing operators.^{1,2} Currently, four commercial air tour operators are authorized to conduct air tours over the Park with IOA for 175 commercial air tours annually, but only one commercial air tour operator currently operates. IOA includes only an annual cap on the number of commercial air tours that may be conducted by an operator but does not designate the routes, time-of-day, altitudes, or other conditions for such tours.

The objective of the ATMP is to develop acceptable and effective measures to mitigate or prevent the significant adverse impacts, if any, of commercial air tour operations on the Park’s

¹ 49 U.S.C. § 40128(c)(2)(A)(i-ii).

² 70 Federal Register 58,778 (Oct. 7, 2005).

resources and values. Because the Park is located entirely on lands held in trust by the United States for the Navajo Nation, the Park's resources and values consist primarily of Navajo Nation cultural resources, including archeological sites, sacred sites, ancestral sites, cultural landscapes, cultural and ceremonial practices, and traditional cultural properties; related natural resources; and the privacy interests of the Navajo Nation residents living within the ATMP planning area. The regulations implementing the Act are found in Title 14, Code of Federal Regulations (CFR), Part 136, *Commercial Air Tours and National Parks Air Tour Management* (14 CFR Part 136). This draft EA is being prepared in accordance with the National Environmental Policy Act of 1969 (NEPA) (42 United States Code (U.S.C.), 4321 et seq.), Council on Environmental Quality (CEQ) NEPA implementing regulations (40 CFR Parts 1500-1508), the 2015 FAA 1050.1F Order, *Environmental Impacts: Policies and Procedures*, and NPS NEPA policies and procedures (2015 NPS NEPA Handbook and 2015 NPS NEPA Handbook Supplemental Guidance - *Writing Impact Analysis Sections for EAs and EISs*).

The term commercial air tour operation is defined (see 14 CFR § 136.33[d]) as any flight conducted for compensation or hire in a powered aircraft, where a purpose of the flight is sightseeing over a park or within ½-mile outside a park's boundary during which the aircraft flies:

- Below 5,000 feet (ft.) above ground level (AGL) (except solely for the purposes of takeoff or landing, or necessary for safe operation of an aircraft as determined under the rules and regulations of the FAA requiring the pilot-in-command to take action to ensure the safe operation of the aircraft); or
- Less than one mile laterally from any geographic feature within the Park (unless more than ½-mile outside the Park boundary).

The area subject to the ATMP is also referred to as the area within the ATMP boundary or the ATMP planning area (Figure 1).

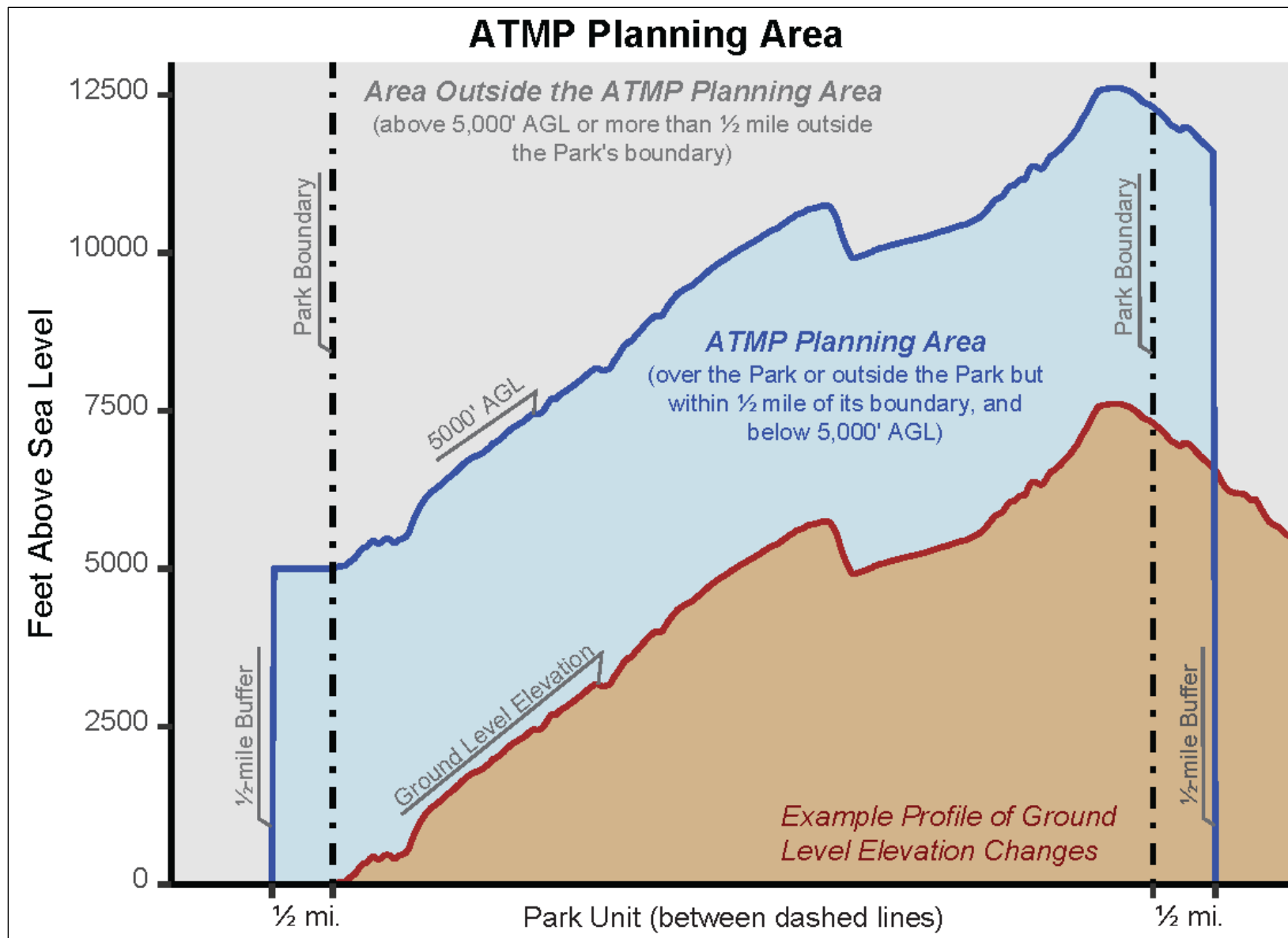


Figure 1. Geographic Depiction of the ATMP Planning Area.

1.2 Background

On February 14, 2019, Public Employees for Environmental Responsibility and Hawai'i Coalition Malama Pono filed a petition in the U.S. Court of Appeals for the District of Columbia Circuit requesting that the Court order the agencies to complete ATMPs for seven parks. On May 1, 2020, the Court granted the petition and ordered the agencies to submit a schedule to bring 23 eligible parks (based on reported air tour data from 2018) into compliance with the Act within two years or to show specific, concrete reasons why doing so will take longer. Consistent with the Court's order, agencies submitted a proposed plan and schedule (Compliance Plan) on August 31, 2020. On June 21, 2022, the Court ordered the agencies to file a joint supplemental report and propose firm deadlines for bringing each of the parks included in the Compliance Plan into compliance with the Act. On July 21, 2022, the agencies filed their report and provided a deadline of December 31, 2024 to complete the ATMP for the Park.

The agencies conducted a number of consultations and engagements with Tribal nations and public agencies pursuant to a number of regulations. The FAA, in coordination with the NPS, initiated consultation with the Navajo Nation and 23 additional Native American Tribes (Tribes) under Section 106 of the NHPA in May 2021. From May 2021 thru December 2023 the agencies consulted via letters, meetings, a webinar, and phone calls with the Navajo Nation President's Office, the Navajo Nation Tribal Historic Preservation Officer, Navajo Nation Chapter House Councils and Delegates that overlay the Park, the Navajo Nation Division of Natural Resources and its following offices: Fish and Wildlife, Heritage and Historic Preservation, and Parks and Recreation (Appendix I). In addition, the Division of Transportation and the Tourism Office within the Division of Economic Development were also engaged in meetings during the planning process.

Based on feedback during these consultations, the agencies agreed to prepare a draft EA to evaluate reasonable alternatives for the ATMP.

1.3 Proposed Action

The Proposed Action is to implement an ATMP for the Park. The Act defines an ATMP as a plan used to develop acceptable and effective measures to mitigate or prevent the significant adverse impacts, if any, of commercial air tour operations upon natural and cultural resources, visitor experiences, and Tribal lands. An ATMP describes conditions for the conduct of air tour operations over a park, including routes, altitudes, time-of-day restrictions, restrictions for particular events, maximum numbers of flights, or other provisions. The Act and implementing regulations found in 14 CFR Part 136 state that the ATMP for a park:

- May prohibit commercial air tour operations over a national park in whole or in part;
- May establish conditions for the conduct of commercial air tour operations, including, but not limited to, commercial air tour routes, maximum number of flights per unit of

time, maximum and minimum altitudes, time of day restrictions, restrictions for particular events, and mitigation of noise, visual, or other impacts;

- Shall apply to all commercial air tour operations over a national park or within ½-mile outside the park's boundary;
- Shall include incentives (such as preferred commercial air tour routes and altitudes, relief from caps and curfews) for the adoption of quiet aircraft technology by commercial air tour operators conducting commercial air tour operations at the Park;
- Shall provide for the initial allocation of opportunities to conduct commercial air tour operations if the plan includes a limitation on the number of commercial air tour operations for any time period; and
- Shall justify and document the need for measures taken pursuant to the items above and include such justifications in the record of decision.

The ATMP will prescribe operating parameters to mitigate impacts from commercial air tours on Park resources. This document considers and evaluates two alternatives for the Park's ATMP.

1.4 Purpose and Need

Purpose: The purpose of the ATMP is to comply with the Act and other applicable laws, consistent with the *Plan and Schedule for Completion of Air Tour Management Plans at Twenty-Three Parks* approved by the U.S. Court of Appeals for the District of Columbia Circuit on November 20, 2020 in Case No. 19-1044, *In Re Public Employees for Environmental Responsibility and Hawai'i Coalition Malama Pono* (Compliance Plan).

Need: The Park was previously exempt from the portion of the Act that requires the agencies to establish an ATMP or voluntary agreement for commercial air tours. On November 2, 2017, the NPS withdrew the Park's exemption (Appendix J). Thus, the Act requires an ATMP or voluntary agreement to be developed for the Park. Air tours have the potential to impact natural and cultural landscapes and resources, Tribal privacy, and Native American TCPs, including Native American sacred landscapes, sites, and ceremonial areas. The Act requires that the agencies develop acceptable and effective measures to mitigate or prevent significant adverse impacts, if any, of commercial air tour operations on these resources.

1.5 Environmental Impact Categories Not Analyzed in Detail

The following environmental impact categories were considered but not analyzed in detail in the draft EA because:

- The topics do not exist in the analysis area, or would not be affected by the ATMP; or
- The likely impacts are not reasonably expected.

Biological Resources (Fish, Amphibians, Invertebrates, and Plants)

The ATMP would not result in ground disturbance or in-water activities that could affect fish, amphibians, invertebrates, or plants.

Noise from aircraft has been demonstrated to influence the behavior of ecologically significant pollinators and seed dispersers in natural and human-altered landscapes (Francis et al., 2012; Gallardo Cruz et al., 2021). Specifically, Francis et al. (2012) studied the effect of compressor noise running continuously and generating noise at high amplitudes (greater than 95 decibels [dB] at a distance of 1 meter). Within the study, experimental sites were established 125 to 150 meters from the noise source. Noise exposure had an indirect positive effect on pollination by hummingbirds but an indirect negative effect on piñon pine seedling establishment by altering the composition of animals preying upon or dispersing seeds. In contrast to the experimental design of this study, commercial air tours do not generate continuous noise. In addition, the Proposed Action would eliminate air tours from the ATMP planning area. Therefore, the agencies have determined that noise associated with the ATMP is unlikely to result in impacts on plants or plant pollination.

Air tours could result in some effects on air quality, such as emissions or the potential for low-flying aircraft to generate dust, which could indirectly affect plants. However, the Proposed Action would eliminate air tours from the park and would not result in any emissions in the ATMP planning area; therefore, it is unlikely that there would be any meaningful impact on plants.

For these reasons, the agencies have dismissed these impact topics from further analysis.

Geologic Resources

While geologic resources is not an impact category FAA traditionally examines, the NPS has agency-wide policies (see *NPS Management Policies 2006* (NPS, 2006a), Chapter 4) for managing geologic resources within the National Park System. Geologic features are the products and physical components of geologic processes and include rocks, caves, canyons, terraces, rock outcrops and formations, and paleontological resources. Geologic processes are the natural physical and chemical forces that act within natural systems and on human developments across a broad spectrum of space and time and include erosion, sedimentation, and volcanic activity, among others. The bedrock of the Park predominantly consists of Paleozoic and Mesozoic sedimentary rocks that have been heavily eroded and incised to form Canyon de Chelly, Canyon del Muerto, and smaller tributary canyons. Units mapped within the Park include the Pennsylvanian–Permian Supai Formation, Permian Cutler Group, and the Triassic Chinle Formation (NPS, 2022a). The scenic red cliff exposures in the Park consist of the De Chelly Sandstone of the Cutler Group, which rise from the wash to heights of up to 366 meters (1,200 ft). Many geologic features have cultural significance to associated Tribes and

those associations are analyzed under cultural resources. Under the No Action Alternative, commercial air tours would continue to occur over these features. Commercial air tours currently occur at altitudes between 800 and 1,000 ft. AGL. A review for potential vibrational impacts on natural features suggests that the potential for damage resulting from fixed-wing propeller aircraft overflights is minimal, as the fundamental blade passage frequency of the aircraft is well above the resonant natural frequency of these features (i.e., the natural vibrational tendency associated with a structure). Additionally, the vibration amplitude associated with fixed-wing aircraft overflights is well below recommended limits described to avoid structural damage (Hanson et al., 1991; Volpe, 2014). In addition, the Proposed Action would eliminate air tours from the ATMP planning area; therefore, no vibrational impacts to geologic resources within the ATMP planning area would be anticipated under either of the alternatives.

Children's Environmental Health and Safety Risks

The ATMP would not affect products or substances that a child would be likely to come into contact with, ingest, use, or be exposed to, and would not result in environmental health and safety risks that have the potential to lead to a disproportionate health or safety risk to children. Therefore, this topic has not been analyzed in detail in the draft EA.

Hazardous Materials, Solid Waste, and Pollution Prevention

While air tours over the Park would not be allowed under the Proposed Action, the agencies cannot speculate if, where, or when an air tour accident or incident may occur or the degree of Park resource damage.

Air tour operators must comply with all applicable federal, state, and local rules and regulations pertaining to the proper storage, handling, and use of hazardous materials. The ATMP would not result in impacts regarding hazardous materials, solid waste, and pollution prevention because it would not 1) violate laws or regulations regarding hazardous materials and/or solid waste management; 2) involve a contaminated site; 3) produce an appreciably different quantity or type of hazardous waste; 4) generate an appreciably different quantity or type of solid waste or use a different method of collection or disposal; 5) exceed local capacity; or 6) adversely affect human health and the environment. Therefore, the ATMP is not expected to result in impacts related to hazardous materials and this topic has not been analyzed in detail in the draft EA.

Farmlands

The ATMP planning area, as described in Section 2.3, ATMP Planning Area, contains some areas that are designated as prime farmland if irrigated, and the Diné actively farm some areas of the Park. However, the ATMP would not involve ground disturbance that would have the potential to convert farmland to non-agricultural uses. In addition, the Proposed Action would eliminate

air tours from the ATMP planning area. Therefore, this impact topic has not been analyzed in detail in the draft EA.

Land Use

Land use refers to the general characteristics of how land is allocated among various administrative, preservation, recreational, and development needs. The ATMP would not result in ground-disturbing activities, and commercial air tours would not take off or land within the ATMP planning area. In addition, the Proposed Action would eliminate air tours from the park. The impacts on land use are not reasonably expected; therefore, land use is not analyzed in detail in the draft EA.

Natural Resources and Energy Supply

Commercial air tours have been ongoing within the ATMP planning area prior to enactment of the Act. The ATMP would not result in the extraction of resources from the Park or cause measurable increases in the consumption of energy resources that would exceed available or future supplies of natural or energy resources. Therefore, this topic is not analyzed in detail in the draft EA.

Visual Effects – Light Emissions

Commercial air tours do not fly at night as it creates safety concerns when flying in areas with little artificial light on the ground surface, and points of interest that could otherwise be seen from an air tour are not visible at night. Any lights from commercial air tour aircraft are not likely to be noticeable. In addition, the Proposed Action would eliminate air tours from the ATMP planning area. Therefore, light emissions are not expected to occur as a result of the ATMP and this topic has not been analyzed in detail in the draft EA.

Water Resources (Including Wetlands, Floodplains, Surface Waters, Groundwater, and Wild and Scenic Rivers)

Due to the absence of Wild and Scenic Rivers, absence of ground-disturbing activities, and the proposed altitudes in the action alternative, the ATMP is unlikely to directly or indirectly adversely affect water resources. As noted above in the analysis for Hazardous Materials, Solid Waste, and Pollution Prevention, the agencies are unable to speculate if, where, or when an air tour accident or incident could occur and the Park resource damage that could result, including that related to hazardous material entering water resources within the ATMP planning area. In addition, the Proposed Action would eliminate air tours from the ATMP planning area. Therefore, water resources are not expected to be impacted as a result of the ATMP and have not been analyzed in detail in the draft EA.

Coastal Resources

The ATMP planning area for the Park does not include coastal areas or areas that are within a designated coastal zone. Therefore, coastal resources have not been analyzed in detail in the draft EA.

Wilderness

There is no eligible, proposed, recommended, potential, or designated wilderness in the Park. Therefore, this topic has not been analyzed in detail in the draft EA.

1.6 Park Overview

The Park consists of approximately 84,000 acres in northeastern Arizona within the Defiance Plateau on Tribal lands held by the United States in trust for the Navajo Nation. Generations of Navajo have lived in Canyon de Chelly, Canyon del Muerto, and Monument Canyon, where they maintain homes, farms, and traditional grazing lands. Approximately 80 Navajo families live in and around the monument or over six hundred individuals live in the canyon community. The Hopi and other modern pueblo Tribes are culturally associated with Canyon de Chelly and its former ancestral inhabitants. The purpose of the Park, as stated in its Foundation Document, is to maintain and preserve an outstanding concentration of archaeological resources, representing thousands of years of continuous occupation and agriculture, as well as other features of scientific, historical, and educational interest. The canyon preserves resources of sacred significance and perpetuates lifeways of past and present cultures ancestrally connected to these landscapes.

Canyon de Chelly National Monument within the Navajo Indian Reservation was established on April 1, 1931, by Presidential Proclamation #1945, with the consent of the Tribal Council of the Navajo Tribe of Indians and authorization of the United States Congress.³ Congress charged the NPS with the administration of the area of national monument, “so far as it applies to the care, maintenance, preservation and restoration of the prehistoric ruins, or other features of scientific or historical interest within the area.” However, Congress also provided that the legislation authorizing the establishment of the monument shall not “be construed as in any way as impairing the right, title, and interest of the Navajo Tribe of Indians which they now have and hold to all lands and minerals, including oil and gas, and the surface use of such lands for agricultural, grazing, and other purposes, except” for the NPS’s legislatively defined role and responsibilities.

³ An Act to authorize the President of the United States to establish the Canyon De Chelly National Monument within the Navajo Indian Reservation, Arizona, 71 Pub. L. 66746 Stat. (1931); Proclamation No. 1945, 47 Stat. 2448 (1932).

In addition to the NPS's Organic Act that applies to resources within the Park, the Navajo Nation has enacted legal protections that apply to the Park. Resolution of the Resources Committee of the Navajo Tribal Council, 1985 (RCS-51-85) – established a protection zone within the boundaries of the Park to protect its resources from activities and developments deemed to be a threat or an adverse impact until a joint management plan between the Navajo Nation, Bureau of Indian Affairs, and the NPS could be developed. That Resolution also established a moratorium on new construction and development within the Park's boundary. The Navajo Nation Cultural Resources Protection Act of 1988 (Navajo Nation Code, Title 19) – Section 1011 requires all cultural properties on Navajo lands, including those in the National Park System, to be included in the Navajo Nation Register of Cultural Properties.

In 2018, the Navajo Nation, the NPS and the Bureau of Indian Affairs entered into a Strategic Agreement for the Cooperative Stewardship of Canyon de Chelly. The parties to the Strategic Agreement recognized that Canyon de Chelly remains the Navajo Nation's Tribal trust lands, over which the Navajo Nation has sovereign authority. The NPS manages the Canyon de Chelly National Monument under federal authority. The Navajo Nation retains authority, in accordance with Navajo Nation and federal law regarding trust assets. In the Strategic Agreement, the parties agreed "[t]o respectfully share stewardship of the Canyon values and to protect and preserve its beauty, resources and culture for the future – Hozho Dooleef." The Strategic Agreement outlined key management roles and responsibilities for the administration of Canyon de Chelly pursuant to existing policies, statutes and regulations. A joint/co-management plan by the Navajo Nation and the NPS is currently underway.

The NPS honors its unique nation-to-nation relationship regarding decisions affecting the Park, particularly because the Park is located on trust lands. The NPS is entrusted with the management of over 85 million acres of Federal lands and waters that are the ancestral homelands of Indian and Alaska Native Tribes, and Native Hawaiians that predate the National Park System. As stewards, the NPS is entrusted to conserve these resources for future generations, including resources, sites, and vistas that hold significance to Indigenous peoples who have lived on and cared for the land since time immemorial. The NPS recognizes and supports the unique, nation-to-nation relationship that exists with the Navajo Nation that is based in the U.S. Constitution, treaties, statutes, and judicial decisions. In managing the Park, the NPS is required to honor its trust responsibilities to protect Tribal interests, pursue an open and collaborative relationship with the Navajo Nation, and provide for the continuation of the cultural and spiritual practices of the Navajo people.

The NPS identified five statements of significance for the Park, or statements explaining why the Park's resources and values are important enough to merit designation as a unit of the National Park System, in the Park's Foundation Document. Those statements include Relationships, Cultural Continuity, and Cultural Resources.

Cultural Continuity refers to the fact that the Park “...preserves one of the longest continually inhabited locations by American Indian communities in the United States, spanning at least 5,000 years. Tséyi’, the place within the rock, sustains a living community connected to a landscape of great historical and spiritual significance—a landscape composed of places infused with collective memory and defining moments in Navajo history. It is essential to the spiritual and traditional lives and cultural identity of many native peoples.”

Cultural Landscapes, Continuing Cultural Connections, Experience of Place, and Partnerships and Relationships are among the Park’s fundamental resources and values identified in its Foundation Document. As the Park’s foundation document explains, “Canyon de Chelly is fundamentally linked to the cultural practices and beliefs of the Navajo and other traditionally associated groups and is central to the perpetuation of their respective cultural identities.” It notes that “[s]pecific places and natural features (e.g., Spider Rock, Fortress Rock, and celestial features) are physical expressions of the defining stories and events in the history of the Navajo people and retain profound spiritual and sacred significance.” It further recognizes that “[f]or the Navajo people (Diné), Canyon de Chelly (Tséyi’) is a physical and spiritual home that sustains the families who live in the canyons as well as a sacred place connecting all Navajo to their cultural heritage and beliefs. Canyon de Chelly also has enduring cultural importance for the other regional native peoples whose ancestors once occupied the canyons.” Consistent with these fundamental resources and values, the NPS prohibits visitors from entering the canyons of Canyon de Chelly National Monument unless accompanied by NPS employees or by authorized guides. 36 CFR § 7.19.

The most significant cultural and natural resources within the ATMP planning area include archeological sites, Tribal sacred sites, traditional cultural properties, and ancestral sites, many of which are listed in National Register of Historic Places (National Register) or are eligible for listing. The Park’s archeological resources provide evidence of occupation through the Archaic, Basketmaker, and Puebloan periods. Many of the sites are cliff dwellings containing large amounts of dry, cultural debris. In addition, 18th, 19th and 20th century A.D. sites of Navajo occupancy remain in the Park. The archeological resources within the Park make up one of the most important and extensive archeological landscapes in the Southwest, expanding over the past 5,000 years. Archeological inventories have resulted in the identification of approximately 1,600 sites throughout the Park, some of which may be considered traditional cultural properties by Tribes. Pre-Columbian archeological sites are a source of spiritual, sacred power to the Navajo people. Offerings are made at these sites, and oral histories (of the people, of ceremonies, of clans) refer to these places. The White House ruins and Spider Rock are two archeological sites and traditional cultural properties within the Park that are still used in ceremony for the Diné People. Both sites are eligible for inclusion in the National Register because of their ancestral connection with cultural practices or beliefs that are rooted in various Southwestern Native American histories and because they are important in maintaining cultural identity.

Today, the Park is occupied by Navajo families who farm and have livestock operations within the canyons, carrying on their traditional practices. Approximately 80 Navajo families live in and around the monument or over six hundred individuals live in the canyon community. This community is one of the longest, continually inhabited Native American communities in the United States.⁴

Visitors can tour the Park's canyons only by hiking, horseback or vehicle with an authorized Navajo guide and after obtaining a backcountry permit from the Navajo Nation's Parks and Recreation Department and the NPS. However, visitors may take a self-guided hike to the White House Overlook and Trail (currently closed due to safety and law enforcement concerns), and scenic drives along the north and south rim from which visitors can access overlooks open year-round and experience expansive views of high desert mesas, vegetation, dark night skies, and distant mountains.

The Park's Foundation Document recognizes that "[a] strong ethic of stewardship for protecting the canyons and the natural world permeates everyday life and is passed on from Navajo elders to younger generations." The Park's natural resources include those that are a result of geological processes of uplift and erosion that have exposed the Park's colorful red cliffs of the de Chelly sandstone which rise from the wash to heights of up to 1,200 feet and contribute to the scenic values of the Park. Towering spires of erosion-resistant sandstone and cap-rock (such as Spider Rock and Face Rock) rise from the canyon floor. Dependable water from springs and seeps, and streams originating from the Chuska Mountains, eventually reach Chinle Wash. Water and the rich soils of the canyons support a variety of native and introduced plants and animals that have sustained canyon residents for thousands of years. A variety of avian species may be found within the Park, including raptors and migratory birds. Species potentially affected by overflights, including two federally listed threatened species – the Mexican spotted owl and yellow-billed cuckoo.

The following Park management objectives relate to the development of this ATMP:

- Preserve one of the longest continually inhabited Native American communities in the United States by protecting residents' right to privacy on their homesites and land use areas, and limiting disruption and noise for Tribal residents who live on Tribal trust lands within the Park with a livelihood through agriculture, livestock grazing, and tourism.
- Protect the cultural landscape of the Park as evidenced by prehistoric, historic, and contemporary land uses adapted to the natural environment of the canyons. The Park has sacred cultural and spiritual value for the Diné, This includes specific places and natural features (e.g., Spider Rock, Navajo Fortress, and celestial features) that are physical expressions of the defining stories and events in the history of the Navajo

⁴ Letter from the Navajo Nation President to FAA and NPS, April 11, 2023

people and retain profound spiritual and sacred significance. Provide outstanding opportunities to study and contemplate the intimate relationships between the land and people of the Park.

- Protect individuals and populations of wildlife species known to be sensitive to the effects of aircraft overflights, primarily migratory birds, and the federally listed Mexican spotted owl.
- Protect visitors' and Navajo residents' opportunities to experience quiet and solitude in a remote natural setting, and to hear and enjoy natural sounds with minimal interference due to noise.
- Protect the remarkable scenic views of the Park's colorful sandstone cliffs, canyons, and rock towers set against a backdrop of ancient cliff dwellings and Navajo communities.

2 ALTERNATIVES

2.1 Alternatives Development

An NPS interdisciplinary team comprising subject matter experts from the NPS's Natural Sounds and Night Skies Division, Environmental Quality Division, Intermountain Regional Office, and the Park developed the action alternative to be considered in this EA in consideration of Park management objectives and based on information and Tribal input received during consultation with the Navajo Nation, specifically the Navajo Nation President Divisions and Departments within the Executive Branch, and local Chapters and Tribal members. The team evaluated the noise impacts of existing air tour routes and operations, the cultural and natural resources within the Park, existing and natural acoustic environment, visitor experience, and visual resources. Because the Park is located entirely on lands held in trust by the United States for the Navajo Nation, impacts on resources within the Park are impacts on Tribal trust resources and Tribal interests.

The NPS and Navajo Nation work in conjunction to manage Park resources and enable traditional and contemporary lifeways. Between March 2021 and December 2023, the agencies engaged with the Navajo Nation President's office and appropriate Departments regarding an ATMP for the Park. In 2022, communications continued with the Navajo Nation with an emphasis on communicating with Chapter House delegates and departmental representation within the Executive Branch. Navajo Chapters play an essential role in shared stewardship of the Canyon de Chelly area as local governmental entities. The Chinle, Tsaile-Wheatfields, Nazlini, Lukachukai, and Sawmill Navajo Chapters, which represent the Diné people that live in and around the Park, passed Resolutions that support an alternative that would not allow air tours over the Park. The Resolutions stated that overflights disturb residential areas, farmers and ranchers, domesticated animals, and wildlife, including endangered species; impact the serenity, peaceful enjoyment, and visitor experience of the natural soundscape; and produce safety and privacy concerns. These Resolutions were sent to the Navajo Nation President. In April 2023, Dr. Buu Nygren, President of the Navajo Nation, sent a letter to the agencies (the President's letter) forwarding the Chapters' Resolutions, all of which oppose air tours over the Park (Appendix I). In his letter President Nygren stated that he "supports the position of the Navajo people (approximately 600 individuals that live in and around the monument) for a Canyon de Chelly Air Tour Management Plan that does not allow any air tours over these sacred lands." Because the Park is located entirely on the Navajo Nation's Tribal trust lands, the agencies relied heavily on the input received from the Chapters, the President of the Navajo Nation, and representatives from Departments in the Executive Branch.

In developing the action alternative, the interdisciplinary team also considered the essential and foundational cultural elements that led to the establishment of the Park as they developed and evaluated alternatives. The primary purpose of the Park is to "maintain and preserve an

outstanding concentration of archeological resources, representing thousands of years of continuous occupation and agriculture, as well as other features of scientific, historical, and educational interest. The canyon preserves resources of sacred significance and perpetuates lifeways of past and present cultures connected to these landscapes” (NPS, 2016). The Park is located entirely on lands held by the United States in trust for the Navajo Nation, and Diné families still reside within the Park.

Consistent with the Park’s founding and purpose, Tribal sacred sites, eligible TCPs, and ancestral sites listed in or eligible for listing in the National Register of Historic Places (National Register) are some of the most significant cultural and natural resources of the Park. The archeological resources in the Park document thousands of years of human presence. It provides the most intact assemblage of perishable materials (e.g., basketry, sandals, reed mats) in the country, and one of the largest concentrations of pictographs and petroglyphs in North America (NPS, 2016). The Park is also inherently tied to the cultural practices and beliefs of the Diné and other traditionally associated groups and is central to the perpetuation of their respective cultural identities. It serves as a physical and spiritual home for the Diné and connects them to their cultural heritage and beliefs (NPS, 2016). Maintaining these resources and values is an essential component of the Park’s purpose.

Importantly, because the Park is located entirely on lands held by the United States in trust for the Navajo Nation, in developing the action alternative the interdisciplinary team carefully considered the United States’ unique trust obligations to the Navajo Nation and how best to safeguard Tribal resources and interests.

The alternative identified by the NPS and justifications for restrictions on commercial air tours were reviewed by the FAA, including the FAA’s local Flight Standards District Office (FSDO) who noted any aviation safety concerns. The two alternatives presented in this draft EA, including the No Action Alternative, represent the alternatives advanced for environmental review and incorporate Tribal feedback received to date on the ATMP planning efforts for the Park. During the NEPA process, the agencies, in consultation with the Navajo Nation, may consider additional alternatives or modifications to the action alternative in response to public, consulting party, agency, and Tribal comments on the draft EA and draft ATMP.

2.2 Alternatives Considered but Eliminated from Further Study

2.2.1 Air Tours within the ATMP Planning Area

The agencies considered but eliminated alternatives that would allow commercial air tours within the ATMP planning area, including at existing or reduced levels. These alternatives were eliminated from further study based on the information and input provided by the five Navajo Nation Chapters that represent the Diné people living in and around the ATMP planning area (Chinle, Tsaile-Wheatfields, Nazlini, Lukachukai, and Sawmill Navajo Chapters), representatives from Departments in the Navajo Nation Executive Branch, and the President of the Navajo

Nation regarding the impacts of air tours on Tribal privacy, Tribal sacred sites, and ceremonial areas and because they do not meet the purpose and need for the ATMP.

In particular, Resolutions from the Tsaile/Wheatfields, Lukachukai, Nazlini, Chinle, and Sawmill Navajo Chapters have expressed that overflights, including commercial air tours, are disruptive and limit Tribal members ability to engage freely in religious and cultural activities in the Park. Representatives from the Navajo Nation 's Executive Offices have also stated that disclosing the time and location of their sacred practices would violate their privacy. They consider the entire landscape of the Park to be sacred and believe air tours are inappropriate and constitute an adverse effect on the cultural landscape, wildlife, and plants. The representatives from the Navajo Nation have stated that overflights, including commercial air tours, have disturbed gatherings and traditional religious practices at sacred sites, impacted viewsheds to sacred geological formations and natural features, are inappropriate to the sacred landscape, and disrupt the tranquility of accessing the lands for reflection or cultural purposes. The Resolutions emphasized that overflights, including commercial air tours, have negative impacts on the cultural heritage of dances, traditional events, agriculture, and hunting, among other events and activities.

Based on Tribal input received from the Chapters, the Navajo Nation's President and Tribal members, the NPS determined that air tours inhibit the NPS's ability to meet the Park's purpose and values, which are described in its Foundation Document (NPS, 2016). The presence of commercial air tours interferes with Tribal connections to the sacred landscape of the Park primarily due to Tribal concerns about privacy. Canyon de Chelly preserves one of the longest continually inhabited locations by American Indian communities in the United States. Tséyi', "the place within the rock," sustains a living community connected to a landscape of great historical and spiritual significance. The Diné reside within the Park and continually practice their traditional and contemporary lifeways within the Park. Based on the information received during consultation, air tour patrons' observation of Tribal members as they carry out traditional activities, such as farming and other daily activities around their residences and religious ceremonies, invades the privacy of those carrying out these activities and diminishes the connections to the sacred landscape.

Air tours encroach on the Diné religious and cultural activities and could interrupt and diminish both the tangible and intangible associations the Diné experience during use of their TCPs, the protection of which is a significant Park purpose. Because continuing cultural connections to the Park and relationships are fundamental values of the Park and are significant to the Park's purpose, air tours and their resultant interference with Tribal connections to the land and Tribal privacy are inconsistent with the Park's purpose and values for which it was established. National Register-listed or eligible cultural resources, including archeological resources, Tribal sacred sites, cultural landscapes, and ancestral sites occur throughout the Park, which is listed in the National Register in its entirety and contains many traditional cultural properties within.

Due to the shape of the Park, which was defined by the canyons and waterways of the landscape, and because sensitive locations are densely distributed throughout the Park, air tours cannot be rerouted to avoid sensitive locations. Also, because the Diné reside on Tribal trust lands within the Park and continually practice their traditional activities and religious ceremonies within the Park, timing of air tours cannot be adapted to avoid these activities. Those activities continuously occur and are central to the Park's purpose of providing connection and relationship of the Diné to the Tribal trust lands and resources within the Park. Thus, provisions, such as time-of-day restrictions or no-fly periods, would be unlikely to be effective in avoiding the impacts identified in the Resolutions and the President's letter and thus would be unlikely to avoid impacting this fundamental Park purpose.

The Park is located on the Navajo Nation's Tribal trust lands. The five Navajo Nation Chapters that represent the Navajo people that live in and around the Park have passed Resolutions opposing air tours over the Park and the Navajo Nation's president supports their position. These Resolutions indicate that air tours interfere with the Diné use of their lands and impact their privacy they carry out traditional activities and religious ceremonies. Based on the above information, allowing commercial air tours within the ATMP planning area is inconsistent with the Park's purpose and values, which include perpetuating traditional Tribal cultural connections to the Park's landscapes. For these reasons, and in consideration of the United States' unique trust obligations to the Navajo Nation, the agencies have considered but eliminated action alternatives that would allow air tours within the ATMP planning area.

2.3 ATMP Planning Area

An ATMP regulates commercial air tours over a national park or within ½-mile outside the park's boundary during which the aircraft flies below 5,000 ft. AGL (Figure 2). This is referred to as the ATMP planning area in this document and as the ATMP boundary in the ATMP itself. The ATMP planning area for this Park includes the Park and the area within ½-mile of the boundary of the Park, all of which are the Navajo Nation's Tribal trust lands (Figure 2). Air tours outside of the ATMP planning area are not subject to the Act and are therefore not regulated under the ATMP. As air tours outside of the ATMP planning area are outside the jurisdiction of the ATMP, there would be no limitations on the annual number of such air tours that could occur, and no designated routes could be set outside the ATMP planning area under any alternative. Refer to Figure 1, above, for a graphic depiction of the ATMP planning area. Although they may occur within the ATMP planning area, general aviation flights, overflights by commercial airlines, and military flights would not be regulated by the ATMP because they are not commercial air tours subject to regulation under the Act.

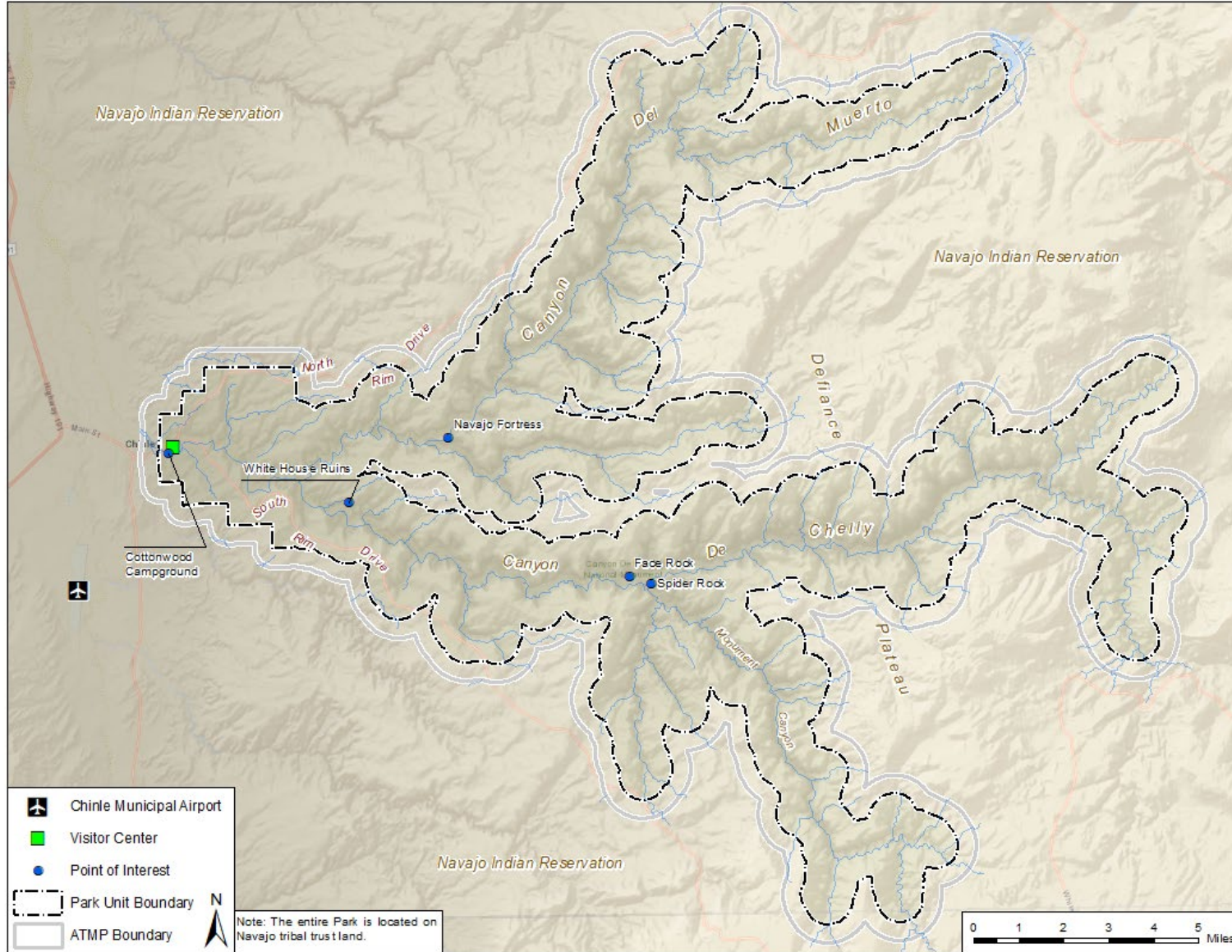


Figure 2. Map of the area subject to the ATMP for Canyon de Chelly National Monument.

2.4 Alternative 1 (No Action Alternative)

The No Action Alternative represents a continuation of what is currently flown under existing law including applicable regulations that govern aviation safety (14 CFR Part 136 (formerly Special Federal Aviation Regulation 71)). This alternative includes IOA, which the FAA was required to grant to existing operators under the Act (70 Federal Register 36,456 (June 23, 2005)).

The No Action Alternative provides a basis for comparison but is not a selectable alternative because it does not meet the purpose and need for the ATMP (refer to Section 1.4, Purpose and Need).

2.4.1 Commercial Air Tours per Year

Four commercial air tour operators currently hold IOA to fly up to a combined total of 175 commercial air tours per year over the Park (see Table 1). Of those operators, only one flew tours between 2017 and 2019, averaging 43 tours per year (0.12 per day). All air tours were flown by fixed-wing aircraft. The agencies consider the 2017-2019 three-year average the existing baseline for the purpose of understanding the existing number of commercial air tours over the Park. The requirement for the commercial air tour operator to report annual commercial air tour operations to the agencies was implemented in 2013. Reporting data from 2013 and 2014 are considered incomplete as reporting protocols were not fully in place at that time and likely do not accurately reflect the number of air tours conducted. Flight numbers from a single year were not chosen as the existing baseline because the three-year average accounts for variation across years and takes into account the most recent pre-pandemic years. Reporting data from 2020 was not used because the COVID-19 pandemic resulted in abnormalities in travel patterns across the U.S., which does not represent the conditions in a typical year. The agencies also decided against using 2021 or 2022 data due to continued abnormalities associated with the COVID-19 pandemic and the unavailability of reporting data for 2021 or 2022 during most of the planning effort.⁵

⁵ Some operators hold IOA over Navajo Nation tribal lands. The only operators that reported having air tours within the Canyon de Chelly ATMP planning area are the operators identified in Table 1.

Table 1. Canyon de Chelly Commercial Air Tour Operators, Aircraft Type, Reported Tours, and IOA.

Operator	Aircraft Type (all fixed wing)	2017 Reported Tours	2018 Reported Tours	2019 Reported Tours	Average Number of Reported Air Tours (2017-2019)	Interim Operating Authority (IOA)
Southwest Safaris	Cessna 182 Cessna T207A	38	30	62	43	147
Air Grand Canyon, Inc.	Unknown	0	0	0	0	9
American Aviation	Cessna 172-N, Cessna 206, Cessna 207-T207A	0	0	0	0	14
Grand Canyon Airlines, Inc.	Cessna 208B, de Havilland DHC-6 300	0	0	0	0	5
TOTAL	-	38	30	62	43	175

Sources: NPS, 2017, 2018, 2019

Although 175 commercial air tours per year over the Park are authorized under IOA, the operations reported by air tour operators reflect an average of 43 commercial air tours per year (0.12 per day). IOA was based on numbers reported by operators more than 20 years ago and may not represent current operational data. There are no verifiable data demonstrating that operators have flown the number of commercial air tours authorized by IOA or will fly this number of tours in the future. Thus, the No Action Alternative would be a continuation of existing conditions. This EA uses the reported three-year average of flights from 2017-2019, and impacts of IOA are not analyzed nor included as the baseline condition.

There would be no limit on the daily number of flights, but based on 2017-2019 data, there was only one instance in which flights exceeded one per day (two flights on March 19, 2019).

Under the Act, the FAA was required to grant IOA for commercial air tours over the Park and adjacent lands that are outside of the Park but within ½-mile of its boundary as a temporary measure until an ATMP could be established. As noted above, all lands within the ATMP planning area are the Navajo Nation's Tribal trust lands.

2.4.2 Commercial Air Tour Routes and Altitudes

There would be no designated flight routes or no-fly zones under the No Action Alternative. Figure 3 depicts current commercial air tour routes within the ATMP planning area that would be expected to continue under the No Action Alternative. Commercial air tours would likely be flown around a corridor of the routes provided by operators as depicted in Figure 3. The one air tour operator who currently operates reported five routes ranging in altitudes from 800 to

1000 ft. AGL for the 2017-2019 reporting period. The altitudes of 800 and 1,000 ft. AGL result in the mean sea level (MSL) altitude callouts shown in Figure 3.⁶

All air tour operators are required to report to the FAA and the NPS, on a semi-annual basis, the number of commercial air tour operations they have conducted within the ATMP planning area in accordance with the FAA's Air Tour Reporting Guidance Memo (FAA 2020). The operators must provide the date and time each tour occurred, the make/model of aircraft used, and the route on which the tour was conducted.

2.4.3 Commercial Air Tour Operators and Aircraft Types

One of the four operators that hold IOA for the Park reported flying commercial air tours over the Park between 2013 and 2019. The operator that reported all air tour routes during this period flies fixed-wing aircraft and no helicopters. Table 1, above, summarizes each operator's aircraft type and average number of reported air tours over the Park from 2017-2019, which would be expected to continue under the No Action Alternative.

⁶ Altitude expressed in units AGL is a measurement of the distance between the ground surface and the aircraft, whereas altitude expressed in MSL refers to the altitude of an aircraft above sea level, regardless of the terrain below it. Aircraft flying at a constant MSL altitude would simultaneously fly at varying AGL altitudes, and vice versa, assuming uneven terrain is present below the aircraft.

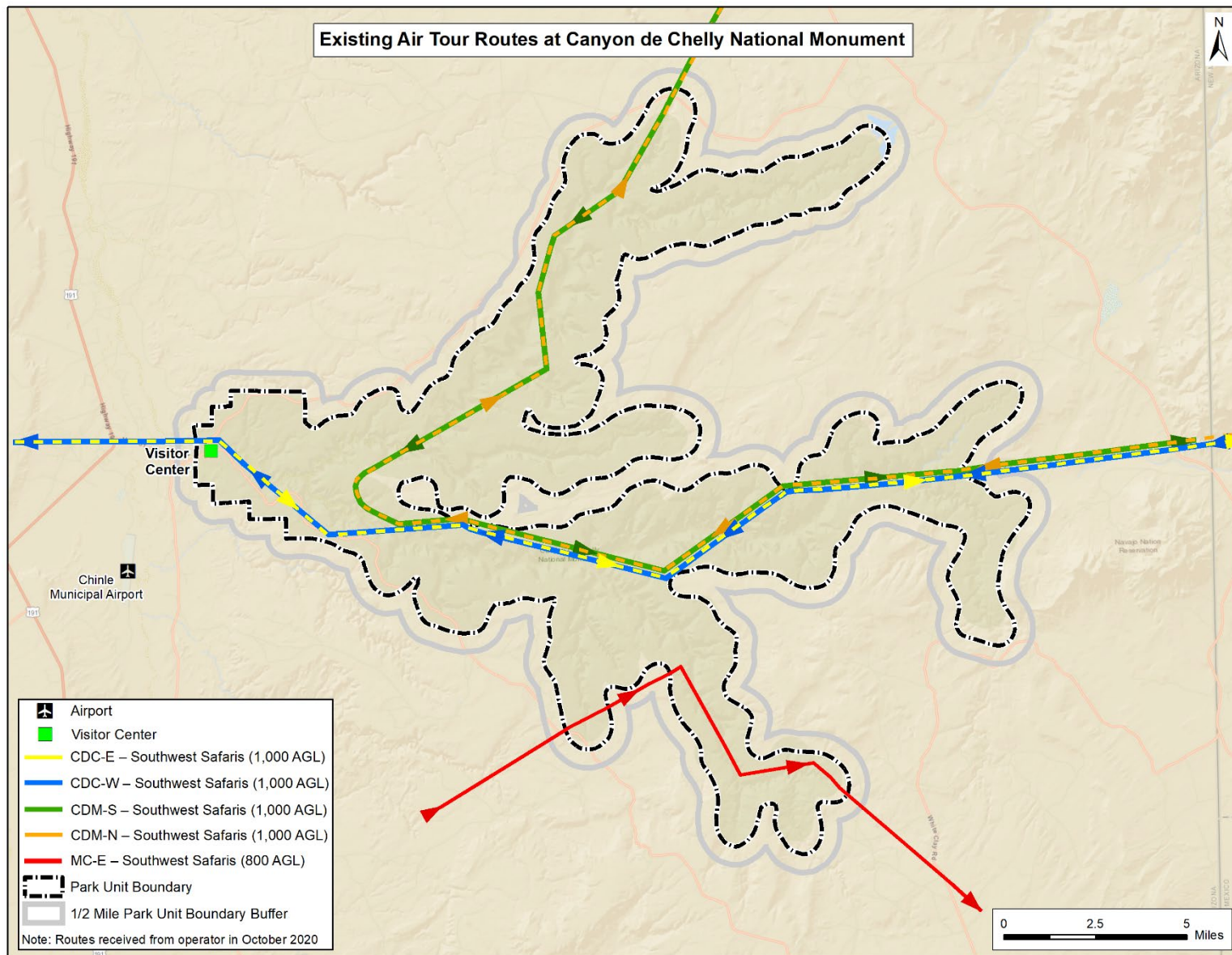


Figure 3. Alternative 1 (No Action).

2.5 Alternative 2 (Preferred Alternative)

Alternative 2 provides the greatest level of protection for the purposes, resources, and values of the Park and because the Park is located entirely on the Navajo Nation's Tribal trust lands, best safeguards Tribal resources and interests. (46 Stat 1161, 1931). This alternative would prohibit commercial air tours below 5,000 ft. AGL over the Park and within ½-mile outside the Park's boundary; maintain confidentiality of sacred sites (Executive Order (EO) 13007, *Indian Sacred Sites*, dated May 24, 1996); respect the spiritual significance of the Park to Tribal people; maintain cultural connections to the Park pursuant to the Park's Foundation Document (NPS, 2016); and prioritize the voices and values of the Navajo living in and around the canyon. Alternative 2 respects the privacy of the Diné actively conducting ceremonial practices by eliminating the opportunity for interruptions from air tours to the sacredness of the land and air space. The Park's Foundation Document (NPS, 2016) recognizes the importance of the Park's cultural resources and cultural continuity, watershed, relationship with the Navajo Nation, and scenic values. The Park's significance statements that express the Park's resources and values that merit designation as part of the National Park System emphasize that the archeological and natural features are integral to the Diné. The Park preserves one of the longest continually inhabited locations and sustains a modern community connected to a landscape of great historical and spiritual significance to the Diné.

Except as necessary for safe operation of an aircraft as determined under Federal Aviation Regulations requiring the pilot-in-command to take action to ensure the safe operation of the aircraft, or unless otherwise authorized for a specified purpose, commercial air tours would not be allowed to enter the ATMP planning area.

Air tours outside of the ATMP planning area (i.e., at or above 5,000 ft. AGL or more than ½-mile outside the Park boundary) are not subject to the Act and are therefore not regulated under the ATMP. Thus, there would be no limitations on the number of air tours that could occur outside the ATMP planning area. Because air tours outside of the ATMP planning area are not regulated by the ATMP, air tour routes outside of this area are difficult to predict with specificity. Operators could fly routes outside the ATMP planning area similar to existing flight paths, or routes could vary greatly from those currently flown and would depend on operator preference and weather conditions at the time of the tour.

Aircraft monitoring and enforcement would still occur under this alternative to ensure that the commercial air tour operator is complying with the terms and conditions of the ATMP by not conducting tours within the ATMP planning area. The agencies would both be responsible for the monitoring and oversight of the ATMP.

All IOA for the Park and Navajo Nation Tribal lands within the ATMP planning area would terminate by operation of law 180 days after the establishment (effective date) of the ATMP, 49 U.S.C. § 40128(e)(2)(E), after which time no operator could continue to rely on any operations

specifications issued under IOA as authority to conduct commercial air tours within the ATMP planning area. Operations specifications would be rescinded or amended to incorporate the operating parameters set forth in the ATMP within 180 days after the effective date of the ATMP.

The FAA reviewed the alternative to ensure it is safe (see Section 2.1, Alternatives Development).

2.5.1 Commercial Air Tour Routes and Altitudes

Air tours could be conducted only outside the ATMP planning area in accordance with FAA regulations. This ATMP and its implementation only apply to the Park and Navajo Nation's Tribal trust lands within a ½ mile of its boundary. An unknown number of air tours originating elsewhere in the region may continue to fly more than ½-mile outside of the Park's boundary or over the ATMP planning area (i.e., at or above 5,000 ft. AGL). The operator is unlikely to continue to conduct tours of the Park by flying along the perimeter of the ATMP planning area because it is difficult to see the predominant features of the Park from outside the ATMP planning area. The operator may fly along the perimeter of the ATMP planning area to conduct air tours of destinations other than the Park or to transport clients to Chinle Municipal Airport (approximately 3 miles outside the ATMP planning area) for ground tours of the Park.

The operator could also choose to move their air tours just above the ATMP planning area. However, it is highly unlikely that the operator would choose to fly above the 5,000-ft. AGL upper limit of the ATMP planning area. The high elevation of the terrain (which ranges from approximately 5,500 ft. MSL at the bottom of the canyon to approximately 7,600 ft. MSL at the canyon rim) would result in the operator being above 10,000 ft. MSL. Supplemental oxygen use is required in unpressurized aircraft flying over 10,000 ft. MSL for more than 30 minutes (14 CFR Parts 135.89, 135.157); therefore, it is unlikely air tours would fly higher for extended periods of time. The actual flight path of air tours outside the ATMP planning area would vary due to operator preference and weather conditions at the time of the air tour. The preciseness of routes and altitudes for tours flown on alternative routes are generally subject to Visual Flight Rules (VFR)⁷, which is based on the principle of "see and avoid," and therefore may vary greatly.

2.5.2 Monitoring and Enforcement

Aircraft monitoring and enforcement would occur to ensure that the commercial air tour operator is complying with the terms and conditions of the ATMP. The NPS would conduct Automatic Dependent Surveillance-Broadcast (ADS-B) aircraft monitoring when possible and work with the FAA to identify and respond to any instances of non-compliance. The agencies

⁷ FAA Advisory Circular 91-36D Visual Flight Rules Flight Near Noise-Sensitive Areas

would both be responsible for the monitoring and oversight of the ATMP. If the NPS or the Navajo Nation identifies instances of non-compliance, the NPS or the Navajo Nation would report such findings to the FAA's Las Vegas FSDO. The FSDO would investigate all reports of non-compliance and would investigate and respond to all written reports consistent with applicable FAA guidance. The public may also report allegations of non-compliance with the ATMP to the FSDO, which may result in an FAA investigation. FAA determination of non-compliance may result in legal enforcement actions. Any violation of operations specifications would be treated in accordance with FAA Order 2150.3, *FAA Compliance and Enforcement Program*.

2.6 Summary Comparison of the ATMP Alternatives

Table 2. Summary Comparison of the ATMP Alternatives.

Alternative Attributes	Alternative 1 (No Action)	Alternative 2 (Preferred Alternative)
General Description and Objectives	Allows a continuation of air tours without implementation of an ATMP or Voluntary Agreement. Does not meet the purpose and need for the ATMP.	Prohibits air tours within the ATMP planning area to maximize protection of the Park's natural and cultural resources, and the privacy of Tribal practices on the Navajo Nation's Tribal trust lands within the ATMP planning area. Most closely aligns with the purpose and significance for which the Park was established. Consistent with the input from the Navajo Nation Chapter Resolutions and letter from the Navajo Nation President's expressed support for a no air tours alternative. Air tours could continue to fly in airspace outside the ATMP planning area (i.e., at or above 5,000 ft. AGL or more than ½-mile outside of the Park's boundary).
Annual Number of Flights	Considers the three-year average of 43 flights per year (based on 2017-2019 reporting data) as the existing condition, though up to 175 air tours per year could be conducted under IOA.	None in ATMP planning area.
Routes	No mandatory routes or no-fly zones. See Figure 3 for depiction of reported routes.	None in ATMP planning area.
Minimum Altitudes	No mandatory minimum altitudes. See Figure 3 for depiction of reported operations. Existing operations range from 800 to 1,000 ft. AGL.	N/A. Operators may fly above the ATMP planning area (at or above 5,000 ft. AGL).
Time of Day	No restrictions.	N/A
Quiet Technology Incentives	None.	N/A

Alternative Attributes	Alternative 1 (No Action)	Alternative 2 (Preferred Alternative)
Interpretative Training and Education	None.	N/A
Annual Meeting	None.	N/A
Restrictions for Particular Events	None.	N/A
Monitoring and Enforcement	The operator reports the number of tours, aircraft type, route, and day/time of tour to the FAA and the NPS on a semi-annual basis.	The NPS may conduct ADS-B aircraft monitoring and would work with the FAA to respond to instances of noncompliance. The FAA FSDO would investigate and respond to all written reports consistent with applicable FAA guidance. FAA determination of noncompliance may result in legal enforcement actions.
Adaptive Management	None.	N/A
Initial Allocation of Air Tours and Aircraft Types	Reflects existing conditions of one operator with reported data from 2017-2019.	N/A

3 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

This chapter includes a description of each environmental impact category. This chapter also includes the environmental consequences of the alternatives and evaluates how the direct, indirect, and cumulative impacts on those environmental impact categories may change by implementing the No Action Alternative or the action alternative at the Park. The analysis methodology for assessing impacts for each environmental impact category is in Appendix E, *Environmental Impact Analysis Methodology*.

As described in Section 1.1, Introduction, under the Act and its implementing regulations, an ATMP regulates commercial air tours over a national park or within ½-mile outside the park's boundary during which the aircraft flies below 5,000 ft. AGL (ATMP planning area). Air tours outside of the ATMP planning area are not regulated under the ATMP. The study area, referred to as the ATMP planning area, for each environmental impact category includes the Park and areas outside the Park within ½-mile of its boundary. The entire study area, or ATMP planning area, is within Navajo Nation Tribal trust lands.

This draft EA analyzes the following environmental impact categories in detail: Noise and Noise-Compatible Land Use; Air Quality and Climate Change; Biological Resources; Cultural Resources; Visitor Use and Experience and Other Recreational Opportunities; Environmental Justice and Socioeconomics; Visual Effects; and Department of Transportation (DOT) Act Section 4(f) Resources. The FAA, in cooperation with the NPS, considered the impact categories specified in FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures* (FAA, 2015) and NPS Director's Order 12: *Conservation Planning, Environmental Impact Analysis, and Decision-making*, and other categories identified during the agency and public scoping process. See Section 1.5 for environmental impact categories not analyzed in detail.

3.1 Scenarios for Indirect and Cumulative Impact Analysis

3.1.1 Indirect Impacts Scenario

Indirect impacts are impacts that “are caused by the action and are later in time or farther removed in distance but are still reasonably foreseeable” (40 CFR 1508.8(b)). Because Alternative 2 would prohibit air tours within the ATMP planning area, it is reasonably foreseeable that the current air tour operator could seek to make up lost revenue resulting from the implementation of the alternative in other ways. One of the ways that the operator could potentially generate revenue is by offering air tours outside of the ATMP planning area, as these would not be regulated by the ATMP. This type of shift in air tour activity is referred to as “air tour displacement,” and could consist of the air tour operator shifting routes or altitudes to just outside the ATMP planning area.

It is difficult to predict with specificity if, where, and to what extent any air tours would be displaced to areas outside the ATMP planning area, including at altitudes at or above 5,000 ft. AGL. As described in Section 2.5.1, it is highly unlikely that the operator would choose to fly above the 5,000-ft. AGL upper limit of the ATMP planning area due to restrictions of flying above 10,000 ft. MSL and oxygen or pressurization requirements. Additionally, flights at or above 5,000 ft. AGL or higher would provide limited value to a sightseeing operation, further minimizing the potential for indirect effects.

It is reasonably foreseeable that the operator would continue to fly to points of interest outside of the ATMP planning area. The operator would be unlikely to continue to conduct tours of the Park by flying along the perimeter of the ATMP planning area because it is difficult to see the predominant features of the Park from outside the ATMP planning area, but the operator may fly along the perimeter of the ATMP planning area to conduct air tours of destinations other than the Park or transport clients to Chinle Municipal Airport for ground tours of the Park. The operator currently flies multiple tours over other parks and areas across six states (Southwest Safaris, 2023a) and could fly these tours more frequently. The Park is entirely located on Navajo Nation Tribal trust lands which also surround the Park. There may be a slight increase in flights over Navajo Nation's Tribal trust lands just outside the ATMP planning area if air tours were displaced outside of the ATMP planning area. Because the Park is located between the airport used by the commercial tour operator (Santa Fe Municipal Airport in Santa Fe, New Mexico) and other air tour destinations, flight paths adjacent to the ATMP planning area may still be used while en route to other destinations such as Grand Canyon and Lake Powell. The operator offers several Canyon de Chelly itineraries that combine an air tour and ground tour of the Park, facilitated by a stopover at Chinle Municipal Airport (Southwest Safaris, 2023b).

Under the No Action Alternative, commercial air tour operations within the ATMP planning area would remain consistent with existing conditions, although air tour numbers could increase up to IOA (175 flights per year).

3.1.2 Cumulative Impacts Scenarios

Cumulative impacts are defined as "effects on the environment that result from the incremental effects of the action when added to the effects of other past, present, and reasonably foreseeable actions regardless of what agency (federal or non-federal) or person undertakes such other actions. Cumulative effects can result from individually minor but collectively significant actions taking place over a period of time" (40 CFR 1508.1(g)(3)). To determine potential cumulative impacts, past, present, and reasonably foreseeable actions and land uses were identified in or near the project area.

For either of the alternatives, the Navajo Nation would continue to conduct management activities on their Tribal trust lands, including within the Park boundary. See, A Strategic Agreement between the Navajo Nation, National Park Service, and Bureau of Indian Affairs for

the Cooperative Stewardship of Canyon de Chelly – June 21, 2018, Appendix A for an overview of roles and responsibilities. The Bureau of Indian Affairs (BIA) also has responsibilities on these lands. NPS would continue current management actions and respond to future Park needs and conditions without major changes in the present courses of action. Aircraft are used infrequently to scout fire reports, suppress fires, respond to search and rescue incidents, and occasional aerial wildlife surveys introduce aircraft into the natural surroundings. General aviation flights, overflights by commercial airlines, and military flights, as well as vehicular guided tours, would also continue to have an adverse impact on the natural scenery and vistas. Park maintenance and operations activities would continue to employ mechanized equipment and ground teams, as needed. Guided tours would also continue.

3.2 Noise and Noise-Compatible Land Use

FAA Order 1050.1F, Appendix B, paragraph B-1.3, *Affected Environment*, requires the FAA to identify the location and number of noise sensitive uses in addition to residences, such as schools, hospitals, parks, and other recreation areas, that could be significantly impacted by noise. As defined in Paragraph 11-5.b (10) of FAA Order 1050.1F, a noise sensitive area is “[a]n area where noise interferes with normal activities associated with its use. Normally, noise sensitive areas include residential, educational, health, and religious structures and sites, and parks, recreational areas, areas with wilderness characteristics, wildlife refuges, and cultural and historical sites.” Noise sensitive areas within the ATMP planning area include the Park, cultural resources discussed in Section 3.5, Cultural Resources, parks and Section 4(f) resources discussed in Section 3.9, Department of Transportation (DOT) Act Section 4(f) Resources, as well as residential areas outside of the Park boundary but within the ½-mile buffer.

Section 4.9, Soundscape Management, of *NPS Management Policies 2006* (NPS, 2006a) directs the NPS to preserve the Park’s natural soundscape and acoustic environment, which refer to the combination of all the natural sounds occurring within the Park, absent the human-caused sounds, as well as the physical capacity for transmitting those natural sounds and the interrelationships among Park natural sounds of different frequencies and volumes. This management policy directs the NPS to preserve soundscapes and the acoustic environment to the greatest extent possible and restore these resources to their natural condition wherever they have become degraded by noise and unwanted sounds. The NPS defines the acoustic environment as the aggregate of all sounds within an area; it is the total acoustic environment in the Park. The soundscape is the human perception of the acoustic environment. In a national park setting, the soundscape can be composed of both natural ambient sound and a variety of human-made sounds.

3.2.1 Affected Environment

The NPS defines acoustic resources as physical sound sources, including both natural sounds (wind, water, wildlife, vegetation) and cultural and historic sounds (battle reenactments, Tribal

ceremonies, quiet reverence). The acoustic environment includes both natural and human-generated sounds and the physical capacity for transmitting those natural sounds and the interrelationships among park natural sounds. Within the Park, natural sounds are considered part of the biological or other physical resource components. Examples of natural sounds (NPS, 2006a) include:

- Sounds produced by birds, frogs, mountain lions, and bighorn sheep to define territories or aid in attracting mates;
- Sounds produced by bats to locate prey or navigate;
- Sounds received by mice or deer to detect and avoid predators or other danger;
- Sounds produced by physical processes, such as wind in the trees, claps of thunder, or falling water.

One of the natural resources of the Park is the natural soundscape, also referred to as the natural ambient or “natural quiet.” The natural ambient includes all naturally occurring sounds, as well as the quiet associated with still nights and certain seasons. It excludes all mechanical, electrical, and other human-caused sounds. An important part of the mission of the NPS is to preserve or restore the natural soundscapes associated with units of the National Park System (NPS, 2006a).

The term existing ambient refers to the sound level of all sounds in a given area and includes all natural sounds, as well as all mechanical, electrical, and other human-caused sounds. Human-generated noise sources may include wheeled vehicles on roads, such as passenger vehicles, tour buses, and cyclists, and aircraft overflights consisting of high-altitude commercial jet aircraft, occasional NPS flights for research or other purposes, commercial air tour operations, and private general aviation aircraft. Human-generated noise within the Park is concentrated in areas of high visitor use, such as the North Rim and South Rim Roads, overlooks, the Visitor Center, and trails. Aircraft and road vehicles are noted as common sources of noise at the Park. There are a limited number of regulated vehicular tours that enter the canyon on a routine basis that generate noise. Daily activities associated with living within the Park generate some noise.

To characterize the natural and existing ambient (both with and without air tours), sound level and meteorological measurements were conducted at five locations across the Park in September 2004 (summer) and March 2010 (winter) (Volpe, 2011). The five sites were selected based on characteristics qualifying them as acoustically representative of the variety of regions in the Park. Regions with similar vegetative land cover, wind conditions, and wildlife habitats, for example, are acoustically similar. Forested areas cover 50% of the Park. The remaining two land cover types are primarily shrubland (40%) and grassland (10%). Taking into account land cover, climate conditions, and Park management, three final acoustic zones were developed: frontcountry (above the rim), frontcountry (below the rim), and backcountry. The median or

L₅₀ sound level (in A-weighted decibels, dBA) is the sound level exceeded 50% of the day (7 am to 7 pm). Four types of median ambient (L₅₀) were computed from acoustical and observer-log data: existing ambient, existing ambient without air tours, existing ambient without all aircraft, and natural ambient. The median daytime existing ambient (L₅₀) was between 26.2 and 35.8 dBA during the summer and between 23.8 and 32.2 dBA during the winter. The median daytime existing ambient (L₅₀) without air tours was between 25.9 and 35.5 dBA during the summer and between 27.6 and 32.1 dBA during the winter. The median daytime existing ambient (L₅₀) without all aircraft was between 24.6 and 34.5 dBA during the summer and between 21.4 and 31.5 dBA during the winter. The median daytime natural ambient (L₅₀) was between 19.4 and 31.0 dBA during the summer and between 19.1 and 29.2 dBA during the winter. For more explanation of how sound is described, see the *Noise, Air Quality, and Greenhouse Gas Emissions Technical Analysis* (Appendix F, Table 1).

3.2.2 Environmental Consequences

There are numerous ways to measure the potential impacts of noise from commercial air tours on the acoustic environment, including intensity, duration, and spatial footprint of the noise. The affected environment and impact analysis uses noise metrics consistent with both FAA and NPS noise guidance. The FAA's primary noise metric established in FAA Order 1050.1F is the yearly day-night average sound level (DNL, denoted by the symbol L_{dn}) metric; the cumulative noise energy exposure from aircraft over 24 hours. The NPS considers various metrics to analyze impacts on Park resources and values from noise, including equivalent continuous sound level (L_{Aeq}), time audible (the amount of time you can hear air tour aircraft noise), the amount of time that the noise from a commercial air tour operation would be above specific sound levels that relate to different Park management objectives (e.g., 35 and 52 dBA), and maximum sound level (L_{max}). These metrics are discussed further in Table 3; a comparison of the sound levels noted in Table 3 to values for a range of everyday sounds can be found in Figure 1 of the *Noise, Air Quality, and Greenhouse Gas Emissions Technical Analysis* (Appendix F). Note that time audible natural ambient was not computed for this Park, as the detailed data required to compute this metric were not available.

Acoustic metrics were modeled using the FAA's Aviation Environmental Design Tool (AEDT) Version 3e and results are described below for both alternatives. The *Noise, Air Quality, and Greenhouse Gas Emissions Technical Analysis* in Appendix F contains figures and tables showing the detailed results for the noise contour and other noise impact analyses. A noise contour presents a graphical illustration or "footprint" of the area potentially affected by the noise.

Table 3. Primary Metrics Used for the Noise Analysis.

Metric	Relevance and Citation
Equivalent Continuous Sound Level, L_{Aeq} , 12 hr	The logarithmic average of commercial air tour sound levels, in dBA, over a 12-hour day. The selected 12-hour period is 7 am to 7 pm to represent typical daytime commercial air tour operating hours.
Day-night Average Sound Level, L_{dn} (or DNL)	The logarithmic average of sound levels, in dBA, over a 24-hour day, DNL takes into account the increased sensitivity to noise at night by including a 10 dB penalty on noise events occurring between 10 pm and 7 am local time. Note: Both $L_{Aeq, 12hr}$ and DNL characterize: Increases in both the loudness and duration of noise events; The number of noise events during specific time periods (12 hours for $L_{Aeq, 12hr}$ and 24 hours for DNL). If there are no nighttime events, then $L_{Aeq, 12hr}$ is arithmetically three dBA higher than DNL as the events are averaged over 24 hours instead of 12 hours.
Time Above 35 dBA	The amount of time (in minutes) that aircraft sound levels are above a given threshold (i.e., 35 dBA). In quiet settings, outdoor sound levels exceeding this level degrade experience in outdoor performance venues (American National Standards Institute (ANSI), 2007); blood pressure increases in sleeping humans (Haralabidis et al., 2008); maximum background noise level inside classrooms (ANSI/Acoustical Society of America, 2010).
Time Above 52 dBA	The amount of time (in minutes) that aircraft sound levels are above a given threshold (i.e., 52 dBA). At this background sound level, normal voice communication at five meters (two people five meters apart), or a raised voice to an audience at ten meters would result in 95% sentence intelligibility (Environmental Protection Agency (EPA), Office of Noise Abatement and Control, 1974). This metric represents the level at which one may reasonably expect interference with park interpretive programs, activities that require communication from a distance, and other general visitor communication.
Maximum Sound Level, L_{max}	The loudest sound level, in dBA, is generated by the loudest event; it is event-based and is independent of the number of operations. L_{max} does not provide any context of frequency, duration, or timing of exposure.

Alternative 1: No Action

Under the No Action Alternative, the acoustic conditions described in the affected environment would be expected to continue. Air tour noise would vary depending on how many commercial air tours are flown, but because air tour numbers are expected to stay near the three-year average (though they may be less than the three-year average or increase up to IOA), noise conditions are likely to be similar to existing conditions. For purposes of the *Noise, Air Quality, and Greenhouse Gas Emissions Technical Analysis* (see Appendix F), the No Action Alternative was modeled based on a peak month, average day of commercial air tour activity for the three-year average from 2017-2019 (i.e., one operation per day).

Additionally, air tour noise would vary depending on the aircraft and route used for the tour. The existing commercial air tour operator provided route information (depicted in Figure 3) for three general route options and has reported flying two types of fixed-wing aircraft: a Cessna 182 and a Cessna 207. This results in six potential aircraft/route combinations for analysis.

Because the peak month, average day is identified as one operation using a Cessna 182 aircraft (which the operator reports flying exclusively from 2017-2019), for purposes of the *Noise, Air Quality, and Greenhouse Gas Emissions Technical Analysis* (see Appendix F), the No Action Alternative modeled the CDC-E/W route using a Cessna 182 aircraft. This route and aircraft combination was chosen as a representation of existing activity based on the best available information. Refer to Section 2.4, Alternative 1 (No Action Alternative), and Appendix F for additional details on the No Action Alternative and associated noise modeling. Modeling results for the No Action Alternative are presented in Table 4. This analysis is based on the three-year average of flights between 2017-2019.

Table 4. Summary of Noise Modeling Metric Results Under the No Action Alternative.

Metric	Noise Modeling Results under the No Action Alternative
12-hour Equivalent Sound Level	$L_{Aeq,12hr}$ would not exceed 35 dBA.
Day-night Average Sound Level	DNL would be 3 dB less than the 12-hour equivalent sound level, and therefore less than 35 dB.
Time Above 35 dBA	The maximum time that noise from air tours would be above 35 dBA is less than 5 minutes a day*, across 69% of the ATMP planning area. See Figure 4.
Time Above 52 dBA	The maximum time that noise from air tours would be above 52 dBA is less than 5 minutes a day, across 7% of the ATMP planning area.
Maximum Sound Level	The maximum sound level (i.e., the loudest sound level generated by the loudest event independent of the number of operations) would be at least 55 dBA, across 5% of the ATMP planning area.

*In this context, day refers to a 12-hour day, 7 am to 7 pm, typical air tour operating hours.

For purposes of assessing noise impacts from commercial air tours on the acoustic environment under FAA's policy for NEPA, the analysis indicates that the resultant DNL is expected to be below 35 dB.

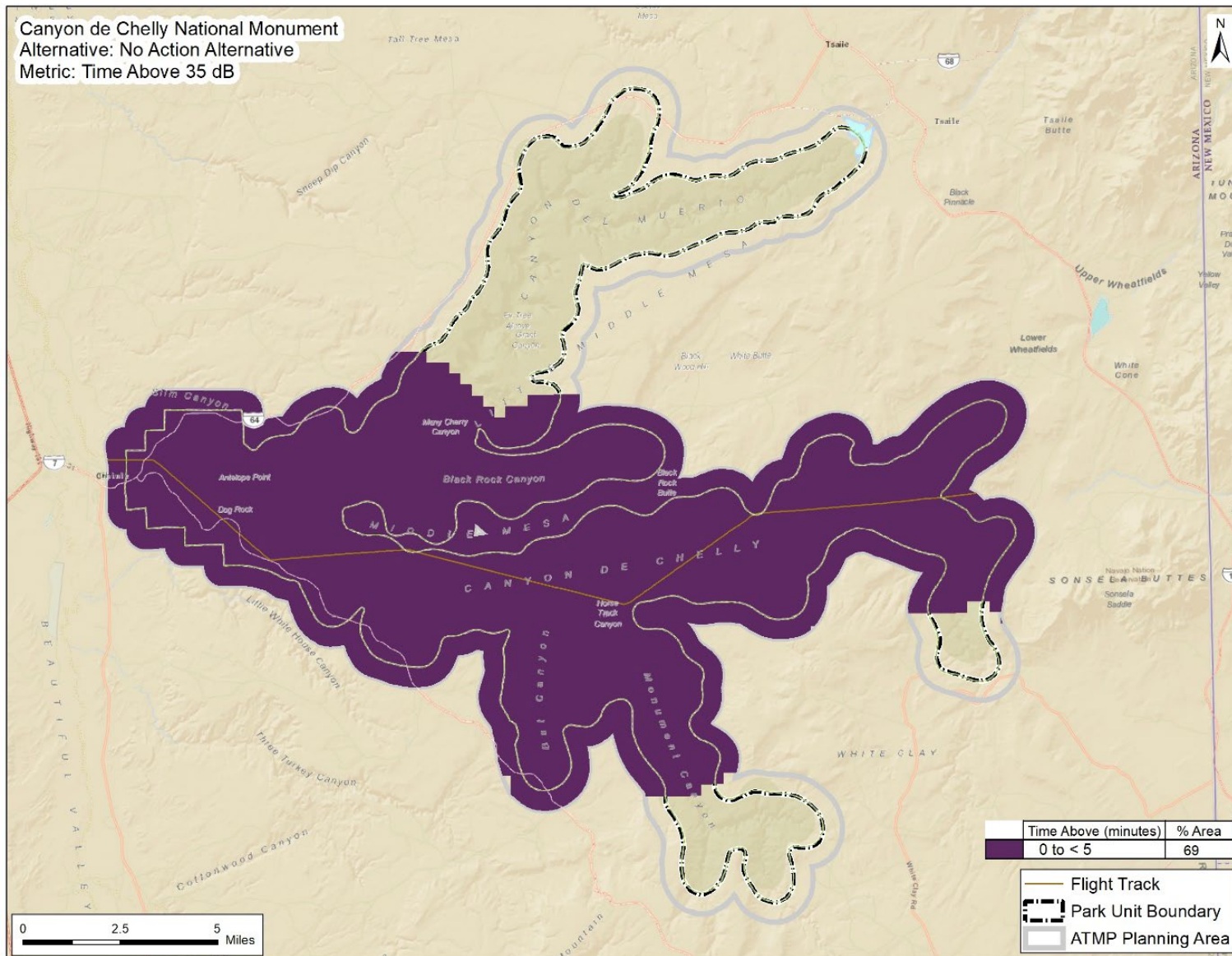


Figure 4. Time Above 35 dBA for Alternative 1 (No Action).

Alternative 2

Under Alternative 2, commercial air tours would not fly within the ATMP planning area, which would remove this source of noise from within the ATMP planning area. Compared to current conditions, the removal of this noise source under Alternative 2 would result in direct beneficial effects on the acoustic environment within the ATMP planning area. The potential for noise impacts in noise-sensitive areas within the ATMP planning area would be reduced relative to current conditions. However, any direct acoustic benefits would be minimal due to the infrequency of air tours under current conditions (assuming up to one flight per day and on average 43 flights per year) and as indicated by the results of noise modeling detailed in the *Noise, Air Quality, and Greenhouse Gas Emissions Technical Analysis* (see Appendix F). The acoustic impacts of Alternative 2 cannot be modeled because, although some speculation about air tour routes can be made, it is unknown where air tours would fly when outside the ATMP planning area. Alternative 2 would provide 365 days per year without air tours within the ATMP planning area, resulting in direct, though minimal, beneficial effects compared to the No Action Alternative.

Indirect and Cumulative Effects

Indirect Effects: Under the No Action Alternative, commercial air tour operations within the ATMP planning area would remain consistent with existing conditions, although air tour numbers could increase up to IOA, thus there would be no change in the acoustic environment and natural soundscape of the ATMP planning area and no indirect impacts would be expected to occur under this alternative.

Alternative 2 would prohibit air tours within the ATMP planning area. As noted in Section 3.1, this could displace air tours outside the ATMP planning area, which could result indirectly in impacts on acoustic resources and natural soundscapes of the locations where any displaced air tours would occur. In the unlikely event that air tours are displaced above the ATMP planning area (see Sections 2.5.1 and 3.1), flights at or above 5,000 ft. AGL would have minimal potential for indirect effects on the acoustic environment within or outside the ATMP planning area.

The precise routes and altitudes for displaced air tours flown outside the perimeter of the ATMP planning area at altitudes below 5,000 ft. AGL flying VFR could vary depending on safety, client demand, weather, fuel load, and other costs. Specific routes, altitudes, and numbers would be relevant in assessing noise and other potential indirect and cumulative impacts associated with eliminating air tours within the ATMP planning area. Consistent with the CEQ regulations, the agencies are disclosing that specific air tour routes, altitudes, and numbers of tours are not available with enough specificity to assess noise and other potential indirect and cumulative impacts associated with reducing or eliminating air tours within the ATMP planning area. In addition, because specific air tour routes are not available, it is not possible to identify all the other potential noise sources that might contribute to the acoustic conditions outside

the ATMP planning area where the operator may fly. Agencies are not required to conduct new scientific or technical research to analyze impacts and may rely on existing information to assess impacts. See 40 CFR Part 1502.21I. For the purposes of disclosing the potential indirect effects of these alternatives, the agencies have considered the potential noise effects of operations above or along the perimeter of the ATMP planning area.

Although highly unlikely, displaced air tours above the ATMP planning area (at or above 5,000 ft. AGL) could result in noise within the ATMP planning area. Compared to current conditions, the noise would be spread over a larger geospatial area and would be audible for a longer period but at a lower intensity. Thus, under Alternative 2, some locations within the ATMP planning area may experience less intense noise but for a longer period when compared to current conditions. Additionally, other locations within the ATMP planning area not currently experiencing air tour noise may experience some noise under Alternative 2 when compared to current conditions. However, the intensity of noise would likely be quite low given the aircraft's altitude; any noise that might result could also be more easily masked by opportunistic sounds, such as wind, and various anthropogenic noise sources. In summary, while the area of noise could be greater under Alternative 2, the intensity of noise, especially when compared to current conditions at locations near or directly below existing air tour routes, would be less.

Displaced air tours have the potential to affect noise-sensitive locations outside the ATMP planning area. To illustrate this, a conservative, screening-level noise analysis was conducted (see Appendix F), referencing DNL 65 dB as the FAA's threshold of significant noise exposure, below which residential land uses are considered compatible. The results of the screening-level noise analysis indicate it is highly unlikely that displaced air tours would generate noise at or above DNL 65 dB outside the ATMP planning area. The activity level of commercial air tours operating within the ATMP planning area under the No Action Alternative (i.e., 43 flights per year on average from 2017-2019) is well below the screening results. Flying at an altitude of 1,000 ft AGL, 5,970 daily flights of a Cessna 182 would be required to generate a cumulative noise exposure level at or above DNL 65 dB

Cumulative Effects: Under either of the alternatives, current management activities of the Navajo Nation, BIA, and National Park Service (including aircraft use for fire management, search-and-rescue, or wildlife surveys and mechanized equipment use by ground teams) would continue to generate noise inside the ATMP planning area. Because the No Action Alternative would not result in any new direct or indirect impacts compared to current conditions, there would be no cumulative effects from the No Action Alternative. Alternative 2 could result in a minimal cumulative beneficial effect on the overall acoustic environment of the Park and Navajo Nation's Tribal trust lands by eliminating air tours within the ATMP planning area since the intensity of noise directly around and below existing air tour routes would decrease, as described above.

3.3 Air Quality and Climate Change

3.3.1 Affected Environment

Air Quality

The Clean Air Act divides federal lands into different classifications based on acreage. The Park and Navajo Nation's Tribal trust lands are not classified as a Class I airshed, which means that it is not afforded special air quality and visibility protection (NPS, 2020).

The National Ambient Air Quality Standards (NAAQS) determine whether a region is in an air quality attainment or nonattainment area. An area is in attainment if it meets the federal standard for all criteria pollutants. Subsequently, an area is in nonattainment if it does not meet (or contributes to ambient air quality in a nearby area that does not meet) the standard. When this occurs, states must submit implementation plans to the Environmental Protection Agency (EPA) discussing programs to improve air quality within that region. The Park is currently in an area of attainment for all NAAQS.

Although the Park is in attainment for all NAAQS, the Park's air quality is considered in overall fair condition. Air quality in the park does not meet the NPS Air Resources Division's recommended benchmarks (good condition) for visibility (fair condition), ozone (O₃, fair condition), or nitrogen deposition (fair condition); air quality does meet the benchmark for sulfur deposition (good condition). Given pollutant exposure, an assessment of air quality indicators and resources sensitive to air pollution, air quality conditions warrant moderate concern (NPS, 2020). A potential source of particulates that affect visibility arises from wildfires, as smoke from wildfires could not only affect visibility but also potentially cause exceedances of the particulate matter standard for NAAQS under certain wind conditions. The NPS has taken measures to mitigate this risk, such as creating a fire management plan for the Navajo Nation and cooperating NPS units (Navajo Nation, NPS, and Bureau of Indian Affairs [BIA], 2005). The NPS currently participates in two air quality monitoring programs — the Interagency Monitoring of Protected Visual Environments program and the National Atmospheric Deposition Program.

Greenhouse Gases

The Intergovernmental Panel on Climate Change estimates that aviation accounted for 4.1% of global transportation greenhouse gas (GHG) emissions (FAA, 2020). GHGs are gases that trap heat in the earth's atmosphere. Naturally occurring and anthropogenic (human made) GHGs include carbon dioxide (CO₂), water vapor, methane, nitrous oxide (N₂O), and O₃. EPA data indicates that commercial aviation contributed to 6.6% of CO₂ emissions in 2013 in the U.S. (EPA, 2015).

In response to the increasing need for understanding and action related to climate change impacts in the parks, the NPS launched the Climate Friendly Parks program in 2002, creating

opportunities to educate staff about climate change issues, assess each park's contribution to GHG emissions, create short and long-term strategies for reducing emissions, determine potential effects of climate change on park resources, and develop skills and strategies for communicating these effects to the public (NPS, 2015). Becoming a certified climate friendly park was identified as an opportunity in the Park's Foundation Document (NPS, 2016).

3.3.2 Environmental Consequences

Alternative 1: No Action

The No Action Alternative represents existing air tour conditions. Modeling results for the No Action Alternative are presented in Table 5 for the criteria pollutants. Note that O₃ is not reported as it is not directly emitted in aircraft exhaust. Pollutant emissions are based on annual flight miles and routes for each aircraft type operating within the ATMP planning area. The emission rates (pounds of emissions per mile flown) used in modeling are aircraft engine- and fuel-specific. The results in Table 5 describe baseline emissions under existing conditions. Because reporting information provided by the commercial air tour operator was not detailed enough to be able to assign a specific number of operations to specific routes, all annual flights were assigned to the longest route as a conservative estimate of total emissions. All criteria pollutants aside from carbon monoxide (CO) were estimated at 0.001 tons per year (TPY) or less. Emissions under alternatives can be compared to baseline emissions to indicate potential impacts on air quality within the ATMP planning area.

Table 5. Summary of Criteria Pollutant Annual Emissions in Tons per Year (TPY) Under the No Action Alternative.

Criteria Pollutant	Total Annual Emissions (TPY)
Carbon monoxide (CO)	0.642
Lead (Pb)	<0.001
Nitrogen dioxide (NO ₂)	0.001
Particulate matter: aerodynamic diameter ≤ 2.5 µm (PM _{2.5})	<0.001
Particulate matter: aerodynamic diameter ≤ 10 µm (PM ₁₀)	<0.001
Sulfur dioxide (SO ₂)	<0.001

The total annual GHG emissions for all sources of commercial air tour aircraft emissions under the No Action Alternative is modeled to be 1.5 metric tons (MT) of CO₂. The No Action Alternative would not cause pollutant concentrations to exceed one or more of the NAAQS for any of the time periods analyzed. This analysis is based on the three-year average of flights between 2017-2019.

Alternative 2

Under Alternative 2, commercial air tours would not be conducted within the ATMP planning area, which would eliminate direct emissions from air tours within the planning area and would not cause pollutant concentrations to exceed one or more of the NAAQS for any of the time periods analyzed. Therefore, Alternative 2 would result in direct beneficial effects on air quality compared to the No Action Alternative, due to lower commercial air tour emissions within the ATMP planning area. Direct emissions in the ATMP planning area would be expected to decrease by the amount reported in the No Action Alternative (Table 5) and would result in zero emissions from the elimination of commercial air tours within the ATMP planning area; However, emissions could still be generated from displaced air tours (refer to indirect effects analysis below).

Indirect and Cumulative Effects

Indirect Effects: Under the No Action Alternative, commercial air tour operations within the ATMP planning area would remain consistent with existing conditions. Although operations could increase up to IOA (175 flights per year), no indirect impacts on air quality and GHG emissions would be expected to occur under this alternative.

For purposes of assessing indirect air quality and GHG impacts that would occur as a result of Alternative 2, this analysis considers whether aircraft currently operating over the Park would generate significant emissions to affect the attainment status of the Park. Based on the analysis, the emissions of all criteria pollutants (excluding O₃) and GHGs from the current number of air tours flown over the Park are minimal (43 tours annual average). Operations that may occur outside the ATMP planning area because of Alternative 2 may shift where emissions occur, but the total annual emissions are not likely to change substantially.

Because Alternative 2 would prohibit air tours within the ATMP planning area, it is reasonably foreseeable that the operator could potentially generate revenue by offering air tours in airspace outside of the ATMP planning area, as the areas outside this area would not be regulated by the ATMP. Some of this displaced activity could result in impacts to air quality although it is difficult to predict with specificity if, where, and to what extent any displaced air tours would result in impacts in different and/or new areas. The preciseness of routes and altitudes for tours flown on displaced routes are generally subject to VFR and may vary greatly.

Air tours occurring outside the ATMP planning area, if any, would not result in direct emissions-related effects within the ATMP planning area. However, prevailing winds may transport some of the emissions outside the ATMP planning area to within the ATMP planning area (i.e., indirect effects). Additionally, some areas that are not currently exposed to emissions from air tours (airspace outside the ATMP planning area) may be exposed to emissions in these scenarios thus affecting the air quality in these areas.

Under Alternative 2, it is unlikely that displaced air tours operating outside the ATMP planning area would result in a measurable difference in air quality impacts or change the current attainment status of the Park. Changes in air tour operations under these alternatives would also likely have minimal impact, if any, on regional air quality.

Cumulative Effects: Because the No Action Alternative would not result in any new direct or indirect impacts compared to current conditions, there would be no cumulative effects from the No Action Alternative. Ongoing present and future Park management actions by the NPS would continue to occur under either of the alternatives. Alternative 2 would likely result in no noticeable change to a slight improvement in overall air quality in the Park with no change in the current NAAQS attainment status.

3.4 Biological Resources

The area of analysis for biological resources, including but not limited to species listed as threatened or endangered, in this draft EA includes the ATMP planning area. To the extent that habitat and species occurrences correlate, impacts on biological resources are expected to be similar within the ATMP planning area. Therefore, if habitat exists for a species but occurrence is unknown, the assumption is that the species could be present and will be analyzed accordingly.

The environmental effects of commercial air tour operations are evaluated for biological resources and their habitats. The analysis discloses the context of natural variability and ecosystem integrity, as well as effects on individuals and populations. Some impacts are species-specific and are identified accordingly.

The Endangered Species Act (ESA) is the primary federal statute regulating federally listed threatened and endangered species and critical habitat. The U.S. Fish and Wildlife Service (USFWS) is the federal agency responsible for administration of the ESA, the Bald and Golden Eagle Protection Act, and the Migratory Bird Treaty Act (MBTA). *NPS Management Policies 2006* (NPS, 2006a) directs the NPS to meet its obligations under the NPS Organic Act and the ESA to both proactively conserve listed species and prevent detrimental effects on these species (*NPS Management Policies 2006* § 4.4.2.3 [NPS 2006a]).

A threatened species is defined under the ESA as “any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.” An endangered species is defined under the ESA as “any species which is in danger of extinction throughout all or a significant portion of its range.” Species designated as threatened or endangered are collectively referred to as listed species in this draft EA. Critical habitat has been designated by USFWS as the habitat needed to support recovery of listed species.

3.4.1 Affected Environment

All fish and wildlife in the Park are located on Tribal trust lands, therefore the NPS consults and cooperates with the Navajo Nation regarding the care and management of wildlife. (Strategic Agreement, 2018, A-8). The Park is home to over 800 vascular plant, 6 amphibian, 190 bird, 8 fish, 54 mammal, and 14 reptile species (NPS, 2023a). The biological resources analyzed in this section include both listed and non-listed wildlife most likely to be affected by the alternatives. As discussed in Section 1.5, Environmental Impact Categories Not Analyzed in Detail, it is unlikely that fish, amphibians, invertebrates, and plant species would be affected by air tours; therefore, they are not considered for further analysis in this draft EA.

Birds

Breeding bird and wintering bird inventories were conducted in 2003 and 2004 using point count surveys, area searches, and incidental sightings. A total of 152 avian species were documented at the Park, of which 99 were confirmed as breeding or probable breeders (LaRue and Mikesic, 2006). In 2009, 2012, and 2015, bird community monitoring was conducted with a focus on riparian habitats within the Park (Holmes and Johnson, 2016). The riparian woodlands in the Park have undergone extensive restoration through the selective thinning of nonnative plants, primarily Russian olive (*Elaeagnus angustifolia*) and tamarisk or salt cedar (*Tamarix* spp.). The objectives for this restoration have been to reduce the density of nonnatives to reflect historical conditions, increase the native plant cover, and restore the hydrological regime. During the 2015 riparian habitat surveys, 2,923 individuals of 49 bird species were detected (Holmes and Johnson, 2016). The most commonly detected species was the chipping sparrow (*Spizella passerina*), which comprised 12% of the total number of individuals detected and was widespread in the target habitat, being detected in 93% of plots. Other abundant and widespread species included blue-gray gnatcatcher (*Polioptila caerulea*), spotted towhee (*Pipilo maculatus*), house finch (*Carpodacus mexicanus*), and warbling vireo (*Vireo gilvus*).

The Navajo Nation endangered species list includes several birds known to be present in the Park: the yellow-billed cuckoo (*Coccyzus americanus*), southwestern willow flycatcher (*Empidonax traillii extimus*), bald eagle (*Haliaeetus leucocephalus*), golden eagle (*Aquila chrysaetos*), American dipper (*Cinclus mexicanus*) and Mexican spotted owl (*Strix occidentalis lucida*) (Navajo Nation Department of Fish and Wildlife, 2020). The protection of golden eagle and bald eagle nests from human activities that may cause temporary or permanent disturbance is codified in Navajo Nation policy (Navajo Nation Council, 2008). Federally listed threatened and endangered birds known to occur in the Park include the yellow-billed cuckoo, Mexican spotted owl, and southwestern willow flycatcher. These species are described further later in this section. A total of five bird species found in the Park are currently listed as Tier-1 (i.e., most vulnerable) Species of Greatest Conservation Need by the Arizona Game and Fish Department's Heritage Data Management System (Arizona Game and Fish Department, 2023).

These species are the yellow-billed cuckoo, southwestern willow flycatcher, peregrine falcon (*Falco peregrinus*), bald eagle, and Mexican spotted owl.

Mammals

The NPS performs regular mammal monitoring using wildlife cameras; a diverse range of mammals have been documented in the Park (NPS, 2023a). These mammals include mule deer (*Odocoileus hemionus*), mountain lion (*Puma concolor*), bobcat (*Lynx rufus*), coyote (*Canis latrans*), gray fox (*Urocyon cinereoargenteus*), American black bear (*Ursus americanus*), and numerous bat species. The NPS is actively studying bat populations using bio-acoustic technology. Mule deer winter in significant numbers around the canyon rim of Canyon de Chelly (and other arms of the canyon system). None of the mammal species present in the Park are considered endangered by the Navajo Nation, nor are they federally listed. However, two mammal species found in the Park are currently listed as Tier-1 (i.e., most vulnerable) Species of Greatest Conservation Need by the Arizona Game and Fish Department's Heritage Data Management System — Townsend's big-eared bat (*Corynorhinus townsendii*) and Gunnison's prairie dog (*Cynomys gunnisonii*) (Arizona Game and Fish Department, 2023).

Reptiles

An inventory of amphibians and reptiles was conducted at the Park in 2002 and 2003 (Mikesic, 2004). The goals of this study were to document at least 90% of the extant herpetofauna through visual observations, photographs, and/or specimen collection, provide baseline information, and make recommendations, as warranted, for development of future management of zoological resources within the Park. Surveys were conducted at 46 plots, each 1 hectare (2.5 acres) in size, in at least eight distinct habitat types, during the day and night. Thirteen reptile species (nine lizards and four snakes) were documented. The Eastern fence lizard (*Sceloporus undulatus*) was the most common reptile surveyed. No federal threatened or endangered or Navajo Nation endangered reptile species were documented during this study. One reptile species, the lesser earless lizard (*Holbrookia maculata*) that was documented in the Park by Burgess (1970; in Mikesic, 2004) was not detected in 2002 or 2003.

Federally Listed Species

A list of threatened and endangered species that may occur within the ATMP planning area was obtained through the USFWS Information Planning and Consultation tool. As discussed in Section 1.5, Environmental Impact Categories Not Analyzed in Detail, the agencies determined that air tours would not result in ground disturbances that have the potential to directly or indirectly impact biological resources including fish, amphibians, invertebrates, or plants. Listed species not impacted directly or indirectly by air tours include endangered fish species Colorado Pikeminnow (*Ptychocheilus lucius*) and razorback sucker (*Xyrauchen texanus*), threatened plant species Navajo sedge (*Carex specuicola*) and Zuni fleabane (*Erigeron rhizomatus*), and candidate insect species monarch butterfly (*Danaus plexippus*). Additionally, the endangered Mexican

wolf (*Canis lupus baileyi*) is not found in the Park and therefore is not included in this draft EA discussion. For more information on these species, see the Section 7 No Effect Memo in Appendix H.

The federally protected species described below are known to occur within the ATMP planning area and could be potentially affected by the Proposed Action.

Birds

Mexican Spotted Owl

The Mexican spotted owl is listed as threatened under the ESA and is one of three subspecies of the spotted owl. They are distinguished by their chestnut brown color and white and brown spots. Mexican spotted owls hunt at night and are considered “perch and pounce” predators that use elevated perches to locate prey by sight and sound. The Mexican spotted owl is an indicator species for old-growth habitat, as they consistently avoid managed forests (NPS, 2014). Within the ATMP planning area, the upper reaches of Canyon de Chelly and Canyon del Muerto have been designated as Mexican spotted owl habitat by the Navajo Nation. Preferred habitat for breeding includes mixed-conifer forest habitat associated with relatively steep-walled canyons, and the Douglas-fir (*Pseudotsuga menziesii*) is the most common tree used for nesting (NPS, 2014). The Park does not contain federally designated critical habitat for the Mexican spotted owl; however, this species is known to nest and roost in the Park. There are protected activity centers (PACs) located within the Park, which were designated in consultation with the Navajo Nation. The PACs are areas that encompass a minimum of 600 acres surrounding known Mexican spotted owl nests and roost sites. Although breeding season varies across the Mexican spotted owl’s range, courtship typically occurs in late winter (February to March), eggs may be laid between March and April, the eggs hatch sometime in early May, and the owlets fledge four to five weeks later. Young owls typically rely on their parents for food through the summer and then disperse in the fall.

All typical habitats of the Mexican spotted owl (including forests, canyons, and Black Mesa) are characterized by a cool microclimate (Mikesic, 2000). These owls may be relatively intolerant of high temperatures. This preference could explain why Mexican spotted owls generally occupy closed-canopy forests that are typically on north-facing slopes, or deeply incised, shady canyons. The canyons on the Navajo Nation’s Tribal trust lands (including those in the Park) usually have steep, nearly vertical rock walls and a cool microclimate in the shaded, north-facing areas. To date, all canyons used by owls on the Navajo Nation’s Tribal trust lands have some forest structure present, and most often, at least a small number of large Douglas-fir trees are present. These sites have large canyon widths ranging from about 200 to 536 meters (660 to 1,760 ft.), most have pinyon-juniper dominating the mesa tops and south-facing canyon areas, and pine-fir stringers with some riparian vegetation and Gambel oak (*Quercus gambelii*) composing the canyon bottom. Despite the presence of vegetation at all sites, owls have been

found nesting and roosting in small caves, cracks, and ledges in the sandstone walls at several sites (Mikesic, 2000). Therefore, the large number of treeless canyons on Navajo Nation's Tribal trust lands could also serve as potential habitat for the Mexican spotted owl. These canyons are typically much smaller in width than those with significant forest structure and may not have riparian vegetation.

Southwestern Willow Flycatcher

The southwestern willow flycatcher (flycatcher) is one of four subspecies of willow flycatcher and is listed as endangered under ESA. Flycatchers are small insectivores that winter in Central America and southern Mexico. Habitat for this species includes riparian corridors with trees that have complex branching patterns that can support flycatcher nests (NPS, 2014). Within the ATMP planning area, the flycatcher is considered a transient species, with confirmed presence as a migrant in 2004 during surveys of flycatcher that were conducted in May, June, and July of that year (LaRue and Mikesic, 2006). An individual was observed near Sleeping Duck (LaRue and Mikesic, 2006). There is no designated critical habitat for the flycatcher within the ATMP planning area.

Yellow-billed Cuckoo

The yellow-billed cuckoo is a large insectivore whose yellow bill is almost as long as its head. This species is listed as threatened under ESA. Riparian habitat is important for the survival of this species, as yellow-billed cuckoos nest in riparian areas and use river corridors as travel routes during migration. Within the ATMP planning area, suitable habitat for this species is located in riparian areas. There is no designated critical habitat located inside the ATMP planning area. Surveys were conducted in May, June, and July of 2004 (LaRue and Mikesic, 2006). However, neither LaRue and Mikesic (2006) nor Holmes and Johnson (2016) recorded observations of any yellow-billed cuckoo during their surveys of the Park.

3.4.2 Environmental Consequences

Noise from commercial air tours may impact wildlife in several ways, including altered vocal behavior, breeding relocation, changes in vigilance and foraging behavior, and impacts on individual fitness and the structure of ecological communities (Shannon et al., 2016; Kunc and Schmidt, 2019). Understanding the relationships between noise attributes (e.g., timing, intensity, duration, and location) and ecosystem responses is essential for understanding impacts on these species and developing management actions to address them (Gutzwiller et al., 2017). To capture how noise may affect quieter natural sounds the impact analysis below examines the time above 35 dBA. Refer to the *Noise, Air Quality, and Greenhouse Gas Emissions Technical Analysis* in Appendix F for more information.

Alternative 1: No Action

Under the No Action Alternative, current effects on biological resources would continue as commercial air tours within the ATMP planning area would continue to fly at low altitudes (ranging from 800 to 1,000 ft. AGL), and there would be no limit to the time-of-day flights commercial air tours could occur, although flights do not occur at night. Raptor species within the ATMP planning area, including Mexican spotted owl, bald eagles, and peregrine falcons, are especially sensitive to low-flying aircraft. Some research indicates that perched and incubating eagles rarely responded to fixed-wing aircraft at close approaches ranging from 50 to 150 meters (164 to 492 ft.) from the nest (Watson, 1993). Flushing impacts can occur from helicopters flown at lower altitudes (Stalmaster and Kaiser, 1997). However, scientific and national level guidance recommends a minimum aircraft standoff of 1,000 ft. for bald eagles (USFWS, 2007) and 2,600 ft. for peregrine falcons to prevent both collisions and noise impacts (Colorado Parks and Wildlife, 2020). Because air tours occur between 800 and 1,000 ft. AGL under the No Action Alternative using fixed-wing aircraft, they do not meet these established standoff distances for bald eagles or peregrine falcons. As a result, there is some potential for mortality to individual bald eagles or peregrine falcons from collisions and disturbances to behaviors that could also affect individual birds; however, due to the infrequent number of flights and short duration of associated noise, any mortality or disturbance would not have population-level effects.

The USFWS seasonal buffer zone recommendation for Mexican spotted owl is ½-mile from March 1 through August 31. This buffer zone during the breeding season is intended to reduce potential impacts on Mexican spotted owl from disturbances including, but not limited to fixed-wing overflights. Although the Park is not considered critical habitat for Mexican spotted owl, this species nests and roosts in the Park with sensitive areas designated by the creation of PACs. All five routes in the No Action Alternative currently fly at altitudes ranging from 800 to 1,000 ft. AGL directly above identified PACs in the Park. Existing air tours occurring between 800 and 1,000 ft. AGL under the No Action Alternative using fixed-wing aircraft do not currently fly in accordance with the ½-mile buffer zone (above 2,640 ft. AGL) for Mexican spotted owl recommended by Colorado Parks and Wildlife (2020) between March 1 and August 31. As a result, there is some potential for mortality to individual Mexican spotted owls from collisions and disturbance, including individuals that are breeding, fledging, or juvenile. However, past studies on the impacts of overflights of fixed-wing aircraft on Mexican spotted owls indicate that owls are fairly resilient to short-duration disturbances caused by overflights (USFWS, 2012). When considering the infrequent number of flights and short duration of associated noise, any mortality and disturbance would not have population-level effects.

Noise from commercial air tours also has the potential to disturb wildlife and could result in changes in wildlife behavior, such as vocal behavior, breeding relocation, and changes in foraging behavior. Wintering big game animals are especially vulnerable to the adverse

energetic consequences of noise disturbance from mid-November through the end of March when the animals are metabolically surviving on fat reserves. Stockwell and Bateman (1991) found that bighorn sheep (*Ovis canadensis nelsoni*) in Grand Canyon National Park were more sensitive to helicopter disturbance during winter (in terms of foraging efficiency) than during spring, possibly due to the lower elevation of spring foraging grounds relative to helicopter flight paths. Their analysis concluded the threshold for helicopter disturbance was between 250 and 450 meters (820 and 1,476 ft). The analysis in Section 3.2.2, Environmental Consequences for Noise and Noise-Compatible Land Use, shows that 69% of the ATMP planning area would experience noise above 35 dBA for less than five minutes on days when air tours occur (see the *Noise, Air Quality, and Greenhouse Gas Emissions Technical Analysis*, Appendix F, Figure 3). The maximum sound level identified in the noise modeling (i.e., the loudest sound level generated by the loudest event independent of the number of operations) would be at least 55 dBA, across 5% of the ATMP planning area. This sound level corresponds to the noise level expected in a quiet urban daytime setting or created by someone typing on a keyboard nearby. These noise intrusions would be short in duration and the maximum sound level is relatively low.

In conclusion, on the days when air tours occur, the short-term noise impacts (attributable in the wildlife context to noise above 35 dBA for less than five minutes) have the potential to cause temporary disturbances in the behavior of birds foraging, mating, or nesting. However, these noise impacts are so infrequent and short in duration and the potential for mortality from collisions is so low, they are not anticipated to cause adverse effects to any of the federally listed species, including southwestern willow flycatcher, yellow-billed cuckoo, Mexican spotted owl, or any other wildlife species.

Alternative 2

Under Alternative 2, commercial air tour aircraft would not fly within the ATMP planning area, which would eliminate this source of noise from the ATMP planning area, as well as low-flying aircraft that are not currently in compliance with recommended buffer zones for Mexican spotted owl. Therefore, there would be a direct beneficial effect on biological resources since the intensity and likely presence of noise and aircraft from commercial air tours, and potential for collisions with birds would be less than under the No Action Alternative. While the impacts described above under the No Action Alternative in the ATMP planning area are minimal, impacts from air tours would be even less likely to occur or would not occur since air tours would no longer be conducted within the ATMP planning area.

The FAA and the NPS are currently conducting analysis for those federally listed species described in Section 3.4.1, Affected Environment for Biological Resources, in accordance with 50 CFR Part 402.02. As of the time of this draft EA publication, the agencies believe the preferred alternative would have *no effect* on federally listed threatened or endangered species. See Appendix H, *Section 7 No Effect Memo* for additional analysis.

Indirect and Cumulative Effects

Indirect Effects: Under the No Action Alternative, commercial air tour operations within the ATMP planning area would remain consistent with existing conditions, although air tour numbers could increase (up to IOA), thus there would be no change to biological resource impacts within the ATMP planning area and no indirect impacts would be expected to occur under this alternative.

As noted in Section 3.2.2, Indirect and Cumulative Effects for Noise and Noise-Compatible Land Use, indirect noise impacts would have the potential to occur under Alternative 2, as this alternative would eliminate air tours within the ATMP planning area as compared to existing conditions, and some air tour displacement could occur. Outside the ATMP planning area, this would have indirect and minor adverse effects on biological resources compared to current conditions by increasing the potential for noise disturbance (and collision risk) relative to existing conditions. Any indirect effects on wildlife caused by displaced air tours under Alternative 2 would not likely be widespread and would be temporary in nature and infrequent on both a daily and annual basis.

Cumulative Effects: Under both alternatives, the Navajo Nation and NPS would continue current management actions and respond to future needs and conditions for biological resources without major changes in the present course. The associated noise levels from infrequent fire suppression and search and rescue activities, as well as mechanized maintenance activities on the ground, and any resultant wildlife disturbance risks within the ATMP planning area would likely continue at current levels.

Because the No Action Alternative would continue to expose designated breeding areas for sensitive, protected bird species (especially the Mexican spotted owl PACs) to noise and collision risk from commercial air tours within the ATMP planning area, cumulative effects on bird reproduction and mortality may be adverse, even though current conditions would not change. Following the same reasoning, Alternative 2 could result in some cumulative beneficial effect on sensitive (e.g., wintering, breeding) wildlife by eliminating the source of noise and resultant wildlife disturbances caused by air tours within the ATMP planning area.

3.5 Cultural Resources

The NHPA (54 U.S.C. §§ 300101 et seq.) is comprehensive federal preservation legislation intended to protect cultural resources. Section 106 of the NHPA (54 U.S.C. § 306108), as implemented in 36 CFR Part 800, requires federal agencies to consider the effects of undertakings on historic properties, should any such properties exist. Historic property is defined in 54 U.S.C. § 300308 and 36 CFR § 800.16(l)(1) as any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register. This term includes artifacts, records, and remains that are related to and located within such

properties. It also includes properties of traditional religious and cultural importance to an Indian Tribe and those that meet the National Register criteria. The FAA's environmental impact category discussing Cultural Resources is titled Historical, Architectural, Archeological and Cultural Resources in FAA Order 1050.1F. These categories include historic properties, as well as any cultural resources identified that may not be eligible for listing in the National Register, including those otherwise protected as Tribal resources or by local and state laws. Sacred sites, for example, are considered significant cultural resources and are also protected under the American Indian Religious Freedom Act. The methodology in Appendix E, *Environmental Impact Analysis Methodology*, as well as the Section 106 documentation in Appendix G, *Cultural Resources Consultation and Summary*, further describe the identification and treatment of cultural resources for the project.

In addition to Section 106 of the NHPA, the NPS's Organic Act and Section 110 of the NHPA apply to and provide for the preservation of historic, ethnographic, and cultural resources on parkland. NPS policies and directives also apply to park cultural and ethnographic resources and provide direction for their management, including the *NPS Management Policies 2006* (NPS 2006a), Chapter 5, Director's Order 28: *Cultural Resource Management*, and EO 13007, which provide direction regarding Indian Sacred Sites, and NPS Policy Memorandum 22-03, which sets forth guidance on how the NPS will implement Secretarial Order No. 3403, *Joint Secretarial Order on Fulfilling the Trust Responsibility to Indian Tribes in the Stewardship of Federal Lands and Waters*. *NPS Management Policies 2006* (NPS 2006a) § 5.3.1.7, Cultural Soundscape Management, acknowledges that culturally appropriate sounds are important elements of the national park experience in many parks and that the NPS will preserve soundscape resources and values of the parks to the greatest extent possible to protect opportunities for appropriate transmission of cultural and historic sounds that are fundamental components of the purposes and values for which the parks were established. *NPS Management Policies 2006* identifies and defines five types of cultural resources for consideration in NEPA evaluation: Archeological Resources, Cultural Landscapes, Ethnographic Resources, Historic and Prehistoric Structures, and Museum Collections. These resource types correlate generally with the FAA categories, as described further below. Museum Collections is dismissed from consideration due to the nature of the project.

The Navajo Nation Heritage and Historic Preservation Department operates under the Navajo Nation Cultural Resources Protection Act. The department protects and manages the Navajo Nation's cultural heritage, including traditional cultural properties, prehistoric and historic burials, archeological and historic properties, on Navajo Nation lands including Tribal Trust lands. (Strategic Agreement, 2018, A-23). NPS responsibilities include, but are not limited to, maintaining the cultural resource databases, seeking funding to protect cultural resources within the Park, monitoring cultural resources, managing public access to ensure that ceremonies and religious practices are not negatively impacted, and issuing some permits,

development of long-term site protection plans and consulting with the Navajo Nation on projects within the Park (Strategic Agreement, 2018, A-23).

On May 12, 2021, the agencies held a webinar with the Navajo Nation to provide basic background information on ATMPs and the ATMP development process. The Section 106 consultation with the Navajo Nation Tribal Preservation Officer (THPO) was initiated via a formal letter dated May 21, 2021.

The NEPA study area for cultural resources, as well as the ATMP planning area corresponds with the Area of Potential Effects (APE) identified as part of the Section 106 process and encompasses the potential effects of all alternatives under consideration. An APE as defined at 36 CFR § 800.16(d) is the geographic area or areas within which the undertaking may directly or indirectly cause alterations in the character or use of any historic properties, if any such properties exist. The proposed undertaking does not require land acquisition, construction, or ground disturbance, and the agencies anticipate no physical effects on historic properties. The APE, therefore, includes areas where any historic property present could be affected by the potential introduction of visual or audible elements that could diminish the integrity of any identified significant historic properties.

In establishing the proposed APE, the FAA sought to include areas where any historic property present could be affected by noise from or sight of commercial air tours that may take place as a result of the undertaking. Since the undertaking will prohibit commercial air tours within the ATMP planning area, it is reasonable that air tours may potentially operate outside of the planning area and may introduce new noise or visual impacts as a result. Accordingly in establishing the proposed APE, the FAA also requested input on the relocation of air tours outside the ATMP planning area but did not receive any additional input on the issue. Therefore, the FAA is proposing an APE comprising the Park plus ½ mile outside the boundary of the Park, the same as the ATMP planning area depicted in Figure 2.

The Park's Foundation Document identifies five statements of significance for the Park, or statements why the Park's resources and values are important enough to merit designation as a unit of the National Park System. Among these are relationships, cultural continuity, and cultural resources. Relationships are identified as significant because of the Park's location on Navajo Nation Tribal land with a resident community, the establishment of the Park as a national monument with the consent of the Navajo Nation, and the NPS's collaborative work with the Navajo Nation and canyon community to manage Park resources and enable traditional and contemporary lifeways. Cultural continuity refers to the fact that the Park "...preserves one of the longest continually inhabited locations by American Indian communities in the United States, spanning at least 5,000 years. Tséyi', 'the place deep within the rock,' sustains a living community connected to a landscape of great historical and spiritual significance — a landscape composed of places infused with collective memory and defining

moments in Navajo history. It is essential to the spiritual and traditional lives and cultural identity of many native peoples” (NPS, 2016).

The Foundation Document also identifies the Park’s fundamental resources and values, including cultural landscapes, continuing cultural connections, experience of place, and partnerships and relationships. As the Park’s foundation document explains, “Canyon de Chelly is fundamentally linked to the cultural practices and beliefs of the Navajo and other traditionally associated groups and is central to the perpetuation of their respective cultural identities.” It notes that “[s]pecific places and natural features (e.g., Spider Rock, Fortress Rock, and celestial features) are physical expressions of the defining stories and events in the history of the Navajo people and retain profound spiritual and sacred significance.” It further recognizes that “[f]or the Navajo people (Diné), Canyon de Chelly (Tséyi’) is a physical and spiritual home that sustains the families who live in the canyons as well as a sacred place connecting all Navajo to their cultural heritage and beliefs. Canyon de Chelly also has enduring cultural importance for the other regional native peoples whose ancestors once occupied the canyons” (NPS, 2016). Consistent with these fundamental resources and values, the NPS prohibits visitors from entering the canyons of the Park unless accompanied by NPS employees or by authorized guides (36 CFR § 7.19).

The Park’s Foundation Document (NPS, 2016) makes clear that the Park has identified archeological and cultural landscapes associated with Tribal partners as a significant cultural resource that should be protected from any diminishment. NPS-28: *Cultural Resource Management Guideline* (1998) provides the guidance for ensuring that these significant sites are not diminished. In particular, NPS-28 provides the following direction:

When used by their associated ethnic groups, these types of resources help underpin entire cultural systems. Resource management sensitive to the rights and interests of these groups, especially Native Americans, can help perpetuate if not strengthen traditional activities such as subsistence, language use, religious practice, and aesthetic expression. In this context, cultural resource management extends beyond concern with tangible resources to recognition and accommodation of cultural processes.

NPS Policy Memorandum 22-03 sets forth guidance on how the NPS will implement Secretary’s Order No. 3403, *Joint Secretarial Order on Fulfilling the Trust Responsibility to Indian Tribes in the Stewardship of Federal Lands and Waters*. This policy states that the NPS will give due consideration to Tribal recommendations and Indigenous knowledge in the planning and management of Federal lands and waters. Per EO 13007, the NPS will, to the greatest extent practicable, accommodate access to and ceremonial use of Indian sacred sites by Indian religious practitioners and avoid adversely affecting the physical and spiritual integrity of such sacred sites; collaborate with Indian and other traditionally associated peoples who have identified sacred sites within units of the National Park System to prepare mutually agreeable

strategies for providing access; and enhance the likelihood of privacy during religious ceremonies.

The FAA contacted the Navajo Nation and 23 federally recognized tribes via letter on March 26, 2021, inviting them to participate in consultation and requesting their expertise regarding historic properties, including Traditional Cultural Properties (TCPs) that may be located within the APE. On December 3, 2021, and December 9, 2021, the FAA sent follow up emails to the federally recognized tribes once again inviting them to participate in Section 106 consultation. On December 15, 2021, and December 20, 2021, the FAA followed up with phone calls to those tribes that did not respond to prior consultation requests. The FAA received responses from four tribes expressing interest in participating in the Section 106 consultation process: Pueblo of Acoma, Pueblo of Isleta, Pueblo of Tesuque, and Pueblo of Picuris.

Five tribes opted out of additional consultation for the undertaking: Pueblo of Pojoaque, Pueblo of Sandia, Pueblo of Santa Ana, San Carlos Apache Tribe, and White Mountain Apache Tribe.

On June 2, 2023, the FAA sent the participating federally recognized tribes a Section 106 consultation letter describing the proposed undertaking in greater detail in which a proposed APE and the results of the preliminary identification efforts of historic properties was provided. The agencies recognize that these tribes have a long-standing and deeply rooted association with the landscape that encompasses Canyon de Chelly National Monument, which includes numerous sites of religious and cultural significance. All of the lands within the Park are Navajo Nation Tribal Trust Lands.

The FAA invited the National Parks Conservation Association (Arizona Field Office) and Apache County to participate in consultation by letter dated June 9, 2021, and August 6, 2021, respectively and included them as consulting parties in subsequent consultation. On June 2, 2023, the FAA also invited the National Trust for Historic Preservation, Southwest Safaris, and Grand Canyon Airlines to consult under Section 106 and provided a Section 106 consultation letter describing the proposed undertaking and proposed an APE. In the June 2, 2023, letter, the FAA also provided the results of our preliminary identification of historic properties.

A letter dated October 26, 2023, sent to all consulting parties, described FAA's further efforts to identify and evaluate historic properties within the APE. The air tour operator did not agree with the FAA's selection of historic sites for inclusion in the APE. The agencies published a notice in the Federal Register, inviting the public to engage in the Section 106 process and provide feedback on the APE and historic property identification. The agencies accepted comments through the NPS's Planning, Environment & Public Comment (PEPC) website from November 2 through December 4, 2023. Three comments were submitted, all supporting the discontinuation of air tours over the Park. On December 28, 2023, the FAA sent letters to the Office of the Navajo Nation President and other consulting parties to notify them of a finding of

“no adverse effect” determination and request review and concurrence on this determination. See Appendix G, Cultural Resources Consultation and Summary, for more information.

3.5.1 Affected Environment

The affected environment includes prehistoric or historic districts, sites, buildings, structures, and/or objects, as well as TCPs (inclusive of ethnographic resources and sacred sites) and cultural landscapes that have been previously documented in the APE or identified through consultation. The affected environment, the ATMP planning area and the APE are all the same geographic area. Under existing conditions, based on operator-reported routes, the commercial air tours fly over all three canyons (see Figure 5).

Throughout the Section 106 process, the agencies requested consulting parties’ input to help identify historic properties within the APE. The agencies provided an initial historic property identification list to consulting parties in the June 2, 2023 letter requesting further input on the identification of historic properties within the proposed APE.

Cultural Resources List

Identified cultural resources within the APE, listed in Table 6 and depicted in Figure 5 are described below and can also be found in Appendix G, Cultural Resources Consultation and Summary.

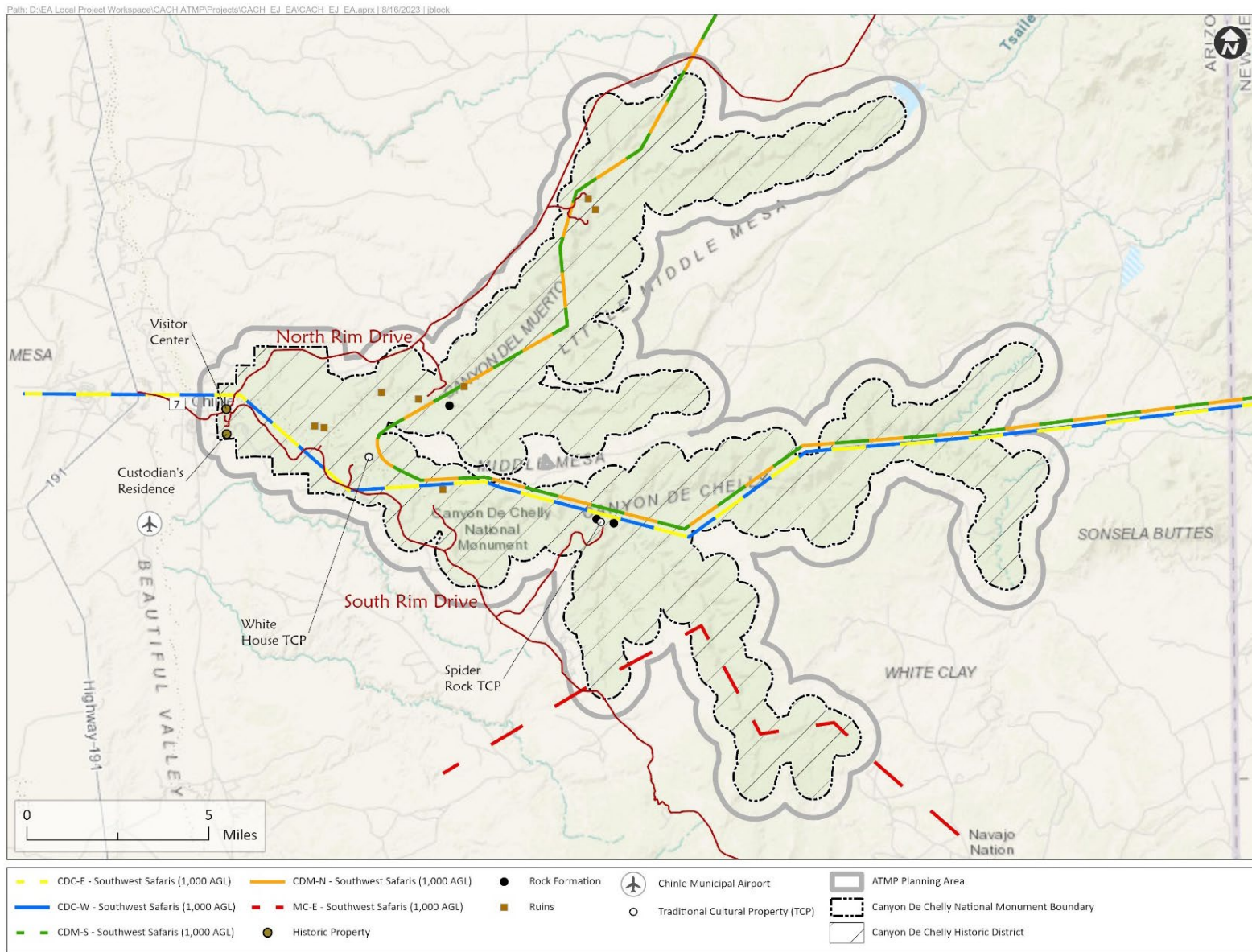


Figure 5. Affected Environment for Cultural Resources and Environmental Consequences for Alternative 1 (No Action).

Table 6. List of Historic Properties in the APE and Description of Historic Characteristics and Section 4(f) Resources.

Property Name	Property Type	Eligibility Status	Significant Characteristics
Canyon de Chelly National Monument	District	Listed	<p>Canyon de Chelly National Monument preserves the remains of aboriginal Anasazi ruins from the Basket Maker II, ca. A.D. 350 through Pueblo III, ca. A.D. 1300, periods. It contains several large and hundreds of small excellently preserved sites of the prehistoric Anasazi. Many of the sites are cliff dwellings containing large amounts of dry, cultural debris. In addition, 18th, 19th, and 20th century A.D. sites of Navajo occupancy remain in the monument. The monument is occupied by families who farm and graze the Canyons today. Canyon de Chelly was the site of Carson's campaign of 1864 which ended the American wars with the Navajo.</p> <p>The remarkable scenery of Canyon de Chelly National Monument reflects the dramatic contrast of brightly colored sandstone walls and rock promontories that tower above sinuous bands of vegetation and agricultural fields along the narrow canyon floors. Canyon rim overlooks provide breathtaking panoramic views into and across the canyons to distant vistas. The presence of Navajo hogans and fields within the canyons set against a backdrop of ancient cliff dwellings visually reinforce the long span of human history and the continuing importance of the canyons for the resident Navajo community.</p>
Custodian's Residence	Building	Eligible	<p>Constructed in 1935-7, the building is an excellent example of Pueblo Revival Architecture. It is a good example of the Southwestern atmosphere of Canyon de Chelly. Although its architectural roots were not Navajo, its design was appropriate for the site in a broader, regional context. Its significance is arguably conveyed through setting and feeling by way of spatial relationships with other historic buildings nearby. The building used to be considered contributing to the Thunderbird Lodge historic district (delisted from the National Register). The character of the building's setting and feeling is still conveyed through its association with these other buildings in the Thunderbird Lodge complex.</p>
Canyon de Chelly National Monument's Mission 66 Visitor Center	Building	Eligible	<p>From 1956 to 1966, the Park Service commissioned over one hundred new visitor centers and additions to existing museum buildings. Local contract architects were responsible for some of the designs, but the bulk of the work went to Park Service architects. The Canyon de Chelly National Monument's Mission 66 Visitor Center was constructed in 1964 by Cecil Doty, an architect from Oklahoma trained in the traditional Park Service Rustic style of design. These buildings were designed to harmonize with the surrounding landscape. Some of them, including the Visitor Center, contain viewing terraces overlooking an area of the Park. The specific visitor center viewsheds at CACH overlook the mouth of the canyon from two (east and west-facing) adjoining courtyard terraces. These viewsheds are likely character defining features of the building as it is sitting at the mouth of the canyon and offers interpretive value from the building's courtyard terraces.</p>

Property Name	Property Type	Eligibility Status	Significant Characteristics
TCPs within the Park boundary ⁵	TCPs	Eligible	<p>North: ID#88, ID#395, ID#455</p> <p>West: ID#16, ID#87, ID#172, ID#182, ID#184, ID#217, ID#219, ID#373, ID#375, ID#378, ID#379, ID#392, ID#393, ID#406, ID#414, ID#424, ID#434, ID#435, ID#437, ID#477, ID#552, ID#1052, ID#1058</p> <p>East: ID#202, ID#234, ID#898</p> <p>Setting and feeling are significant characteristics for several of the TCPs that were identified within the APE. For example, some places are used as the person stands on the rim of an overlook and prays, for prayers in general, or as storage places for bundles or offerings that are used during ceremony.</p>
TCPs within the half-mile boundary around the Park. ⁵	TCPs	Eligible	<p>ID#32, ID#73, ID#574, ID#1080: Setting and feeling are significant characteristics for several of the TCPs that were identified within the APE. For example, some places are used as the person stands on the rim at the overlook and prays, for prayers in general or as storage places for bundles or offerings that are used during ceremony.</p>
White House TCP (ID#184)	TCP	Eligible	<p>White House Ruins in Canyon de Chelly (Kiníí'na'ígai) has an associated ceremonial history. Pre-Columbian sites can be sources of spiritual, sacred power to Navajo people. Offerings are made at these sites, and oral histories (of the people, of ceremonies, of clans) refer to these places at times when people were still living there. This place has been continuously used for contemplation and prayer by the Navajo people. Significant characteristics of this TCP include the natural scenery and vegetation, which are linked to ceremonial visions.</p>
Spider Rock TCP (ID#414) ^(a)	TCP	Eligible	<p>Spider Rock is a significant TCP for the Navajo. The rock is considered the home of Spider Woman, a benevolent figure who is recognized in many traditional Native American oral stories as a guide, protector and healer, teacher, disciplinarian, adviser and/or spiritual leader. Spider Rock is eligible for inclusion in the National Register because of its association with cultural practices or beliefs that are rooted in various Southwestern Native American histories and because it is important in maintaining cultural identity. Spider Rock's natural surroundings, viewshed and noise constraints are vitally important in conveying respect for Spider Woman and her home, in sharing lessons taught by Spider Woman regarding weaving, and in establishing a geographical context for oral histories as well as healing ceremonies.</p>

Notes:

(a) Location is restricted and therefore cannot be shown on the APE map.

Historic District (comprising Archeological Resources/Sites, Prehistoric and Historic Structures, and Cultural Landscape)

Archeological resources are the physical evidence of past human activity, including evidence of the effects of that activity on the environment. Archeological resources include artifacts and features located in a concentrated area, otherwise known as sites, as well as isolated occurrences of cultural material located outside of site boundaries.

A cultural landscape reflects human adaptation and use of natural resources and is often expressed in the way land is organized and divided. Cultural landscapes are geographic areas associated with specific cultures or historical events, and they help illustrate how humans have adapted to and altered their surroundings. The NPS recognizes four cultural landscape categories: historic designed landscapes, historic vernacular landscapes, historic sites, and ethnographic landscapes.

As stated above, Congress authorized the establishment of the Park on February 14, 1931, (Public Law 71-667) to protect significant prehistoric archeological sites and ruins. The resources contribute to one of the most important and extensive archeological landscapes in the Southwest (NPS, 2016). The entire Park is listed as an historic district, and it is on the Navajo Nation Register of Cultural Properties. This historic district/cultural property includes all archeological sites and resources.

The Park preserves the remains of aboriginal ruins from the Basketmaker II (ca. A.D. 350) through Pueblo III (ca. A.D. 1300) periods. It contains several large and hundreds of small excellently preserved sites of these prehistoric periods. Many of the sites are cliff dwellings containing large amounts of dry, cultural debris. In addition, 18th, 19th, and 20th century A.D. sites of Diné occupancy remain in the monument. Diné farm and graze the canyons today.

Among the varied archeological resources are stratified occupational deposits that include ceramic, lithic, and occasionally perishable materials (baskets and other objects fashioned from plant fibers); large aboveground structural complexes (e.g., White House, Antelope House, Mummy Cave); smaller structural remains in canyon wall alcoves; pictographs and petroglyphs; and evidence of trails (e.g., handholds/footholds carved into the canyon walls) (NPS, 2016). Smaller or less visible prehistoric sites include archeological resources on remnant alluvial terraces scattered along the canyon floor. These sites are characterized by low mounds, slight depressions, truncated dry-laid sandstone walls, occasional vertical slabs, and scatters of artifacts. Archeological sites can range from a small ephemeral artifact scatter or the fragmentary remains of a Puebloan village (Natural Resources Conservation Service [NRCS], 2000).

Approximately 30% of the Park has been archeologically inventoried resulting in about 1,600 identified and recorded sites (NPS, 2016). Surveys of the north canyon, Canyon del Muerto,

have identified about 750 archeological sites. Although not formally surveyed, the south canyon, Canyon de Chelly, is believed to contain at least the same amount of archeological resources as the north, if not more (NPS, 2022a). The NPS does not disclose the exact locations of sensitive resources.

There are 164 documented prehistoric/historic structures with estimates in the range of 400 additional structures not fully documented. The cliff dwellings and other Puebloan structures are all in the canyons. Navajo rancherias are also present in the canyons and rim areas of the Park. The most distinctive structures at traditional Navajo rancherias are hogans (NPS, 2006b).

Traditional Cultural Properties, Ethnographic Resources, and Sacred Sites

Ethnographic resources are resources that are associated with the customs, habits, or behaviors of a cultural group, including those that possess religious and cultural significance. A sacred site, as defined in EO 13007, is any specific location that is identified to be an appropriately authoritative representative of an indigenous religion, as sacred by virtue of its established religious significance to, or ceremonial use by, an indigenous religion. A TCP is a property significant due to its association with past and continuous cultural practices or beliefs of a living community that are rooted in that community's history and are important in maintaining the continuing cultural identity of the community. TCPs possess traditional cultural significance derived from the role the property plays in a community's historically rooted beliefs, customs, and practices (NPS, 1992). TCPs are treated as historic properties for the purpose of evaluating impacts under Section 106 and NEPA (FAA, 2020).

The Diné maintain a cultural connection with the landscape through their continued residency and use of the landscape. The entire Park is listed on the Navajo Nation Register of Cultural Properties and the National Register of Historic Places, and it is considered a TCP. In addition to the prehistoric and historic resources described above, the monument also contains additional TCPs that are individually identified.

White House Ruins in Canyon de Chelly (Kiní'na'ígai) has an associated ceremonial history. Pre-Columbian sites can be sources of spiritual, sacred power to the Diné. Offerings are made at these sites, and oral histories (of the people, of ceremonies, of clans) refer to these places at times when people were still living there.

Specific places and natural features (e.g., Spider Rock, Fortress Rock, and celestial features) are physical expressions of the defining stories and events in the history of the Diné and retain profound spiritual and sacred significance (NPS, 2016). Spider Rock, a tall geological formation (spire), is a significant TCP for the Diné. This sandstone chimney rock is considered the home of Spider Woman, a benevolent figure who is recognized in many traditional Native American oral stories as a guide, protector and healer, teacher, disciplinarian, adviser and/or spiritual leader. It is connected to other natural geological features through stories and ceremonies. The

natural setting, surroundings, and viewshed of Spider Rock are vitally important in conveying respect for Spider Woman and her home, in sharing lessons taught by Spider Woman regarding weaving, and in establishing a geographical context for oral histories, as well as healing ceremonies. Spider Rock is eligible for inclusion in the National Register because of its association with cultural practices or beliefs that are rooted in various Southwestern Native American histories and because it is important in maintaining cultural identity.

Other TCPs within the ATMP planning area have been identified. Some places are used as the person stands on the rim of an overlook and prays, for prayers in general, or as storage places for bundles or offerings that are used during ceremony. For these TCPs, the natural setting and feeling are significant characteristics.

The preservation of natural resources and the natural setting of the Park are important to maintaining the integrity of ethnographic resources, including TCPs. Many of these natural resources are contributing features to the cultural resources detailed throughout this draft EA. For example, the Resolutions stated that the Park contains features that contribute to cultural practices, such as the natural soundscape of the canyon (e.g., birds chirping and winds rustling plants and trees), as well as sensitive cultural artifacts and archaeological sites including adobe ruins, fragile cliffs, and sandstone rock formations.

Historic Buildings

The Custodian's Residence was constructed between 1935 and 1937 and is an excellent example of Pueblo Revival Architecture. It is a good example of the Southwestern atmosphere of Canyon de Chelly. Although its architectural roots were not Navajo, its design was appropriate for the site in a broader, regional context. The character of the building's setting and feeling is still conveyed through its association with these other buildings that constitute the Thunderbird Lodge complex (but ineligible for the National Register).

From 1956 to 1966, the NPS commissioned over one hundred new visitor centers and additions to existing museum buildings throughout the National Park System. The majority of the buildings were designed by NPS architects. The Park's Mission 66 Visitor Center was designed by Cecil Doty, an architect from Oklahoma trained in the traditional NPS Rustic style of design. Doty made the transition from rustic to modern style, stripped of obvious associates with regional context. Doty's designs were modest and utilitarian. The Canyon de Chelly Mission 66 Visitor Center, described as "stark," includes viewing terraces (Allaback, 2000), some of which overlook the mouth of the canyon from two (east and west-facing) adjoining courtyard terraces. The siting of the Mission 66 Visitor Center at the mouth of the canyon also offers interpretive value from the building's courtyard terraces. Construction was completed in 1964. The Mission 66 Visitor Center (at the western end of the monument) is about 3 miles east of the turnoff to Chinle from U.S. Highway 191 (NPS, 2016).

3.5.2 Environmental Consequences

Cultural resources within the APE include historic, architectural, archeological, and cultural resources, inclusive of ethnographic resources, TCPs, sacred sites, cultural landscapes, historic districts, and prehistoric and historic buildings and structures. Adverse impacts to these resources would occur if the alternative would alter the characteristics that contribute to the significance of a cultural resource in a manner that diminishes the integrity of the resource's location, design, setting, materials, workmanship, feeling, or association. Commercial air tours, by their nature, have the potential to impact resources for which feeling and setting are contributing elements.

Neither alternative evaluated limits access to Tribal sacred sites nor involves ground disturbance that would adversely affect the physical integrity of sacred sites on federal lands.

Alternative 1: No Action

Under the No Action Alternative, commercial air tours would continue to operate fixed-wing aircraft on three routes at altitudes ranging from 800 ft to 1000 ft AGL. The continuation of air tours flying passengers above the Park would continue to result in an invasion of privacy for Diné residents and users. As stated in Section 2.4.1, reporting data from 2017-2019 indicates that air tours fly over the APE approximately 43 times per year, and on days when air tours occur, an average of one tour is flown. Based on the *Noise Technical Analysis* (see Appendix F, Section 2.4), which uses an average of one flight per day (based on a peak month, average day of commercial air tour activity for the three-year average from 2017-2019), and Section 3.2.2, the maximum time that noise from air tours would be above 35 dBA, the level at which experience is degraded in quiet settings (ANSI 2007), is less than 5 minutes a day, across 69% of the ATMP planning area. Therefore, although some noise and visual intrusions would continue to be present, they would be infrequent and limited to a few minutes per day and approximately 43 instances per year.

The noise associated with existing commercial air tours over the Park is minimal, short in duration, and maximum sound levels are low. Noise from air tours would result in infrequent detractions from the feeling and setting of the Park's cultural resources, including historic districts, cultural landscapes, archeological resources, TCP, sacred sites, ethnographic and natural features, and historic structures that are located closest to the existing air tour routes. These effects would continue to occur under the No Action Alternative.

As described in Section 2.2.1, Air Tours within the ATMP Planning Area, the presence of existing low-altitude overflights over the Park, including commercial air tours, unreasonably interferes with Tribal connections to the sacred landscape of the Park. Air tours over the Park interfere with the privacy of the Navajo as they carry out ceremonies and sacred practices, the protection of which is a primary purpose of the Park. Tribal dances are religious ceremonies

and are not public performances. It is a privilege to witness a ceremony. As noted in the Resolutions, commercial air tours may interrupt these practices by their physical presence and invasion of privacy, which denigrates the sacred space that the Park protects.

A letter from the Navajo Nation President stated that overflights, including commercial air tours, have disturbed gatherings and traditional religious practices at sacred sites, impacted viewsheds to sacred geological formations and natural features, are inappropriate to the sacred landscape, and disrupt the tranquility of accessing the lands for reflection or cultural purposes. Resolutions from the Navajo Nation Chapters have emphasized that overflights, including commercial air tours, have negative impacts on the cultural heritage of dances, traditional events, agriculture, and hunting, among other events and activities.

Because continuing cultural connections to the Park is a fundamental resource value of the Park and is significant to the Park's purpose, based on information learned in consultation, air tours and their resultant interference with Tribal connections to the land under the No Action Alternative would be inconsistent with the Park's purpose and values for which it was established.

Alternative 2

Under Alternative 2, the elimination of commercial air tours from the ATMP planning area would eliminate flights and routes within the planning area, the minimal noise impact is expected to be reduced. The elimination of air tours within the ATMP planning area will also reduce the likelihood that an air tour would interrupt traditional practices such as ceremonies, as compared to existing conditions. Therefore, the undertaking would not diminish the integrity of any historic property's significant historic features.

Indirect and Cumulative Effects

Indirect Effects: Indirect effects on cultural resources could occur from noise and visual impacts caused by air tours flying outside of the ATMP planning area. Indirect effects on Tribal privacy, religious, and cultural activities that are fundamental to the Park's purpose and values could occur from air tours displaced to outside the ATMP planning area to the extent that those effects were experienced by Diné.

Under the No Action Alternative, commercial air tour operations within the APE would remain consistent with existing conditions. Although air tour numbers could increase up to IOA (175 flights per year), there would be no change to cultural resources within the APE, and no indirect impacts would be expected to occur under this alternative. As noted in Section 3.2.2, Environmental Consequences for Noise and Noise-Compatible Land Use, indirect noise impacts would have the potential to occur under Alternative 2 as this alternative could result in the displacement of air tours outside the ATMP planning area.

As described in Section 3.1.1, Indirect Impacts Scenario, commercial air tours could be displaced to outside of the ATMP planning area. For air tours conducted at or above 5,000 ft. AGL, the increase in altitude would likely decrease impacts on ground-level resources as compared to current conditions because the noise would be spread over a larger geographical area. Noise from air tours conducted at or above 5,000 ft. AGL would be audible for a longer period but at a lower intensity. Similarly, aircraft are transitory elements in a scene and visual impacts tend to be relatively short, especially at higher altitudes. Some of these air tours could still encroach on Tribal privacy, religious, and cultural activities that are fundamental to the Park's purpose and values, but these impacts would be less likely to occur if air tours are flown at higher altitudes.

It is difficult to predict with specificity if, where, and to what extent any displaced air tours would result in impacts in different and/or new areas under Alternatives 2. Because Alternative 2 would prohibit commercial air tours from being conducted within the ATMP planning area, it has the potential to result in the displacement of air tours and could result in more flights over cultural resources that extend beyond the ATMP planning area. While Alternative 2 could result in some indirect noise and visual impacts to cultural resources within the APE for flights along the perimeter but outside or above the ATMP planning area, these impacts are not anticipated to result in adverse effects on cultural resources as they would be low in intensity and frequency. See Appendix G, *Cultural Resources Consultation and Summary*, for more information.

Cumulative Effects: As stated in Section 3.1.2, Cumulative Impacts Scenarios, under either of the alternatives, the Navajo Nation, BIA and NPS would continue current management actions and respond to future Park needs and conditions without major changes in the present course. Aircraft, mechanized equipment, ground teams, and vehicular tours would continue to generate noise during normal operations. The noise created by these actions would continue to be short in duration and produce low levels of sound. This would continue to result in infrequent detractions from the feeling and setting of the cultural resources within the Park, including historic districts, cultural landscapes, archeological resources, TCP, sacred sites, ethnographic and natural features, and historic structures that are located closest to these actions.

Ongoing visual impacts within the APE include general aviation flights, which would likely continue in the same frequency and manner under either of the alternatives, as they occur independently of air tours, and be at a much higher elevation. This would continue to result in infrequent detractions from the feeling and setting of the cultural resources in the Park. Because the No Action Alternative would not result in any new direct or indirect impacts compared to current conditions, there would be no cumulative effects from the No Action Alternative. The cumulative effects would be fewest under Alternative 2, which would prohibit air tours within the ATMP planning area. Ongoing present and future Park management actions

and construction activities by the NPS, as well as ongoing general aviation over the Park, would continue to occur under either of the alternatives.

3.6 Visitor Use and Experience and Other Recreational Opportunities

While visitor use and experience is not an impact category the FAA traditionally examines, the NPS has agency-wide (see *NPS Management Policies 2006* (NPS 2006a), § 8.2) and Park-specific guidelines (NPS, 2016) for managing visitors within the National Park System. This section also examines impacts on air tour customers. The Diné and other Tribes that have ancestral connections to the Park are not considered Park visitors. The impacts on Diné and other Tribal members connected to Park lands are discussed in Section 3.5, Cultural Resources.

3.6.1 Affected Environment

Visitor Trends and Experience

Most of the Park's recreational visits are day use, with the highest visitation during the summer months (June, July, and August). Key visitor facilities within the Park include the canyon overlooks, and Puebloan ruins. Visitor services and activities include a Visitor Center, camping, lodging, hiking, jeep and horseback trails and tours, rock art viewing, picnicking, photography, and interpretative programs. Park staff, volunteers, and guides provide a variety of in-person interpretive and educational programs throughout the year. These programs may occur at various locations in the Park but are most frequently provided in the vicinity of visitor centers and along tour routes (NPS, 2023c). With the exception of self-guided hikes at the White House Overlook and Trail, visitor activities occurring within the canyon are allowed only with a Navajo guide. At the time of this environmental assessment, the White House Overlook and trail are closed until further notice for safety reasons.

The character and quality of the visitor experience influence perception of natural areas, providing a unique encounter with a place that differentiates it from other areas. Public enjoyment of resources is a fundamental purpose of all national parks (NPS, 2006a). The most popular visitor-use areas are the overlooks on South Rim and North Rim Drives. The South Rim and North Rim roads bring visitors to scenic overlooks, archeological sites, trails, and visitor services within. Visitors are primarily drawn to the significant cultural resources (refer to Section 3.5.1, Affected Environment for Cultural Resources for more information), as well as the opportunity to observe wildlife and the Park's outstanding scenery. The Visitor Center, Cottonwood camping, lodging and picnic areas, two rim roads, and overlooks are the only developed areas within the Park. (NPS, 2023c).

Figure 6 depicts key visitor facilities and points of interest within the ATMP planning area.

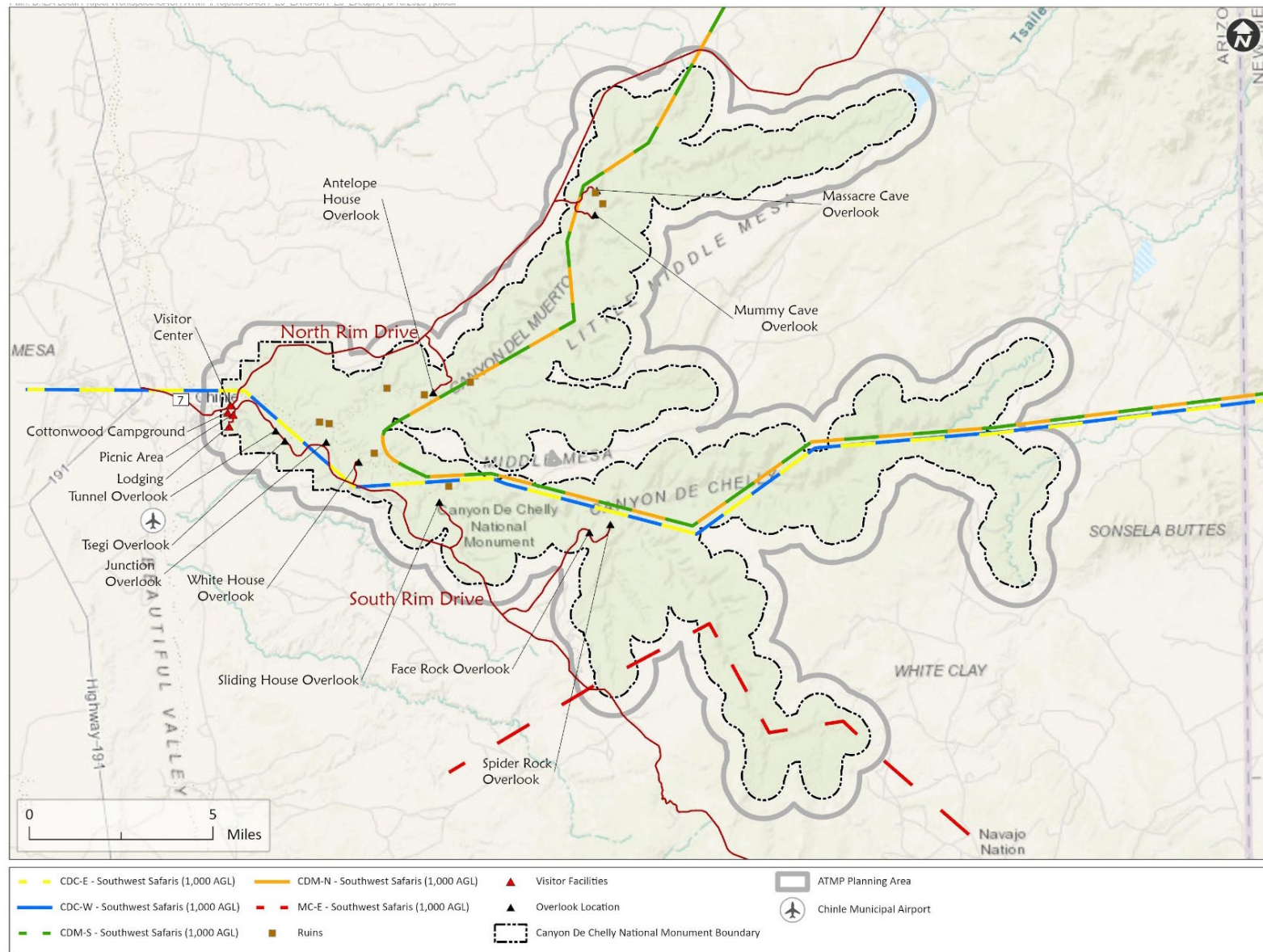


Figure 6. Visitor Facilities and Points of Interest within the ATMP Planning Area.

Other Recreational Opportunities

This category applies to persons recreating within the ATMP planning area through the experience of air tours. An average of 225 air tour customers per year are currently able to experience the Park from another perspective.⁸ The air tour experience often varies depending on weather conditions and other factors, such as length of the flight and the Park features that are viewed. Currently, the air tour operator offers various tours over the Park via fixed-wing aircraft and is authorized to fly up to 175 operations over the Park each year.

3.6.2 Environmental Consequences

The NPS allows visitor uses that are appropriate to the purpose for which the park was established and can be sustained without causing unacceptable impacts to park resources or values.

Alternative 1: No Action

Under existing conditions, air tours are concentrated near visitor points of interest including the scenic overlooks, ruins, canyon bottoms, visitor center, and campground, which would continue under the No Action Alternative. Table 7 presents a summary of the locations within the Park where sound was measured, the corresponding results of the acoustic monitoring at these locations, and the time that the noise level was above 52 dBA (which generally corresponds with noise that would result in speech interference). These data represent the current conditions, based on the best available information for existing air tour operations, and these conditions would continue under the No Action Alternative.

Table 7. Average dBA at Acoustic Measurement Locations and Time Above 52 dBA

Location	Daytime sound level range (approximate)	Time Above 52 dBA
Chinle Wash (canyon bottom)	20 to 40 dBA	0 minutes
Antelope House Ruin	16 to 56 dBA	0 minutes
White House Rock Overlook	18 to 57 dBA	<1 minute
Antelope House Ruin Overlook	21 to 50 dBA	0.1 minutes
Spider Rock Overlook	18 to 41 dBA	<1 minute

Source: Baseline Ambient Sound Levels In Canyon De Chelly National Monument, Appendix A, April 2011 (Volpe 2011)

⁸ The estimated 225 air tour visitors is based on the average reported air tours from 2017-2019 (43), multiplied by an estimated 5 passenger seats per aircraft. The number of air tours visitors likely overestimates the actual number since it assumes every passenger seat is occupied.

As illustrated in Figure 5 and Figure 6, the air tour routes fly over many of the popular visitor destinations. Speech interference would not be anticipated to occur at most visitor points of interest. However, Table 7 shows that based on the noise modeling for the No Action Alternative, noise from air tours could result in speech interference impacts at Antelope House Ruin Overlook and Spider Rock Overlook for less than one minute a day (Volpe, 2011). The 2023 Baseline Ambient Sounds Level also concluded that the time above 52 dBA would be 0 to less than 5 minutes for 7% of the Park and primarily in the areas of the Visitor Center, Spider Rock and overlook, and White House Rock (Appendix F). This noise would be expected to have a minimal effect on visitor experience and interpretive programs given the short duration of noise impacts and limited number of occurrences (43 flights per year).

Visitor experience in other areas of the Park, such as along trails or campgrounds may be impacted by air tour noise since visitors engaging in these activities value natural quiet. The *Noise, Air Quality, and Greenhouse Gas Emissions Technical Analysis* (Appendix F, Section 2.4) shows that noise above 35 dBA would occur for less than five minutes a day across 69% of the ATMP planning area (primarily the east-to-west aligned canyons and rims) under the No Action Alternative. For purposes of the *Noise, Air Quality, and Greenhouse Gas Emissions Technical Analysis*, an average of 43 flights per year and an average of one flight per day (based on a peak month, average day of commercial air tour activity for the three-year average from 2017-2019) was used. In these areas where visitors could generally expect to hear natural sounds during their visit, noise from commercial air tours under this alternative could impact visitor experience by temporarily affecting their ability to hear natural sounds. However, given the very short duration of noise from air tours that would occur under the No Action Alternative, and the limited number of flights per year (43 air tours), effects on visitor experience would be expected to be minimal.

Air tours also introduce aircraft into the visitors' views. However, given the short duration of an air tour over a given area that would occur under the No Action Alternative, and the limited number of flights per year, effects on visitors' views of the resources would be expected to be minimal.

See Section 3.5.2, Environmental Consequences for Cultural Resources for discussions on how commercial air tours could impact cultural resources that are visitor points of interest. This analysis is based on the three-year average of flights between 2017 and 2019.

Commercial air tours offer a recreational experience for those who wish to view the Park from a different vantage point. Commercial air tour pilots may provide education to commercial air tour customers about the region, its history, and geology. Because the number of commercial air tours under the No Action Alternative would expected be consistent with the average number of flights from 2017-2019 but could increase up to 125 air tours per year, there would be no changes anticipated to the availability of this experience under this alternative.

Alternative 2

Under Alternative 2, commercial air tours would not fly within the ATMP planning area, which would eliminate this source of noise and visual intrusion from the ATMP planning area. Therefore, there would be a minimal direct beneficial impact on Park visitor use and experience since the intensity and presence of noise and sight of aircraft from commercial air tours would be less than under the No Action Alternative. Alternative 2 would offer the greatest protection for visitor use and experience.

However, Alternative 2 would not allow commercial air tours within the ATMP planning area, so air tour customers would not be able to view the Park from an aerial vantage point within the ATMP planning area. This would have an adverse effect on the air tour customers' experience within the ATMP planning area. In recent years, the number of air tours has been limited, so the loss of this experience would affect a very small percentage of visitors.

Indirect and Cumulative Effects

Indirect Effects: Under the No Action Alternative, commercial air tour operations within the ATMP planning area would remain consistent with existing conditions, although air tour numbers could increase up to IOA (175 flights per year), thus there would be no change to the visitor experience within the ATMP planning area and no indirect impacts would be expected to occur under this alternative.

As noted in Section 3.2.2, Indirect and Cumulative Effects for Noise and Noise-Compatible Land Use, indirect noise impacts would have the potential to occur under Alternative 2. Alternative 2 would eliminate air tours, which would therefore have the potential to result in some displacement of air tours outside of the ATMP planning area. Air tours occurring outside of the ATMP planning area may result in noise that could affect visitor use and experience in areas outside of the Park where those air tours would be occurring. As described in Section 3.1.1, Indirect Impacts Scenario, the operator may choose to fly along existing flight paths but at or above 5,000 ft. AGL. For air tours conducted at or above 5,000 ft. AGL, the increase in altitude would likely decrease impacts on ground-level resources compared to current conditions because the noise would be dispersed over a larger geographical area.

The operator currently flies multiple tours over different parks and lands in Arizona (Southwest Safaris, 2023a), and they could fly these tours more frequently. The majority of destinations and tours offered by the operator are to the west, north, and east of the Park, and the airport used for most flights is located west of the Park. There may be a slight increase in flights over Navajo Nation Tribal lands outside of the ATMP planning area, if air tours were displaced outside of the ATMP planning area. This could temporarily increase noise-related effects on visitors, such as speech interference and the inability to hear natural sounds when flights pass overhead. It is difficult to predict with specificity if, where, and to what extent any displaced air

tours would result in impacts in different and/or new areas under Alternative 2. Alternative 2 could result in greater impacts outside the ATMP planning area from displaced air tours.

Cumulative Effects: As stated in Section 3.1.2, Cumulative Impacts Scenarios, under either of the alternatives, the NPS would continue current management actions and respond to future Park needs and conditions without major changes in the present course. Aircraft, mechanized equipment, ground teams, and vehicular tours would continue to generate noise during normal operations. Noise from this equipment and aircraft audibly and visually detracts from visitor use and experience. These projects and flights are anticipated to continue to facilitate resource stewardship projects and scientific research under the alternatives and could create additional disturbances to visitor experience in the locations where these activities occur. However, because these projects and flights generally occur throughout the ATMP planning area and are not concentrated in any one area, they are not a source of consistent disruption to the visitor experience.

The No Action alternative would not result in any new direct or indirect impacts compared to current conditions, there would be no cumulative effects from the No Action alternative. Alternative 2 would result in minimal cumulative beneficial effects on visitor use and experience in the ATMP planning area by eliminating noise-related impacts from commercial air tours that occur within the ATMP planning area.

3.7 Environmental Justice and Socioeconomics

As mandated by EO 12898 (*Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, dated February 11, 1994), “each federal agency shall make achieving environmental justice part of its mission by identifying and addressing as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations.” In addition to EO 12898, DOT Order 5610.2c, *Final Order to Address Environmental Justice in Low-Income and Minority Populations*, requires the FAA to incorporate environmental justice (EJ) principles in project development and provide meaningful public involvement opportunities to minority and low-income populations, known as “EJ populations.” For the purposes of this EJ analysis, the FAA will use the minority and low-income definitions provided in DOT Order 5610.2c.⁹

Socioeconomics is an umbrella term used to describe aspects of a project that are either social or economic in nature, or a combination of the two. A socioeconomic analysis evaluates how

⁹ See DOT Order 5610.2C Appendix, <https://www.transportation.gov/sites/dot.gov/files/Final-for-OST-C-210312-003-signed.pdf>

elements of the human environment, such as population, employment, housing, and public services, might be affected by the Proposed Action and alternative(s) (FAA, 2020). The CEQ regulations for implementing NEPA (40 CFR Parts 1500-1508), direct economic analyses of federal actions that will affect local or regional economies. The policies and rationale associated with including an evaluation of socioeconomic impacts in the NEPA process are found in Section 1.4.7.1 of *NPS Management Policies 2006* (NPS 2006a). The factors of socioeconomics discussed in this draft EA include the air tourism industry and ancillary businesses. U.S. Census Bureau data were used to evaluate social and economic factors of the study area.

The combination of all relevant impact categories represents the potential EJ impact because EJ impacts may be realized in conjunction with impacts to any other impact category. Refer to each environmental impact category's respective section in this draft EA for a description of the study area limits and Figure 7 for a depiction of the study area used for the EJ and socioeconomic analyses. The analysis incorporates data presented at the county level and from census block groups that are within and adjacent to the study area.

3.7.1 Affected Environment

Environmental Justice

The most recent minority and low-income information were analyzed through U.S. Census Bureau data sets. U.S. Census Bureau data is collected in five descending groupings corresponding to geographic area. The groupings are as follows: state, county, tract, block group, and block. Block groups are the smallest unit for which income and poverty level information is available. Block level data is the smallest unit for which race and minority information is available. The agencies used five-year estimates (2016-2020) from the American Community Survey (ACS) to determine socioeconomic and racial characteristics of the population. The following EJ analysis includes selecting a geographic unit of analysis and comparing it to an appropriate reference community. If the percentage of minority or low-income populations in the unit of analysis exceed the reference community threshold, then those geographic units are considered populations of EJ concern. In this case, the agencies analyzed ACS estimates from seven block groups that coincide with or border the ATMP planning area (i.e., units of analysis) and compared that data to the county-level estimates (i.e., the reference community). The comparison of data from the block group level to the county level data was used to identify populations of EJ concern.

For this analysis, a minority census block group of EJ concern is a census block group (unit of analysis) with a minority population percentage greater than the minority population percentage in the county (reference community). Minorities are those who identify themselves as Black, Hispanic or Latino, Asian American, American Indian and Alaskan Native, and/or Native Hawaiian or Other Pacific Islander (DOT Order 5610.2C). This definition is equivalent to the population made up of individuals who report their race and ethnicity as any combination other

than both White (alone) and non-Hispanic or Latino. The percentage minority population of the county that contains the ATMP planning area (i.e., Apache County, Arizona) is 82% (U.S. Census Bureau, 2023a). Therefore, every census block group with a percentage minority population greater than 82% is designated a population of EJ concern. For this analysis, a low-income population census block group of EJ concern is a census block group with a greater percentage of low-income population than the percentage of low-income population in the county. Low-income individuals are those living in households with an annual income less than the national poverty level. The percentage of low-income population in the county that contains the ATMP planning area (i.e., Apache County, Arizona) is 34% (U.S. Census Bureau, 2023b). Therefore, every census block group with a low-income population greater than 34% is designated a population of EJ concern.

Figure 7 depicts populations of EJ concern by block group within the study area. Residents of Canyon De Chelly are represented in the data; however, the exact locations of residences are not shown or analyzed. As shown in the figure, the entire study area overlaps with census blocks that contain EJ populations. Table 8 shows the minority and low-income population estimates for Apache County, Arizona and block groups within the study area. Of the seven block groups within the study area, (i.e., overlapping the ATMP planning area), all seven contain populations of EJ concern based on minority population estimates, and all but three contain populations of EJ concern based on low-income population estimates. In addition, when considered collectively, the seven block groups in the study area exceed the thresholds for minority population and low-income population to be considered (together) a population of EJ concern (Table 8. Minority and Low-Income Population Data within the Study Area.).

Table 8. Minority and Low-Income Population Data within the Study Area.

Census Area	Total Population	Minority Population	Low-Income Population
Apache County	70,448 ^(a) to 71,714 ^(b)	82%	34%
Block Group 1, Census Tract 9440	1,745	100%	30%
Block Group 3, Census Tract 9441	909	100%	51%
Block Group 4, Census Tract 9441	1,695	88%	53%
Block Group 1, Census Tract 9442.02	1,703	100%	67%
Block Group 2, Census Tract 9442.02	887	100%	29%
Block Group 3, Census Tract 9442.02	917	99%	28%
Block Group 1, Census Tract 9443.02	1,090	100%	50%
All Block Groups in the Study Area	7,201 ^(c)	98% ^(d)	46% ^(d)

Source: U.S. Census Bureau, 2023a, b

Notes:

(a) Total population for whom household income relative to federal poverty level is estimated

(b) Total population for whom race and ethnicity (i.e., whether of Hispanic or Latino origin) is estimated

(c) Sum

(d) Weighted average

Socioeconomics

This section describes the socioeconomic conditions that may be affected by the alternatives. Socioeconomic impacts of ATMP alternatives include the potential impacts commercial air tour operations have on two interest groups: 1) local residents living in close proximity to or within the Park, who may be affected by both the number of air tours and the manner in which they are conducted; and 2) air tour operators in the region, specifically the one active commercial air tour operator with IOA for the Park and their employees, and the associated tourism industry. The factors of socioeconomics discussed in this draft EA include industry, employment, and income.

Industry

Apache County's largest civilian employment sectors are health care and social assistance, educational services, and public administration (U.S. Census Bureau, 2023c). Other significant sectors include construction, retail trade, and accommodation and food services (U.S. Census Bureau, 2023c).

The Park plays a major role in the tourism industry of Apache County. In 2021, 184,191 visitors spent a total of almost \$14 million at the Park and added a value of approximately \$8.5 million to the local economy (NPS, 2022b). The total labor income generated by this spending equaled approximately \$4.8 million (NPS, 2022b). Entrance fees are not required to enter the Park. The Park provides seasonal, term, permanent full-time, and part-time positions. The Park offers trails, ranger programs, guided canyon tours, and a Visitor Center with a Park store.

Commercial Air Tours

Four commercial tour operators hold IOA to conduct a combined total of 175 tours per year over the Park. Based on the average of reporting data from 2017-2019, only one operator has reported flying an average of 43 air tours per year over the Park. The operator advertises day trips to the Park that include a round-trip flight from Santa Fe to Chinle Municipal Airport, where passengers are taken on ground tours of the Park (Southwest Safaris, 2023b).

The price per person for the operator's air tours varies and can cost up to \$795 per person for itineraries that include Canyon de Chelly (Southwest Safaris, 2023a, b). The air tour industry employs pilots, mechanics, office administrators, and other types of jobs to conduct business. In addition to people directly employed by the air tour operator, others are indirectly involved with the industry including hotels, tour booking agents, and advertising and marketing professionals. The air tour operator that is active in the Park offers sightseeing tours departing from Santa Fe Airport, in Santa Fe County, New Mexico. Employment supported by the air tour industry provides income to workers and indirectly provides revenue to local businesses as a result of employee and operator spending.

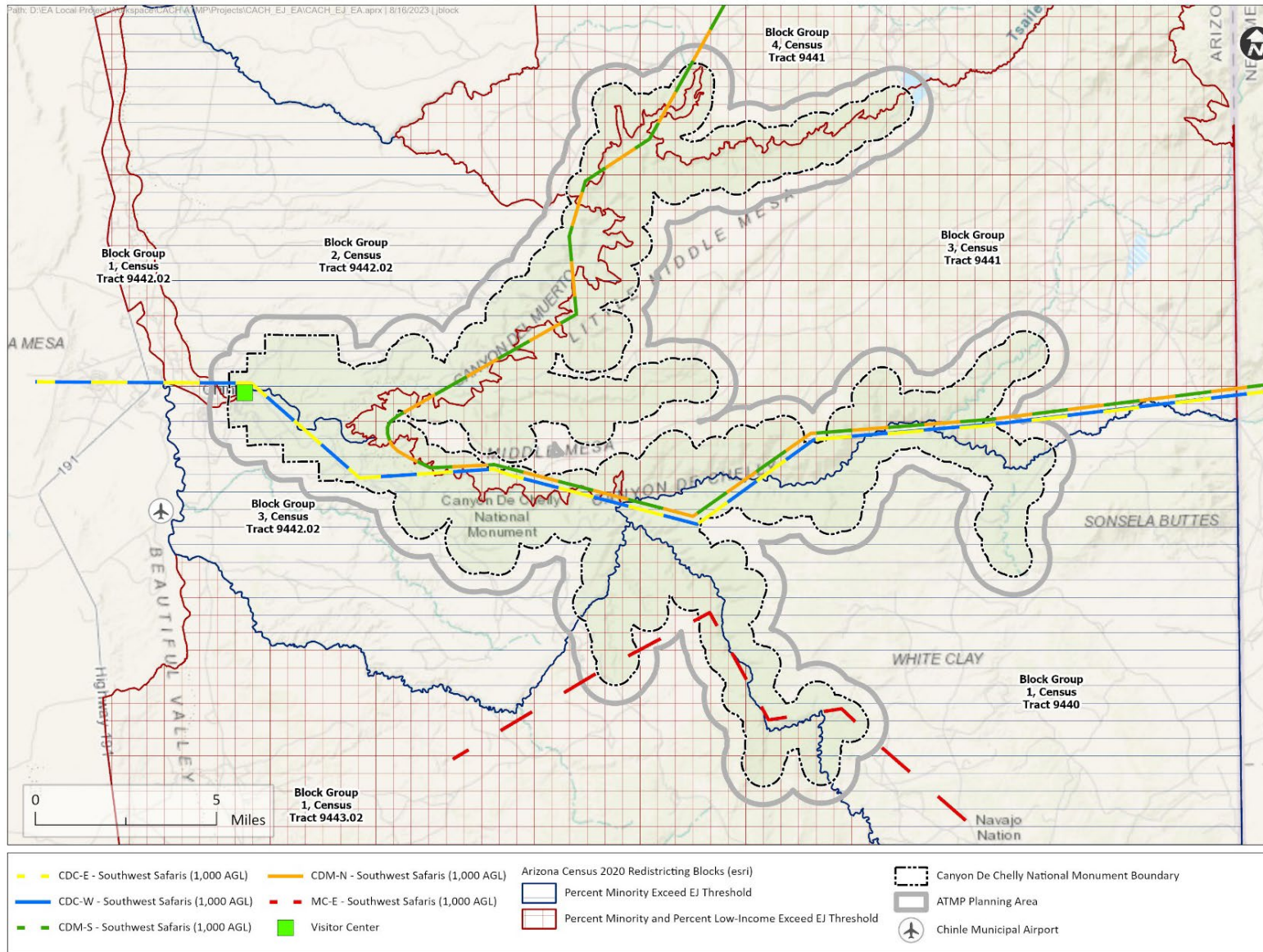


Figure 7. Affected Environment for Environmental Justice and Socioeconomics, and Environmental Consequences for Alternative 1 (No Action).

3.7.2 Environmental Consequences

In accordance with FAA Order 1050.1F, the following factors were considered to determine if the action would have a disproportionately high and adverse impact on an EJ population, i.e., a low-income or minority population:

- Significant impacts in other environmental impact categories; or
- Impacts on the physical or natural environment that affect an EJ population in a way that the FAA determines are unique to the EJ population and significant to that population.

This assessment is provided for each alternative below. As shown in Figure 7 minority and low-income populations of EJ concern are present throughout the entire study area. Specific impacts associated with each alternative are discussed in more detail below.

For socioeconomic impacts, FAA considers the following factors when evaluating the severity of impacts which include the potential to:

- Induce substantial economic growth in an area, either directly or indirectly (e.g., through establishing projects in an undeveloped area);
- Disrupt or divide the physical arrangement of an established community;
- Cause extensive relocation when sufficient replacement housing is unavailable;
- Cause extensive relocation of community businesses that would cause severe economic hardship for affected communities;
- Disrupt local traffic patterns and substantially reduce the levels of service of roads serving an airport and its surrounding communities; or
- Produce a substantial change in the community tax base.

Consideration of these factors for each alternative is provided below. The analysis below reflects the results of the impact analysis for noise, visual, air quality, and cultural effects as they are the impact categories that would be reasonably expected to affect EJ populations, though impact conclusions for other environmental impact categories are reflected in other sections of this draft EA.

Alternative 1: No Action

Under existing conditions, air tour routes occur throughout the ATMP planning area (Figure 7). The block groups within these areas contain populations of EJ concern. Because block groups containing EJ populations are present within and around the ATMP planning area, EJ populations currently experience the noise, air quality, and visual effects associated with air tours under current conditions as described in more detail below.

Acoustic environmental effects under the No Action Alternative would not have a unique or significant impact on populations of EJ concern in the ATMP planning area. The noise impacts of the No Action Alternative (see Section 3.2.2, Environmental Consequences for Noise and Noise-Compatible Land Use) were modeled based on a peak month, average day of commercial air tour activity for the three-year average from 2017-2019 – identified as one operation. The modeling results indicate that the No Action Alternative would result in a maximum sound level (i.e., the loudest sound level generated by the loudest event independent of the number of operations) of at least 55 dBA, across 5% of the ATMP planning area. This sound level corresponds to that of a quiet urban daytime setting or created by someone typing on a keyboard nearby. The maximum time that noise from air tours would be above 52 dBA is less than 5 minutes a day, across 7% of the ATMP planning area, and the maximum time that noise from air tours would be above 35 dBA is less than 5 minutes a day, across 69% of the ATMP planning area. During the brief periods when sound levels reach 52 dBA, residents within the 7% impacted area of the ATMP planning area may experience mild and temporary impacts, such as speech interference. Air tours are conducted during the day; therefore, noise from air tours would not impact residents of the ATMP planning area at night. As for a resident's cumulative exposure to sound from air tours over a 24-hour period, the DNL is expected to be below 35 dB under the No Action Alternative (refer to the *Noise, Air Quality, and Greenhouse Gas Emissions Technical Analysis*, Appendix F, Section 2.4).

Air quality effects under the No Action Alternative would not have a unique or significant impact on populations of EJ concerns in the ATMP planning area. The No Action Alternative would not cause pollutant concentrations to exceed one or more of the NAAQS for any of the time periods analyzed or to increase the frequency or severity of any such existing violations (see Section 3.3.2, Environmental Consequences for Air Quality and Climate Change). The total annual GHG emissions resulting from commercial air tours in the ATMP planning area are modeled to be 1.5 MT of CO₂.

Under the No Action Alternative, impacts to viewsheds would primarily occur at the canyon viewpoints overlooking scenic natural areas (see Section 3.8.2, Environmental Consequences for Visual Effects), and would not have a unique or significant impact on populations of EJ concern in the ATMP planning area. Minimal impacts would continue to occur to visual resources under the No Action Alternative as commercial air tours would continue to contrast the scenic vistas and natural areas in the Park, but the visual resources of the Park would still be viewable at times of the day when commercial air tours were not present within the study area (a peak month, average day consists of one air tour).

An impact category with a potentially unique effect on residents of the ATMP planning area is the matter of privacy, as discussed in Section 3.5.2, Environmental Consequences for Cultural Resources. Under the No Action Alternative, populations of EJ concern that reside in the ATMP planning area have up to a 12% chance of an air tour flight within sight of their homes and

communities on any given day, assuming a total of 43 air tours per year. While the privacy interests of ATMP planning area residents have not been directly quantified in this draft EA, nation-to-nation consultation has indicated that commercial air tours in the ATMP planning area constitute an invasion of the privacy to which the Diné people are entitled in their cultural practices and daily lives. The perceived or actual loss of privacy among low-income and minority communities in the ATMP planning area due to the continued operation of commercial air tours under the No Action Alternative has potentially adverse social and cultural implications.

In summary, EJ populations occur throughout the ATMP planning area and are therefore the populations primarily and disproportionately affected by the potential noise, air quality, visual, and cultural impacts of commercial air tours under the No Action Alternative. However, the modeled impacts of the No Action Alternative do not constitute impacts to the noise, air quality, or visual environments within the ATMP planning area that would uniquely or significantly impact populations of EJ concern. The issue of privacy for EJ populations in the ATMP planning area is a unique and potentially adverse social and cultural impact noted in this draft EA. Under the No Action Alternative, noise, air quality, visual, and cultural impacts would be consistent with current conditions, and therefore there is no change in impacts and effects on EJ populations.

Under the No Action Alternative, there would be no socioeconomic change relative to existing conditions. The number of commercial air tours conducted by the operator would vary from year to year but would likely be consistent with the number of tours reported in the timeframe from 2017-2019 (though they could increase up to the IOA of 175 flights per year). Therefore, the amount of income generated for the air tour operator and other ancillary businesses, as well as employment, would likely be consistent with income generated during that timeframe. Because the No Action Alternative would not change economic conditions, would not involve ground-disturbing activities, and would not add ground-based motor vehicles or equipment, it would not induce substantial economic growth, disrupt or divide the physicality of the community, cause extensive relocation, disrupt traffic patterns, or produce a substantial change in the community tax base.

Alternative 2

Under Alternative 2, commercial air tours would not be conducted within the ATMP planning area. Therefore, there would be direct beneficial impacts on noise, air quality, viewsheds, and cultural resources (i.e., privacy) within the study area as a result of the elimination of commercial air tours in the ATMP planning area (see Section 3.2.2, Environmental Consequences for Noise and Noise-Compatible Land Use; Section 3.3.2, Environmental Consequences for Air Quality and Climate Change; Section 3.8.2, Environmental Consequences for Visual Effects; and Section 3.5.2, Environmental Consequences for Cultural Resources). Alternative 2 would result in a reduction in commercial air tour noise and visual impacts, air

emissions, and privacy concerns for residents compared to those currently occurring under existing conditions; therefore, this alternative would result in a benefit to EJ populations within the ATMP planning area and would not result in disproportionately high and adverse noise, air quality, visual, or privacy impacts to EJ populations in the ATMP planning area.

Alternative 2 has the potential to minimally impact socioeconomic conditions in the ATMP planning area and the Park. Alternative 2 would not involve ground-disturbing activities and would not add ground-based motor vehicles or equipment; therefore, it would not induce substantial economic growth, disrupt or divide the physicality of the community, cause extensive relocation, or disrupt traffic patterns. Alternative 2 could result in some adverse impacts on employment or the amount of income that the air tour operator and other ancillary businesses could generate from conducting air tours within the ATMP planning area. The active air tour operator in the Park offers day tour itineraries that land at Chinle Municipal Airport to allow passengers to go on ground tours of the Park. Under Alternative 2, these trip offerings could continue, with flights diverted outside the ATMP planning area, or they could reduce in frequency as a result of reduced demand for Canyon de Chelly itineraries that do not offer air tours over the Park. In addition, the air transportation industry represents less than 1% of the total employment in the tri-county area where the operator is based (Sante Fe Municipal Airport in Santa Fe, New Mexico), and the prohibition on air tours within the ATMP planning area would not preclude the operator from making up this revenue generation in other ways, such as using aircraft for other business ventures or conducting air tours elsewhere within the region (see below for a discussion of indirect socioeconomic effects). Therefore, it is unlikely that Alternative 2 would result in large socioeconomic impacts either to the region surrounding the Park or the region where the air tour operator is based, including those associated with changes to the community tax base associated with a loss of industry.

Indirect and Cumulative Effects

Indirect Effects: Under the No Action Alternative, commercial air tour operations within the ATMP planning area would remain consistent with existing conditions, although air tour numbers may increase up to IOA (i.e., 175 flights per year), thus there are no indirect impacts that would be expected to occur under this alternative. There are no indirect impacts to EJ populations that would be expected to occur under this alternative, nor would this alternative be expected to result in a change to indirect socioeconomic impacts for ancillary businesses as there would be no change to existing conditions.

The prohibition of air tours within the ATMP planning area under Alternative 2 could limit the potential future economic growth for the commercial air tour operator and other ancillary businesses. Because of the capital investment the air tour operator has in aircraft, facilities, and equipment, the operator could seek to make up lost revenue from air tours within the ATMP planning area by conducting air tour operations outside of the ATMP planning area to the extent possible. The operator currently flies multiple tours over different parks and lands in

the southwest (Southwest Safaris, 2023a), and they could fly these tours more frequently. The operator may also choose to retire, surrender their operating certificate, or use their aircraft for other businesses or operations, such as search and rescue, fire protection, resource mapping and assessment, and flight for life operations. Although Alternative 2 would eliminate opportunities for the air tour operator and ancillary businesses to generate revenue from tours conducted within the ATMP planning area, this alternative would not preclude the operator from making up this revenue generation in other ways such as using their aircraft for other business ventures or conducting air tours elsewhere within the region.

It is challenging to predict with specificity if, where, and to what extent any air tours displaced to outside the ATMP planning area would result in indirect noise, air quality, visual, or privacy impacts on EJ populations. The EJ populations identified within the ATMP planning area do extend into areas outside the ATMP planning area. Therefore, operations that may occur outside the ATMP planning area as a result of the elimination of air tours within the ATMP planning area under Alternative 2 may shift the burden of air tour impacts to other low-income and minority communities. However, the noise, air quality, and visual effects on EJ communities are neither significant nor unique. While it is unlikely that commercial air tours would continue outside the ATMP planning area, where visual points of interest are not concentrated, the potential for increased privacy concerns among EJ populations outside the ATMP planning area due to displaced air tours is a possibility. In summary, EJ populations disproportionately comprise the populations immediately outside the ATMP planning area that may experience indirect effects of Alternative 2. However, significant adverse indirect noise, air quality, visual, or privacy impacts on EJ populations are not expected to occur.

Cumulative Effects: Under either of the alternatives, the NPS would continue current management actions and respond to future Park needs and conditions without major changes in the present course.

Low-income and minority populations are more vulnerable to the cumulative impacts of environmental hazards than other socioeconomic groups and the general populace, which explains the need for EJ analysis. The No Action Alternative would not result in any new direct or indirect impacts compared to current conditions; however, the cumulative effects of the existing noise, air quality, visual, and cultural impacts attributable to commercial air tours within the ATMP planning area (however negligible individually) could potentially adversely impact the health, safety, and wellbeing of EJ populations. Based on this same reasoning, Alternative 2 could result in some cumulative beneficial effects on the EJ populations in the ATMP planning area, due to the minor reductions in commercial air tour influence on the acoustic environment, air quality, visual impacts, and privacy concerns.

3.8 Visual Effects

Visual resources include buildings, sites, traditional cultural properties, and other natural or manmade landscape features that are visually important or have unique characteristics. In addition, visual resources can include the cohesive collection of various individual visual resources that can be viewed at once or in concert from the area surrounding the site of the alternatives. Visual character refers to the overall visual makeup of the existing environment where the alternatives would be located. For example, areas in close proximity to densely populated areas generally have a visual character that could be defined as urban, whereas less developed areas could have a visual character defined by the surrounding landscape features, such as open grass fields, forests, mountains, deserts, etc. Visual effects generally describe the extent to which the Proposed Action or alternatives would either produce light emissions that create annoyance or interfere with activities; or contrast with, or detract from, the visual resources and/or the visual character of the existing environment. Although there are no federal special purpose laws or requirements specific to light emissions and visual effects, there are special purpose laws and requirements that may be relevant, such as those relating to cultural resources (see Section 3.5, Cultural Resources) or Section 4(f) resources (see Section 3.9, Department of Transportation (DOT) Act Section 4(f) Resources). Additionally, NPS *Management Policies 2006* (NPS 2006a) § 1.4.6 provides that scenic views and vistas are park resources that are protected under the NPS Organic Act.

The study area for visual effects is the ATMP planning area, which is also consistent with the cultural resources APE. Refer to Figure 5 for a depiction of the study area used for the visual effects analysis.

3.8.1 Affected Environment

The Park is characterized by brightly colored sandstone walls and rock promontories that tower above sinuous bands of vegetation and agricultural fields along the narrow canyon floors. Canyon rim overlooks provide visitors with breathtaking panoramic views into and across the canyons to distant vistas. The presence of Navajo hogans and fields within the canyons set against a backdrop of ancient cliff dwellings visually reinforces the long span of human history and the continuing importance of the canyons for the resident Navajo community. As discussed in Section 3.6.1, Affected Environment for Visitor Use and Experience and Other Recreational Opportunities, a major attraction for visiting the Park is to experience the scenery and landscape of the Park. Within the Park, visual resources include views of the natural landscape features, especially from canyon overlooks (NPS, 2016). The Park's visual resources also include its archeological sites and rock (refer to Section 3.5.1, Affected Environment for Cultural Resources, for more information).

3.8.2 Environmental Consequences

Studies indicate that aircraft noise in national parks can impact human perceptions of aesthetic quality of viewsheds (Weinzimmer et al., 2014; Benfield et al., 2018).

Impacts on visual resources and visual character relate to a decrease in the aesthetic quality of the Park resulting from air tours. FAA Order 1050.1F provides factors to consider in evaluating the severity of impacts, including the extent that the action would have the potential to:

- Affect the nature of the visual character of the area, including the importance, uniqueness, and aesthetic value of the affected visual resources;
- Contrast with the visual resources and/or visual character in the study area; and
- Block or obstruct the views of visual resources, including whether these resources would still be viewable from other locations.

Alternative 1: No Action

Reporting data from 2017-2019 indicates that visitors have the potential, on average, to see commercial air tour aircraft 43 times per year, and the maximum number of tours reported over the Park during this time period was two tours in a single day, though most days on which air tours were flown (approximately 99%) consisted of one tour. The altitudes reported from commercial air tours conducted near viewsheds in the ATMP planning area range from 800 to 1,000 ft. AGL, so the aircraft would likely be visible in these areas.

Refer to Figure 5 and Figure 6 for a depiction of existing air tour routes in the context of important cultural resources, visual points of interest, and viewsheds within the Park. In the context of the Park's natural scenery consisting of dramatic canyons, rims, geological formations, and Ancestral Pueblo ruins, the commercial air tours would contrast with the natural scenery in locations where air tours are visible to Park visitors. The viewpoints where this would be most likely to occur are the highest points in the Park where 360-degree views are available. Existing commercial air tour routes are located near these viewpoints and would be seen by visitors overlooking natural scenic areas, which would continue to occur under the No Action Alternative. However, due to the minimal number of tours, the encroachment of commercial air tour aircraft on these viewsheds could minimally and temporarily detract from the visitor's opportunity to observe these unique scenic vistas and natural resources on days when air tours are flown. See Section 3.5.1, Affected Environment for Cultural Resources, for additional information on visual effects associated with cultural resources.

Alternative 2

Under Alternative 2, commercial air tours would not be conducted within the ATMP planning area, which would result in fewer effects on visual resources in the visual effects study area. Therefore, commercial air tours within the visual effects study area would no longer have a

direct effect on the visual resources within the ATMP planning area. Visual resources would experience direct beneficial impacts under Alternative 2 and visual character would improve compared to current conditions. Alternative 2 would provide the greatest protection to Park viewsheds between the two alternatives.

Indirect and Cumulative Effects

Indirect Effects: Under the No Action Alternative, commercial air tour operations within the ATMP planning area would remain consistent with existing conditions, although air tour numbers could increase up to IOA (175 flights per year), thus there would be no change to viewsheds within the ATMP planning area and no indirect impacts would be expected to occur under this alternative.

As described in Section 3.1.1, Indirect Impacts Scenario, commercial air tours could be displaced to outside of the ATMP planning area under Alternative 2. Air tours occurring outside of the ATMP planning area may result in more indirect effects on visual resources. The operator may choose to fly along existing flight paths but at or above 5,000 ft. AGL, minimizing the potential for indirect effects.

It is unlikely that the operator would continue to conduct commercial air tours of the Park by flying along the perimeter of the ATMP planning area, further minimizing the potential for indirect effects. The operator currently flies multiple tours over different parks and lands in the Southwest (Southwest Safaris, 2023a), and they could fly these tours more frequently. The majority of destinations and tours offered by the operator are to the west, north, and east of the Park, and the airport used for most flights is located in Santa Fe, New Mexico, to the east of the Park. There may be a slight increase in flights over Navajo Nation Tribal lands outside of the ATMP planning area, if air tours were displaced.

Therefore, under Alternative 2, indirect impacts to viewsheds within and outside the ATMP planning area could occur to the extent that they are present if flights were displaced to outside the ATMP planning area.

Cumulative Effects: As stated in Section 3.1.2, Cumulative Impacts Scenarios, under either of the alternatives, the NPS would continue current management actions and respond to future Park needs and conditions without major changes in the present course. Aircraft, mechanized equipment, ground teams, and vehicular tours would continue. Aircraft and vehicular guided tours would continue to have a short-term adverse impact on the natural scenery and vistas. Park maintenance and restoration activities would continue to have a temporary adverse effect on the natural landscape and scenery. The cumulative visual effects of these ongoing flights and maintenance activities along with those from commercial air tours under the No Action Alternative would have the greatest potential for adverse cumulative impacts on viewsheds

within the visual effects study area. The cumulative effects would be the fewest under Alternative 2 as there would be no tours permitted within the ATMP planning area.

3.9 Department of Transportation (DOT) Act Section 4(f) Resources

Section 4(f) of the Department of Transportation Act of 1966, which was recodified and renumbered as Section 303(c) of 49 U.S.C., provides that the Secretary of Transportation will not approve any program or project that requires the use of any publicly owned land from a public park, recreational area, or wildlife and waterfowl refuge of national, state or local significance; or land from an historic site of national, state or local significance, as determined by the officials having jurisdiction over the land, unless 1) there is no feasible and prudent alternative to the use of such land; and 2) such program or project includes all possible planning to minimize harm resulting from such use. Where federal lands are administered for multiple uses, the federal official having jurisdiction over the lands shall determine whether the subject lands are in fact being used for park, recreational, wildlife, waterfowl, or historical purposes. National Wilderness areas may serve similar purposes and shall be considered subject to Section 4(f) unless the controlling agency specifically determines that, for Section 4(f) purposes, the lands are not being used.

Appendix B of FAA Order 1050.1F describes the FAA's procedures for complying with Section 4(f). Federal Highway Administration/Federal Railroad Administration/Federal Transit Administration regulations and policy are not binding on the FAA; however, the FAA may use them as guidance to the extent relevant to aviation projects.¹⁰ According to FAA Order 1050.1F, significance of impacts is determined based on whether the action involves more than a minimal physical use of a Section 4(f) resource or constitutes a "constructive use" based on an FAA determination that the aviation project would substantially impair the Section 4(f) resource.

The study area for considering Section 4(f) resources in this draft EA corresponds with the APE used for compliance with Section 106 of the NHPA. Refer to Figure 5 for a depiction of the Section 4(f) study area.

3.9.1 Affected Environment

Section 4(f) resources including parks, recreational areas, and wildlife and waterfowl refuges, were identified using public datasets from federal, state, and local sources. Historic properties were identified as part of the Section 106 consultation process (refer to Section 3.5, Cultural Resources). Each resource that intersected the Section 4(f) study area (i.e., some portion of the

¹⁰ See 1050.1F Desk Reference, Section 5-3.

property fell within the Section 4(f) study area) was included in the Section 4(f) analysis (see Appendix I, *Section 4(f) Analysis*).

The only non-historic Section 4(f) resource identified in the study area is the Canyon de Chelly National Monument. Section 3.5.1, *Affected Environment for Cultural Resources*, and Appendix G, *Cultural Resources Consultation and Summary*, list historic resources that qualify under Section 4(f). Except in unusual circumstances, Section 4(f) protects only those historic sites that are listed in or eligible for listing in the National Register.¹¹ There were no wildlife or waterfowl refuges identified in the Section 4(f) study area. Figure 5 shows a map of the Section 4(f) resources analyzed in this chapter, within the Section 4(f) study area.

3.9.2 Environmental Consequences

In the context of Section 4(f) resources, the term “use” refers to both physical and constructive impacts on Section 4(f) resources. Physical use involves the physical occupation or alteration of a Section 4(f) resource, while constructive use occurs when a Proposed Action results in substantial impairment of a resource to the degree that the activities, features, or attributes of the resource that contribute to its significance or enjoyment are substantially diminished. In consideration of potential impacts that could result in substantial impairment to Section 4(f) resources in the Section 4(f) study area, the analysis is limited to identifying impacts that could result in a constructive use, as the alternatives would not have the potential to cause direct impacts to a Section 4(f) resource. Potential impacts to Section 4(f) resources from commercial air tours may include noise from aircraft within the acoustic environment, as well as visual impacts.

The FAA considered the potential for constructive use of Section 4(f) resources under all alternatives. In accordance with FAA Order 1050.1F, the FAA determined through an initial assessment if the Proposed Action would result in the use of any of the properties to which Section 4(f) applies. As noted in Section 2.4, Alternative 1 (No Action Alternative), the No Action Alternative provides a basis for comparison within this draft EA but is not a selectable alternative because it does not meet the purpose and need for the ATMP (refer to Section 1.4, Purpose and Need). Therefore, the FAA did not advance the No Action Alternative for detailed Section 4(f) analysis as it is not considered a selectable alternative.

To assess noise impacts on Section 4(f) resources, the land use compatibility guidelines in 14 CFR Part 150 assist with determining whether a Proposed Action would constructively use a Section 4(f) resource. These guidelines rely on the DNL, which is considered the best measure

¹¹ If a historic site is not National Register listed or eligible, a state or local official may formally provide information to FAA to indicate that a historic site is locally significant. The responsible FAA official may then determine it is appropriate to apply Section 4(f). See FAA Order 1050.1F for further detail.

of impacts on the quality of the human environment from exposure to noise. The FAA acknowledges that the land use categories in 14 CFR Part 150 may not be sufficient to determine the noise compatibility of Section 4(f) properties (including, but not limited to, noise-sensitive areas within national parks and wildlife refuges), where a quiet setting is a generally recognized purpose and attribute. Visual impacts are assessed in accordance with the framework identified in Section 3.8, Visual Effects.

Alternative 2

Under Alternative 2, commercial air tours would not be conducted within the ATMP planning area, which would reduce this source of noise originating from within the ATMP planning area. The acoustic impacts of Alternative 2 cannot be modeled because, although some speculation about air tour routes can be made, it is unknown where air tours would fly when outside the ATMP planning area (see below for a discussion of indirect effects). Thus, data on the resultant DNL for this alternative are not available. Alternative 2 would provide 365 days per year without air tours within the ATMP planning area.

The FAA also considered the potential for vibrational or visual effects on Section 4(f) resources under Alternative 2. However, since Alternative 2 would not authorize commercial air tours to be conducted within the ATMP planning area, vibrational or visual effects to Section 4(f) resources would not occur from air tours within the ATMP planning area.

As a result, the FAA concludes there would be no substantial impairment¹² of Section 4(f) resources from noise, visual, or vibrational-related effects caused by air tours in the ATMP planning area under Alternative 2. This Section 4(f) determination for historic properties is based on 14 CFR Part 150 Appendix A and is also consistent with the Section 106 no adverse effect determination for Alternative 2 (see Section 3.5.2, Environmental Consequences for Cultural Resources).

Indirect and Cumulative Effects

Indirect Effects: The indirect effects of Alternative 2 on Section 4(f) properties reflect those analyzed in the sections for noise and visual effects. Alternative 2 would prohibit air tours within the ATMP planning area as compared to existing conditions and would have the potential to result in some displacement of air tours outside the ATMP planning area. Air tours occurring outside the ATMP planning area, if any, may result in noise or visual effects on Section 4(f) resources to the extent that they are present near the areas where those flights would occur.

¹² Substantial impairment would occur when impacts to section 4(f) lands are sufficiently serious that the value of the site in terms of its prior significance and enjoyment are substantially reduced or lost.

The indirect effects analysis for visual effects identifies that some indirect visual impacts could occur if flights were displaced outside the ATMP planning area and could be experienced just outside the ATMP planning area (see Section 3.8.2, Environmental Consequences for Visual Effects). Section 4(f) resources are present in these areas and could experience indirect visual effects if air tours were visible from those resources. However, the FAA and the NPS are unable to predict with specificity if, where, and to what extent any displaced air tours would result in visual impacts in different and/or new areas, including Section 4(f) resources.

Cumulative Effects: The cumulative effects to Section 4(f) properties reflect those analyzed in the sections for noise and visual effects. Ongoing present and future Park management actions by the NPS within the ATMP planning area, including periodic administrative flights, such as those used for maintenance, search and rescue efforts, aerial wildlife surveys, wildland fire response, and occasional chain saw use, may contribute noise that would continue to negatively affect the acoustic environment of Section 4(f) properties within the ATMP planning area. Other sources of ongoing visual impacts that may affect Section 4(f) properties within the ATMP planning area include general aviation flights, overflights by commercial airlines, military flights, and administrative flights noted above. These activities would likely continue under Alternative 2, as they occur independently of air tours. The removal of air tours and routes under Alternative 2 within the ATMP planning area would result in a reduction in the noise directly around and below air tour routes as compared to current conditions. This would result in a minimal benefit to the overall cumulative effects on Section 4(f) properties.

Section 4(f) Recommended Finding

In summary, the FAA has determined that there would be no constructive use to Section 4(f) properties under Alternative 2 because noise and visual impacts from commercial air tours under these alternatives would not constitute a substantial impairment of Section 4(f) resources in the Section 4(f) study area. As part of the ATMP and draft EA development, the FAA consulted with the NPS and through the release of the draft ATMP and draft EA, consulted with the NPS and other officials with jurisdiction over Section 4(f) resources in the Section 4(f) study area, and hence, the FAA's proposed a no constructive use determination. The FAA has sent letters to each Section 4(f) property's official with jurisdiction with this preliminary finding concurrent with the release of this draft EA for public review. Refer to Appendix I, *Section 4(f) Analysis*, for additional details on this coordination.

3.10 Summary of Environmental Consequences

Table 9. Summary of Environmental Consequences of the ATMP Alternatives. summarizes the environmental consequences described above for both of the alternatives considered across each environmental impact category.

Table 9. Summary of Environmental Consequences of the ATMP Alternatives.

Environmental Impact Category	Alternative 1 (No Action)	Alternative 2 (Preferred)
Noise and Noise-Compatible Land Use	<ul style="list-style-type: none"> • 12-hr equivalent sound level: <35 dBA • DNL: <35 dB within the ATMP planning area. • Time above 35 dBA: Up to 5 minutes per day, across 69% of ATMP planning area. • Maximum time above 52 dBA: Up to 5 minutes per day, across 7% of the ATMP planning area. • Maximum sound level in ATMP planning area: 55 dBA across 5% of the ATMP planning area. • No indirect effects are expected. • No cumulative effects are expected. 	<ul style="list-style-type: none"> • 365 days per year without air tours within the ATMP planning area would reduce the potential for noise from air tours in the most noise-sensitive regions of the Park. • Minimal adverse indirect noise impacts may occur outside the ATMP planning area due to potential air tour displacement. • Minimal beneficial cumulative effects are expected in the overall acoustic environment.
Air Quality and Climate Change	<ul style="list-style-type: none"> • GHG emissions: 1.5 MT of CO₂ per year. • Would not cause NAAQS exceedance No indirect effects are expected. 	<ul style="list-style-type: none"> • 100% reduction in criteria pollutant emissions within the ATMP planning area. • Reduction of 1.5 MT of GHG emissions (as CO₂) within the ATMP planning area. • Would not cause NAAQS exceedance. • Indirect impacts may occur due to air tours outside the ATMP planning area if winds transport emissions within the ATMP planning area, and some areas not currently exposed to emissions from air tours (outside the ATMP planning area) may be exposed to emissions. • Highly unlikely that air tours displaced to outside the ATMP planning area would result in air quality impacts under NEPA or change the current attainment status of the Park.
Biological Resources	<ul style="list-style-type: none"> • Commercial air tour noise would continue, potentially disturbing protected species and other wildlife for short and infrequent periods (up to five minutes per day above 35 dBA across 69% of the ATMP planning area) • Continued minimal risk of direct strikes to birds and bats. • Not expected to result in indirect effects on wildlife. • Minimal adverse cumulative effects are expected due to the sensitivity of some breeding birds to disturbance from aircraft flying near nesting and roosting sites. 	<ul style="list-style-type: none"> • Although minimal, direct beneficial effects on biological resources are expected due to elimination of potential air tour noise-related disturbance and collision risk. • No adverse impacts to wildlife within the ATMP planning area but could indirectly increase the potential for noise disturbance and collision risk outside the ATMP planning area due to air tour displacement. • Minimal beneficial cumulative effects may be expected for species that are sensitive to human disturbance, especially the Mexican Spotted Owl.

Environmental Impact Category	Alternative 1 (No Action)	Alternative 2 (Preferred)
Cultural Resources	<ul style="list-style-type: none"> • Cultural resources would continue to be minimally impacted by presence and sound of air tours potentially impacting the feeling and setting of cultural resources. • Interruptions to Tribal practices would continue associated with intrusion into Tribal privacy. • Time above 35 dBA: <5 minutes across the APE. • Not expected to result in indirect effects on cultural resources within the APE. 	<ul style="list-style-type: none"> • Although very minimal, would reduce noise from air tours and remove visual intrusions from the setting of cultural resources within the APE. • Eliminate disruptions to Tribal practices from air tours and improve privacy for Tribal residents and users of the Park. • Could result in minimal indirect impacts on cultural resources outside the APE.
Visitor Use and Experience and Other Recreational Opportunities	<ul style="list-style-type: none"> • Current minimal impacts to interpretive programs at the Visitor Center due to sound levels from air tours resulting in speech interference and inability to hear natural sounds would continue. • Minimal impacts on visitor experience in natural areas of the Park related to the intrusion of audible air tour noise where visitors would expect natural sounds to prevail during their visit to the Park. • Maintains the current availability of air tours for those who want to view the Park from an aerial vantage point. • 69% of the ATMP planning area would experience air tour noise above 35 dBA for <5 minutes on days when air tours occurred. • 7% of the ATMP planning area would experience air tour noise above 52 dBA for <5 minutes on days when air tours occurred. • No indirect effects are expected. 	<ul style="list-style-type: none"> • Reduce effects, although very minimal, to interpretive programs at the Visitor Center, where sound levels from air tours result in speech interference and inability to hear natural sounds. • Offers the greatest protection of visitor use and experiences from the ground but eliminates air tour experiences within the ATMP planning area. • Eliminates the opportunity for those interested in viewing the Park from an aerial perspective. • Indirect impacts on visitor experience and points of interest could occur if flights were displaced to outside the ATMP planning area.

Environmental Impact Category	Alternative 1 (No Action)	Alternative 2 (Preferred)
Environmental Justice and Socioeconomics	<ul style="list-style-type: none"> • Populations in the ATMP planning area are made up disproportionately of EJ populations, however noise, air quality, and visual impacts on EJ populations would be neither significantly adverse nor unique to those communities. • Adverse and unique impact on EJ population privacy (a cultural resource) due to commercial air tours. • No indirect effects are expected. • Some minimal potential for adverse cumulative effects. 	<ul style="list-style-type: none"> • Populations in the ATMP planning area are made up disproportionately of EJ populations, therefore the minimal improvements in noise environment, air quality, visual impacts, and privacy would result in minimal benefits to EJ populations. • Could result in changes to employment or the amount of income that the air tour operator and other ancillary businesses generate from conducting air tours within the ATMP planning area resulting in minimal adverse impact on the EJ populations in the ATMP planning area. • Potential, but minimal, indirect effects are expected for EJ populations immediately outside the ATMP planning area, due to displaced air tours. • Some potential for minimal beneficial cumulative effects.
Visual Effects	<ul style="list-style-type: none"> • Air tours would continue to have minimal impact on viewsheds. • No indirect effects are expected. • Peak month, average day = 1 air tour 	<ul style="list-style-type: none"> • Would improve protection of Park viewsheds and would minimally benefit visual resources and visual character within the Park. • Indirect impacts to viewsheds could occur if flights were displaced to outside the ATMP planning area.
DOT Act Section 4(f) Resources	<ul style="list-style-type: none"> • The No Action Alternative cannot be altered to avoid or prevent unacceptable impacts to the Park's Section 4(f) resources. 	<ul style="list-style-type: none"> • No "constructive use" to Section 4(f) properties.

**Appendices for the Draft Environmental
Assessment for an Air Tour
Management Plan for
Canyon de Chelly National Monument**

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APPENDIX A

References

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APPENDIX B

List of Acronyms, Abbreviations, and Glossary

List of Acronyms, Abbreviations, and Glossary

Acronyms and Abbreviations

The Act	National Parks Air Tour Management Act of 2000
ACS	American Community Survey
ADS-B	Automatic Dependent Surveillance-Broadcast
AEDT	Aviation Environmental Design Tool
The agencies	Federal Aviation Administration and National Park Service
AGL	Above Ground Level
ANSI	American National Standards Institute
APE	Area of Potential Effects
ATMP	Air Tour Management Plan
ATMP planning area	The area within which an ATMP regulates commercial air tours over a national park or within ½-mile outside the park's boundary during which the aircraft flies below 5,000 ft. AGL.
BIA	Bureau of Indian Affairs
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CO	Carbon Monoxide
CO ₂	Carbon Dioxide
Compliance Plan	<i>Plan and Schedule for Completion of Air Tour Management Plans at Twenty-Three Parks</i>
dB	Decibels
dBA	Decibels (A-weighted scale)
DNL	Day-night Average Sound Level (denoted by the symbol L _{dn})
DOT	U.S. Department of Transportation
EA	Environmental Assessment
EJ	Environmental Justice
EO	Executive Order
EPA	Environmental Protection Agency
ESA	Endangered Species Act
FAA	Federal Aviation Administration
ft.	Feet
FSDO	Flight Standards District Office
GHG	Greenhouse Gas
IOA	Interim Operating Authority

L ₅₀	The median sound level (in decibels) is the sound level exceeded 50% of the day
L _{Aeq}	Equivalent Continuous Sound Level
L _{dn}	Day-night Average Sound Level
L _{max}	The loudest sound level, in dBA, generated by the loudest event
MBTA	Migratory Bird Treaty Act
MSL	Mean Sea Level
MT	Metric Tons
N ₂ O	Nitrous Oxide
NAAQS	National Ambient Air Quality Standards
National Register	National Register of Historic Places
NEPA	National Environmental Policy Act of 1969
NHPA	National Historic Preservation Act
NPS	National Park Service
NRCS	Natural Resources Conservation Service
O ₃	Ozone
PAC	Protected Activity Center
The Park	Canyon de Chelly National Monument
Pb	Lead
PM _{2.5}	Particulate Matter with a diameter of 2.5 micrometers or smaller
PM ₁₀	Particulate Matter with a diameter of 10 micrometers or smaller
SHPO	State Historic Preservation Office
SO ₂	Sulfur Dioxide
TCP	Traditional Cultural Property
THPO	Tribal Preservation Officer
TPY	Tons per Year
Tribes	Native American Tribes
U.S.C.	United States Code
USFWS	U.S. Fish and Wildlife Service
VFR	Visual Flight Rules

APPENDIX C

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List of Preparers

Appendix C lists the names of the principal persons contributing information to this draft EA.

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- Tsaile-Wheatfields Chapter of the Navajo Nation
- Lukachukai Chapter of the Navajo Nation
- Nazlini Chapter of the Navajo Nation
- Sawmill Chapter of the Navajo Nation

APPENDIX D

Distribution List

Distribution List

The agencies have notified via email the following parties of the availability of the Draft EA and Draft ATMP documents:

Federal Agencies

- U.S. Bureau of Indian Affairs
- U.S. Department of Agriculture - Natural Resources Conservation Service
- U.S. Environmental Protection Agency
- U.S. Fish and Wildlife Service
- U.S. Geological Survey
- U.S. Congress
- U.S. House of Representatives

Arizona State Agencies

- Department of Game and Fish
- AZ House of Representatives
- AZ Senate

County and Local Agencies

- Apache County

Community Organizations, Associations, Businesses, and Interest Groups

- National Parks Conservation Association
- Western National Parks Association

Tribes (Navajo Nation – Cooperating Agency, see under Preparers)

- Chinle Chapter of the Navajo Nation
- Tsaile-Wheatfields Chapter of the Navajo Nation
- Lukachukai Chapter of the Navajo Nation
- Nazlini Chapter of the Navajo Nation
- Sawmill Chapter of the Navajo Nation
- The Hopi Tribe of Arizona
- Zuni Tribe of the Zuni Reservation
- Pueblo of Acoma, NM
- Pueblo of Picuris, NM
- Pueblo of San Felipe, NM

- Pueblo of San Idelfonso, NM
- Pueblo of Santa Ana, NM
- Pueblo of Santa Clara, NM

Public Review

Copies of the Draft EA are available for public review and comment. The full document is available via the following:

- NPS Planning, Environmental and Public Comment website
<https://parkplanning.nps.gov/CACHATMP>

APPENDIX E

Environmental Impact Analysis Methodology

Environmental Impact Analysis Methodology

1.0 Introduction and Overview

The Federal Aviation Administration (FAA), the National Park Service (NPS) (together, “the agencies”), are working together to develop an air tour management plan (ATMP) pursuant to the National Parks Air Tour Management Act of 2000 (the Act) and a draft Environmental Assessment (EA) for Canyon de Chelly National Monument (hereafter referred to as the “Park”). Due to the unique nature of the Park being entirely located on Navajo Nation Tribal trust lands, the agencies have worked cooperatively with the Navajo Nation in developing the ATMP. The Act was signed into law on April 5, 2000. The Act applies to all commercial air tour operations over a unit of the National Park System. The proposed action is to implement an ATMP for the Park and is described in Section 1.3 of the draft EA. This technical appendix describes the methodologies used for evaluating the potential for environmental impacts to occur from the alternatives considered in the draft EA.

The agencies have identified environmental impact categories that require detailed analysis in this draft EA due to the potential environmental impacts resulting from implementing the alternatives (refer to Section 1.5 of the draft EA for a discussion of the environmental impact categories not analyzed in detail). The methodologies in this document reflect the analysis that has been performed by environmental impact category for each of the alternatives. The results of these analyses are described in the Environmental Consequences sections of the draft EA. This methodology is based on the FAA 1050.1F Order - *Environmental Impacts: Policies and Procedures*¹, and NPS NEPA policies and procedures (2015 NPS NEPA Handbook², 2015 NPS NEPA Handbook Supplemental Guidance - *Writing Impact Analysis Sections for EAs and EISs*³).

Under the National Parks Air Tour Management Act of 2000 (the Act) and its implementing regulations an ATMP regulates commercial air tours over a national park or within ½-mile outside the park’s boundary during which the aircraft flies below 5,000 feet (ft.) above ground level (ATMP planning area). Air tours outside of the ATMP planning area are not regulated under the ATMP. Unless otherwise noted, the study area for each environmental impact category is the ATMP planning area.

2.0 Environmental Baseline and Impact Analysis for the No Action Alternative

For all environmental impact categories described herein, impact analysis for each alternative discloses how environmental conditions would change relative to current conditions, which serves as the

¹ Federal Aviation Administration (FAA). (2015). *1050.1F Environmental impacts: policies and procedures*. https://www.faa.gov/regulations_policies/orders_notices/index.cfm/go/document.current/documentnumber/1050.1.

² National Park Service (NPS). (2015). *National Park Service NEPA Handbook*.

³ National Park Service (NPS). (2015). *National Park Service NEPA Handbook Supplemental Guidance: Writing Impact Analysis Sections for EAs and EISs*.

environmental baseline for this analysis. Impacts are analyzed relative to current conditions, so that they can be described and measured relative to a level for which data exists. Each analysis provides a comparative analysis between alternatives for each environmental impact category.

Existing conditions for air tour activity is defined as the three-year average of commercial air tours conducted over the Park from 2017-2019, along with operator-provided route and altitude information. Reporting data from 2013 and 2014 are considered incomplete as reporting protocols were not fully in place at that time and likely do not reflect actual flights. The agencies consider the 2017-2019, three-year average, existing conditions for the purposes of understanding both the existing number of commercial air tour flights over the Park and impacts from that activity. Flight numbers from a single

year were not chosen as the existing condition because the three-year average accounts for both variation across years and takes into account the most recent years prior to the COVID-19 pandemic. The 2020 COVID-19 pandemic resulted in atypical commercial air tour operations, which does not represent the conditions in a typical year. The agencies also decided against using 2021 or 2022 data due to continued abnormalities associated with the COVID-19 pandemic and the unavailability of reporting data for 2021 or 2022 during most of the planning effort.

The No Action Alternative represents a continuation of existing air tour conditions over the Park. The Act provided for existing commercial air tour operations occurring at the time the law was enacted to continue until an ATMP for the Park was implemented by expressly requiring the FAA to grant interim operating authority (IOA) to existing operators.^{4 5} Flights up to IOA are not considered part of the No Action Alternative, though in any given year the operator could conduct additional tours up to their IOA or they may fly fewer air tours than in the period from 2017-2019. The Affected Environment for each environmental impact category discloses existing conditions of commercial air tours over the Park as it relates to resources within the study area for each category. Impact analysis for the No Action Alternative discloses the effects on the environment that would occur with existing conditions carried into the future. There are no designated routes under the No Action Alternative, but for the purpose of defining the No Action Alternative for analysis, route information provided by the operator is used to define the routes for this alternative. There are no altitude restrictions under the No Action Alternative.

3.0 Impacts Considered

The analysis considers direct, indirect, and cumulative effects of each alternative described in Chapter 2 of the draft EA. The methodologies used in considering these effects to environmental impact categories are described by category in Section 4.0 of this document.

⁴ 49 U.S.C. § 40128(c)(2)(A)(i-ii)

⁵ FR, Vol. 70, No. 194, October 7, 2005, page 58778

3.1 Direct Effects

Direct effects are those caused by the alternative and occur at the same time and place as implementation of the alternative. Direct effects consider the change from current resource condition, which is described in the Affected Environment, on environmental resources within the study area resulting from implementation of that alternative.

3.2 Indirect Effects

Indirect effects are those which are caused by the alternative and occur later in time or are farther removed in distance but are still reasonably foreseeable.

It is reasonably foreseeable that because of the capital investment air tour operators have in aircraft, facilities, and equipment, operators could seek to make up lost revenue from air tours over the Park resulting from a reduction in air tours by conducting air tour operations outside of the ATMP planning area to the extent possible. In accordance with Section 1508.1(g)(2) of Council on Environmental Quality (CEQ) NEPA regulations, the agencies considered reasonably foreseeable actions that could occur as a result of the alternative in the indirect effects analysis for each environmental impact category. The indirect effects analyses consider potential shifts in air tour operations resulting from implementation of each alternative and the potential for displacement of air tours outside of the ATMP planning area due to a reduction in the number of authorized flights per year compared to existing conditions.

Consistent with Section 1502.21 of CEQ NEPA regulations, the agencies have disclosed that specific air tour routes, altitudes, and numbers of tours are not available to assess impacts that would occur from air tours that are displaced outside the ATMP planning area, and the resultant environmental effects that would occur. In addition, because specific air tour routes are not available, it is not possible to identify all the other potential noise sources or sources of visual effects that might contribute to the acoustic or visual conditions if operators were to fly just outside the ATMP planning area. It is difficult to predict whether any displaced air tours would result in operations on alternative routes that could have effects within or outside the ATMP planning area. This is because the airspace outside of the ATMP planning area is uncontrolled airspace, and operators fly under Visual Flight Rules (VFR). VFR is based on the principle of “see and avoid,” and does not require specific routes or altitudes, excepting weather minimums (see 14 Code of Federal Regulations (CFR) § 91.155).⁶ Therefore, the exactness of routes and altitudes for air tours outside of the ATMP planning area flying VFR could vary depending on client demand, weather, fuel load, and other costs. See 40 CFR § 1502.21 (c)(1). Agencies are not required to conduct new scientific or technical research to analyze impacts and may rely on existing information to assess impacts. See 43 CFR § 1502.21(c).

For the purposes of disclosing the potential indirect effects of each alternative, the agencies have considered operator websites, the current availability of air tours over other lands outside the ATMP

⁶ <https://www.faa.gov/files/gslac/courses/content/25/185/vfr%20weather%20minimums.pdf>

planning area, and the proximity of the operator's facilities to other airports or heliports. The analysis considers current and historical flight patterns, the prevalence of features outside the ATMP planning area that may attract air tours (such as known points of interest), and the potential for operators to fly along the perimeter of the ATMP planning area and/or above 5,000 ft. above ground level (AGL) to continue to observe features within the ATMP planning area. Indirect effects analyses consider the number of air tours proposed in each alternative and the likely displacement of air tours outside the ATMP planning area. The draft EA qualitatively discusses what potential shifts in air tour operations would mean for resources within or outside of the ATMP planning area to the extent that they are present.

3.3 Cumulative Effects

Cumulative effects are effects on the environment that result from the incremental effects of the action when added to the effects of other past, present, and reasonably foreseeable actions regardless of what agency (federal or non-federal) or person undertakes such other actions. Based on local knowledge from NPS staff, the agencies have identified other ongoing and reasonably foreseeable actions to consider within each environmental impact category.

The cumulative effects analysis qualitatively considers the effects of each alternative along with any known past, present, or future actions that would contribute to environmental effects to resources in the ATMP planning area. The draft EA presents this analysis in a comparative manner across all alternatives and describes the context of the effect in terms of other environmental effects that are present or likely to occur within the ATMP planning area.

4.0 Analysis Methodology by Environmental Impact Category

The section presents the impact analysis methodologies used in development of the draft EA for each environmental impact category considered.

4.1 Noise and Noise-Compatible Land Use

The impact analysis for noise and noise-compatible land use discloses the noise generated from air tours under each alternative as modeled. The analysis also includes a comparison of the effects across alternatives. The methods used for the noise modeling are presented below and also described in the *Noise Technical Analysis*, Appendix F of the draft EA.

4.1.1 Noise Modeling

There are numerous ways to measure the potential impacts of noise from commercial air tours on the acoustic environment of a park, including intensity, duration, and spatial footprint of the noise. The ambient sound level data and air tour operational data are used as inputs into the FAA's Aviation Environmental Design Tool (AEDT) to compute the following metrics to be used for the noise technical analysis (Table 1).

Table 1. Primary Metrics Used for the Noise Technical Analysis.

Metric	Relevance and citation
Equivalent Continuous Sound Level, $L_{Aeq, 12\text{ hr}}$	The logarithmic average of commercial air tour sound levels, in dBA, over a 12-hour day. The selected 12-hour period is 7 AM to 7 PM to represent typical daytime commercial air tour operating hours.
Day-night Average Sound Level, L_{dn} (or DNL)	<p>The logarithmic average of sound levels, in dBA, over a 24-hour day, DNL takes into account the increased sensitivity to noise at night by including a 10 decibel (dB) penalty on noise events occurring between 10 PM and 7 AM local time.</p> <p>Note: Both $L_{Aeq, 12hr}$ and DNL characterize:</p> <ul style="list-style-type: none"> Increases in both the loudness and duration of noise events The number of noise events during specific time period (12 hours for $L_{Aeq, 12hr}$ and 24-hours for DNL) <p>If there are no nighttime events, then $L_{Aeq, 12hr}$ is arithmetically three dBA higher than DNL as the events are averaged over 24 hours instead of 12 hours.</p> <p>The FAA's (2015, Exhibit 4-1)⁷ indicators of significant impacts are for an action that would increase noise by DNL 1.5 dB or more for a noise sensitive area that is exposed to noise at or above the DNL 65 dB noise exposure level, or that will be exposed at or above the DNL 65 dB level due to a DNL 1.5 dB or greater increase, when compared to the no action alternative for the same timeframe.</p>
Time Audible Natural Ambient (not computed for the Park)	<p>The total time (minutes) that aircraft noise levels are audible to an attentive listener with normal hearing under natural ambient conditions.</p> <p>The natural ambient is the sound level exceeded 50 percent of the time, L_{50}, determined from the natural sound conditions found in an ATMP planning area, including all sounds of nature (i.e., wind, streams, wildlife, etc.), and excluding all human and mechanical sounds. Time audible does not indicate how loud the event is, only if it might be heard.</p>

⁷ FAA. (2015). 1050.1F Order

Metric	Relevance and citation
Time Above 35 dBA	The amount of time (in minutes) that aircraft sound levels are above a given threshold (i.e., 35 dBA). In quiet settings, outdoor sound levels exceeding this level degrade experience in outdoor performance venues (American National Standards Institute (ANSI), 2007 ⁸); blood pressure increases in sleeping humans (Haralabidis et al., 2008 ⁹); maximum background noise level inside classrooms (ANSI/Acoustical Society of America S12.60/Part 1, 2010 ¹⁰).
Time Above 52 dBA	The amount of time (in minutes) that aircraft sound levels are above a given threshold (i.e., 52 dBA). At this background sound level, normal voice communication at five meters (two people five meters apart), or a raised voice to an audience at ten meters would result in 95% sentence intelligibility (United States Environmental Protection Agency, Office of Noise Abatement and Control, 1974 ¹¹). This metric represents the level at which one may reasonably expect interference with park interpretive programs, activities that require communication from a distance and other general visitor communication.
Maximum Sound Level, L_{max}	The loudest sound level, in dBA, generated by the loudest event; it is event-based and is independent of the number of operations. L_{max} does not provide any context of frequency, duration, or timing of exposure.

⁸ American National Standards Institute, Inc. (ANSI). (2007). Quantities and procedures for description and measurement of environmental sound — Part 5: Sound level descriptors for determination of compatible land use. *Acoustical Society of America*, ASA S12.9-2007/PART 5 (R2020), 1-20. https://www.techstreet.com/standards/asa-s12-9-2007-part-5-r2020?product_id=1534045.

⁹ Haralabidis A.S., Dimakopoulou, K., Vigna-Taglianti, F., Giampaolo, M., Borgini, A., Dudley, M., Pershagen, G., Bluhm, G., Houthuijs, D., Babisch, W. Velonakis, M., Katsouyanni, K. & Jarup, L. (2008). Acute effects of night-time noise exposure on blood pressure in populations living near airports. *European Heart Journal*, 29(5), 658-664. <https://academic.oup.com/eurheartj/article/29/5/658/440015>

¹⁰ ANSI/Acoustical Society of America. (2010). Acoustical performance criteria, design requirements, and guidelines for schools, Part 1: Permanent schools. *Acoustical Society of America*, ANSI/ASA S12.60-2002/Part 1. [https://webstore.ansi.org/preview-pages/ASA/preview_ANSI+ASA+S12.60+Part+1-2010+\(R2020\).pdf](https://webstore.ansi.org/preview-pages/ASA/preview_ANSI+ASA+S12.60+Part+1-2010+(R2020).pdf)

¹¹ ANSI/Acoustical Society of America. (2010). Acoustical performance criteria, design requirements, and guidelines for schools, Part 1: Permanent schools. *Acoustical Society of America*, ANSI/ASA S12.60-2002/Part 1. [https://webstore.ansi.org/preview-pages/ASA/preview_ANSI+ASA+S12.60+Part+1-2010+\(R2020\).pdf](https://webstore.ansi.org/preview-pages/ASA/preview_ANSI+ASA+S12.60+Part+1-2010+(R2020).pdf)

4.1.2 Indirect Effects

The indirect effects analysis for noise and noise-compatible land use considers potential shifts in air tour operations resulting from implementation of an alternative within the ATMP planning area and the potential for displacement of air tours outside of the ATMP planning area due to a reduction in the number of authorized flights per year compared to existing conditions. FAA considers that noise levels are generally significant if aircraft activity under the alternative would increase noise by annual DNL 1.5 dB or more for a noise sensitive area that is exposed to noise at or above the DNL 65 dB noise exposure level, or that would be exposed at or above the DNL 65 dB level due to a DNL 1.5 dB or greater increase, when compared to the existing conditions for the same timeframe (FAA Order 1050.1F, Exhibit 4-1)¹².

The analysis consists of two separate components:

- A noise analysis that, for the aircraft currently operating at the Park, assesses the activity threshold that would generate a noise exposure level at or above DNL 65 dB in a single location. Use of the DNL 65 dB threshold speaks to whether or not noise from air tours operating outside the ATMP planning area under the alternative would result in levels incompatible with noise- sensitive land use (i.e., DNL 65 dB), but the threshold of significance is a 1.5 dB or more increase at or above the resulting DNL 65 dB level as defined in FAA Order 1050.1F and 14 CFR Part 150.1.
 - The noise analysis considers the activity threshold two ways:
 - For the aircraft type with the loudest noise level, what is the activity level that would generate a noise level at or above DNL 65 dB?
 - For the aircraft types and fleet mix distribution within the 2017-2019 peak month average day, what is the activity level that would generate a noise level at or above DNL 65 dB?
- An activity assessment that describes the potential number of aircraft operations that may occur at a given point outside the ATMP planning area over a 24-hour period due to a no air tour alternative or additional flights outside the ATMP planning area resulting from a decrease in annual operations.
 - The analysis assumed air tour operations would comply with applicable aviation safety regulations.

The results of this analysis are described in the indirect effects analysis in the environmental consequences discussion of the draft EA for Noise and Noise-Compatible Land Use.

4.1.3 Cumulative Effects

The impacts analysis for cumulative effects to noise and noise-compatible land use discloses the likely changes to the ambient condition (not natural ambient, which is disclosed in the Affected Environment section of the draft EA) as modeled for each alternative. The qualitative discussion includes mention of

¹² FAA. (2015). *1050.1F Order*

whether the overall soundscape would become louder, quieter, or stay the same. The cumulative impact analysis includes the noise from air tours plus other noise sources. The section also provides discussion of differences between alternatives.

4.2 Air Quality and Climate Change

4.2.1 Air Quality Analysis

The Environmental Protection Agency (EPA) has established the National Ambient Air Quality Standards (NAAQS) (40 CFR Part 50) for six criteria air pollutants which can be harmful to human health and the environment.¹³ Primary standards protect public health, including sensitive populations such as children and the elderly, while secondary standards protect public welfare, including visibility impairment and damage to animals, vegetation, and buildings. The six criteria pollutants are:

- Carbon monoxide (CO)
- Lead (Pb)
- Nitrogen dioxide (NO₂)
- Ozone (O₃)¹⁴
- Particulate matter: aerodynamic diameter ≤ 2.5 μm (PM_{2.5})¹⁵ and aerodynamic diameter ≤ 10 μm (PM₁₀)
- Sulfur dioxide (SO₂)

The EPA designates geographic areas¹⁶ based on their relation to the NAAQS by pollutant:

- Nonattainment Area: Areas of the country where air pollution levels persistently exceed one or more of the NAAQS.
- Attainment Area: Any area that meets the standard for all criteria pollutants.
- Maintenance Area: Any area that was formerly in nonattainment status for one or more criteria pollutants, but currently meets the standard for all criteria pollutants.

The General Conformity Rule (40 CFR Part 93) ensures that federal actions do not cause or contribute to new violations of the NAAQS, worsen existing NAAQS violations, or delay attainment of the NAAQS. Federal agencies are required to work with state, tribal, and local governments in nonattainment or

¹³ NAAQS Table: <https://www.epa.gov/criteria-air-pollutants/naaqs-table>

¹⁴ Nitrogen oxides (NOX) and volatile organic compounds (VOC) are considered precursors to ground-level ozone and may be closely monitored in areas with ozone concerns.

¹⁵ Sulfur dioxide (SO₂), NOX, VOC, and ammonia are considered precursors to PM_{2.5}.

¹⁶ Current Nonattainment Counties for All Criteria Pollutants: <https://www3.epa.gov/airquality/greenbook/ancl.html>

maintenance areas to ensure their actions conform to relevant air quality plans.¹⁷

4.2.2 Study Area and Data Sources

The study area for the air quality analysis corresponds with the ATMP planning area. The study area is compared with geographic information systems data in EPA's Green Book¹⁸ to confirm attainment status (attainment, nonattainment, or maintenance by pollutant). The FAA's AEDT is used to derive emission rates for aircraft used in air tours over the Park. The route lengths by aircraft type and number of annual operations by aircraft type are derived from operator reporting data.

4.2.3 Methodology for Analyzing Air Quality Impacts

The impact analysis for air quality consists of five steps:

- 1. Calculate annual flight miles for each aircraft type operating over the ATMP planning area.**

Annual flight miles over the ATMP planning area are calculated for each aircraft type by multiplying the total number of air tour operations by each route flown over the ATMP planning area.

- 2. Calculate emission rates for each aircraft used in air tours over the ATMP planning area.**

The latest version of FAA's AEDT is used to develop emission rates (pounds of emissions per mile flown) for each aircraft. Emission rates for non-jet engines (i.e., those most likely conducting air tours) are based on emission factors in AEDT, which are primarily derived from the EPA's AP-42: Compilation of Emission Factors. Although the AP-42 emission factors represent the best available data, they have not been updated since the 1990s and most aircraft engines in use today are likely to be cleaner due to less-polluting fuels and improvements in engine emissions controls. Therefore, the calculated emission rates should be considered a conservative estimate of emission rates for aircraft used in air tours. Calculate emissions from air tours over the ATMP planning area.

For each aircraft type operating over the ATMP planning area, emissions (tons per year) are calculated by multiplying the annual flight miles (step 1) by the aircraft-specific emission factor (step 2). The sum of emissions across all aircraft types represents the total emissions (by alternative) for the ATMP planning area.

- 3. If the ATMP planning area is located in EPA's nonattainment and/or maintenance areas, compare emissions with *de minimis* thresholds.**

To highlight the potential impacts to ambient air quality for all criteria pollutants, the emissions results are compared with the EPA's General Conformity *de minimis* thresholds for the most

¹⁷ General Conformity: <https://www.epa.gov/general-conformity>

¹⁸ Nonattainment Areas for Criteria Pollutants (Green Book): <https://www.epa.gov/green-book>

stringent¹⁹ nonattainment areas. EPA's General Conformity *de minimis* thresholds represent a surrogate for impacts to ambient air quality. If emissions estimates for all pollutants in the ATMP planning area are below *de minimis* thresholds, the proposed air tours are expected to result in negligible impacts to air quality.

4. If the ATMP planning area is located in EPA's attainment areas, disclose ATMP emissions to fulfill NEPA requirements.

Per the requirements of NEPA, disclosure of both baseline emissions and any change in emissions (comparison between the No Action Alternative and the action alternatives) shall be provided in the draft EA to understand the potential consequences to air quality. Since the ATMP planning area is located in an area of the United States that is in attainment for all regulated pollutants, there are no regulatory thresholds to compare that indicate the potential air quality impacts of said emissions. Rather, the reported emissions provide a basis of acknowledgement as to what the proposed project may contribute to the attainment air shed. For the purposes of ATMPs, only emissions changes from aircraft operations for each alternative are considered.

If adverse effects on air quality are predicted, the final step of the analysis is to determine whether:

- There are any practicable mitigation measures or alternatives that would avoid or reduce impacts to air quality; and
- A substantial need for action exists, and if other alternatives with less adverse impacts on air quality will still satisfy the purpose and need without resulting in exorbitant costs.

4.2.4 Climate Change Analysis

In February 2021, the CEQ rescinded the 2019 Draft NEPA Guidance on Consideration of Greenhouse Gas Emissions and is reviewing, for revision and update, the 2016 Final Guidance on Consideration of Greenhouse Gas Emissions and the Effects of Climate Change.²⁰ CEQ directs agencies to consider: (1) the potential effects of a proposed action on climate change as indicated by assessing greenhouse gas (GHG) emissions (e.g., to include, where applicable, carbon sequestration); and (2) the effects of climate change on a proposed action and its environmental impacts. Federal agencies are advised to use projected GHG emissions as a proxy for assessing an action's impact on climate change. The difference in GHG emissions between alternatives, as well as the total GHG emissions of the No Action Alternative, should be provided as part of the NEPA analysis. The 2016 CEQ guidance does not establish any

¹⁹ The most stringent non-attainment areas (i.e., lowest *de minimis* thresholds) are categorized as "extreme" for ozone (VOCs or NOX) and "serious" for particulate matter (PM₁₀, PM_{2.5}, NOX, VOC, and SO₂; ammonia is not considered for aircraft emissions as they relate to ATMPs).

²⁰ Council on Environmental Quality (CEQ). (2016). *Final Guidance for Federal Departments and Agencies on Considerations of Greenhouse Gas Emissions and the Effects of Climate Change in National Environmental Policy Act Reviews*.

particular quantity of GHG emissions as significant.

4.2.5 Study Area and Data Sources

The study area for GHG emissions is the ATMP planning area. FAA's AEDT is used to derive emission rates for aircraft used in air tours over the ATMP planning area. The route lengths by aircraft type and number of annual operations by aircraft type are derived from operator reporting data.

4.2.6 Methodology for Analyzing Greenhouse Gas Impacts

The GHG analysis includes the following four steps:

1. Calculate annual fuel burn for each aircraft type operating over the ATMP planning area.

Annual fuel burn (for use with fuel burn-based emission factors in step 2) are calculated from the annual flight miles using conversion factors given in FAA's AEDT. Annual flight miles over the ATMP planning area are calculated for each aircraft type by multiplying the total number of air tour operations by each route flown within the ATMP planning area.

2. Calculate GHG emission factors for each aircraft used in air tours in the ATMP planning area.

The latest version of AEDT is used to develop a CO₂ equivalents (CO_{2e}) emission factor in metric tons of emissions per gallon of fuel (MT CO₂/gal) for each aircraft. CO_{2e} emission factors in AEDT are calculated based on the quantity of aircraft fuel burned. Since the proposed action involves only aircraft operations, MT CO_{2e} will be assumed to be the same as the aircraft MT CO₂.²¹

3. Calculate GHG emissions from air tours over the ATMP planning area.

For each aircraft type operating over the ATMP planning area, the CO_{2e} emissions (MT per year) are calculated by multiplying the annual fuel burn (step 1) by the aircraft-specific emission factor (step 2). The sum of emissions across all aircraft types represents the total emissions (by alternative) for the ATMP planning area.

GHG emission inventory results are not compared to the NAAQS nor any other significant criteria. The results are provided for informational purposes as a means of disclosing the project's potential effects on GHGs and climate change.

If an increase in GHG emissions is predicted, the final step of the analysis involves considering whether there are areas within the scope of the project where such emissions could be reduced through mitigation measures such as changes to more fuel-efficient aircraft, use of renewable fuels, and operational changes.

4.3 Biological Resources

The study area for biological resources includes the ATMP planning area. To the extent that habitat and

²¹ FAA 1050.1F Desk Reference. February 2020. Section 3.3 Environmental Consequences – Climate.

species occurrences correlate, impacts to biological resources are expected to be similar within the ATMP planning area. Therefore, if habitat exists for a species but occurrence is unknown, the assumption is that the species could be present and has been analyzed accordingly.

The agencies have identified federally listed species, special status species, and any critical habitats within the Affected Environment discussion of the draft EA. For any species for which habitat does not encompass the entire ATMP planning area, habitat areas for these species are identified to connect data on effects of air tours, such as noise contours, to potential effects on species that utilize those areas. Based on the results of this review, the Park's natural resource managers and biologists have confirmed species within the ATMP planning area that have the potential to be affected by commercial air tours based on their knowledge of wildlife responses to commercial air tours.

For special status species and/or critical habitats which have the potential to be affected by commercial air tours, the agencies have performed a literature review for species-specific management guidelines such as recommended noise limits, time of year restrictions, aircraft standoff distances, or other mitigation measures that could be feasibly addressed by the ATMP parameters. The agencies consulted with the Navajo Nation Department of Fish and Wildlife for species-specific management guidelines and recommendations.

The draft EA includes a qualitative analysis of the effects to biological resources that could result from each alternative. The analysis discloses how ATMP operating parameters and the resultant resource conditions would change by comparing existing conditions to the parameters proposed for each alternative. For example, the draft EA identifies areas where noise levels would change, if routes had been shifted closer or further from sensitive habitat attributes, or if altitudes would increase or decrease as compared to existing conditions, and qualitatively discloses how that could affect biological resources. The analysis also discloses the effects of the use itself by analyzing the impacts of each alternative in the context of any documented management guidelines (as available). Based on this analysis, the agencies proposed an effect determination.

4.4 Cultural Resources

The analysis methodology for cultural resources (inclusive of Historical, Architectural, Archeological and Cultural Resources) consists of evaluating the potential impacts of each alternative under consideration on cultural resources identified within the NEPA study area. Section 106 of the National Historic Preservation Act (NHPA Section 106) as set forth in 36 CFR Part 800 provides the framework for gathering the information needed to assess impacts on cultural resources under NEPA, per FAA's 1050.1F Order²². The NEPA study area for cultural resources corresponds with the Area of Potential Effects (APE) identified as part of the Section 106 process and encompasses the potential effects of all alternatives under consideration. The APE may be revised and refined based on the preferred alternative or the consultation process. Cultural Resources within the APE are identified in the Affected Environment of the draft EA.

Section 106 considers effects to properties (districts, sites, buildings, structures, or objects) that are

²² FAA. (2015). *1050.1F Order*

listed in or eligible for listing in the National Register of Historic Places (National Register). The Section 106 process for the Park includes prehistoric or historic districts, sites, buildings, structures, and/or objects, as well as traditional cultural properties (TCPs) (inclusive of ethnographic resources and sacred sites) and cultural landscapes that have been previously documented in the APE or identified through consultation. NPS Management Policies (2006)²³ define five types of cultural resources for consideration – archeological resources, cultural landscapes, ethnographic resources, historic and prehistoric structures, and museum collections. Because of the nature of the alternatives (i.e., no ground disturbance or physical incursion), the cultural resource identification focuses on resources that could be affected visually or by noise from aircraft. The focus of cultural resources identification is on those resources for which feeling and setting contribute to the properties' significance, including TCPs and other properties of cultural and religious significance to Native American Tribes and other consulting parties with relevant expertise. This analysis in the draft EA considers potential beneficial and adverse impacts to all cultural resources within the APE, including resources identified by the Park that may not fall under the Section 106 process, if present.

Park staff have provided information about cultural resources located within the Park boundaries and the consulting parties have identified TCPs and sacred sites within the APE. Additional records have been gathered from Park staff and through an on-site records search of the Navajo Nation Heritage and Historic Preservation Department to identify any additional cultural resources within the APE. Historic property identification includes previously documented properties with no formal National Register evaluation as well as those previously listed or determined eligible for listing in the National Register. No additional survey will be conducted; unevaluated or undetermined properties will be treated as eligible for the purposes of Section 106 consultation and NEPA evaluation. Using this information, a list of cultural resources located within the APE is generated and those with unrestricted location data are mapped (any individual TCPs, sites of cultural or religious significance or boundaries of archeological districts included in the study area maps depict only general buffered areas to protect the location of sensitive sites).

The agencies have reviewed the alternatives and determined if any of the cultural resources within the APE may be affected by each alternative and evaluated the magnitude of those impacts. The analysis includes a qualitative assessment of how the ATMP operating parameters for each alternative may affect resource conditions compared to current conditions. The agencies use the time above 35 dBA metric and 12-hour equivalent sound level metric from the *Noise Technical Analysis* (Appendix F) to quantitatively assess potential noise impacts to cultural resources from Alternative 3 as compared to the No Action Alternative. Noise data is used to identify where audible impacts may increase, decrease, or be introduced. Time above 52 dBA was used where noise increases are identified and modeled noise points can be associated with cultural resources. Point data does not include areas outside of the ATMP planning area that may be within the APE. As appropriate, maximum sound level and time audible metrics are also utilized for additional context on increases in noise intensity and/or duration and evaluation of whether impacts are adverse or beneficial to cultural resources where a quiet or natural setting contributes to the significance. Alternative 2 was not modeled, so the same data is not available

²³ NPS. (2006). Management policies. https://www.nps.gov/subjects/policy/upload/MP_2006.pdf

for Alternative 2.

The impacts analysis considers the context and significant features of the resources as well as the nature of the impacts that may result from the action, including the intensity and severity of the impact.

Effects to cultural resources would occur if implementation of the alternative would alter the characteristics of the resource that make it eligible for listing in the National Register or otherwise culturally significant. Examples of effects that adversely impact cultural resources are noted in 36 CFR 800.5(a). An adverse effect finding under Section 106 does not automatically trigger a significant impact under NEPA. The analysis of impacts will incorporate any measures developed through the Section 106 process to avoid, minimize or mitigate adverse effects. The relative effects to cultural resources are also qualitatively compared across all alternatives. The NEPA documentation will report consultation conducted as relevant to the delineation of the APE and Affected Environment. The results of Section 106 consultation and the FAA's proposed finding of effect will also be included for the preferred alternative when available. Relevant documentation of the Section 106 process will be included in Appendix G, *Cultural Resources Consultation and Summary*, for reference.

4.5 Visitor Use and Experience and Other Recreational Opportunities

The impact analysis for visitor use and experience and other recreational opportunities is analyzed for Park visitors and air tour clients. The visitor analysis focuses effects on visitor points of interest and how visitors use those areas, interpretive programs, and Park management objectives related to visitor use and experience, as identified in the Affected Environment of the draft EA. The Affected Environment also identifies Park management zones and objectives that would apply to the management of commercial air tours. The environmental impact analysis quantitatively analyzes how the ATMP operating parameters and the resultant resource conditions for visitor use and experience would change by comparing existing conditions to the parameters proposed in the alternative. The analysis also uses the results of the *Noise Technical Analysis* (Appendix F) to identify potential impacts to visitor use and experience from the alternatives, including interpretive programs. As described in the *Noise Technical Analysis*, the time above 52 dBA metric represents the level at which one may reasonably expect interference with Park interpretive programs. The locations of Park interpretive programs and the corresponding time above 52 dBA are noted to identify impacts to interpretive programs that could occur. The analysis also considers the different noise sensitivities of the different types of Park visitor and visitor experiences (e.g., backcountry vs. frontcountry), and how each of the alternatives could affect visitor use at those sites. For areas of the Park where visitors would have an expectation to hear natural sounds, the analysis includes a reference to the results of the time above 35 dBA metric. In addition to considering noise effects on the Park visitor experience, the analysis considers how visual effects could influence visitor use and experience (see method description for visual effects below). The relative effects to Park visitors are also qualitatively compared across all alternatives.

The impact analysis for other recreational opportunities applies to persons recreating outside the Park but within the ATMP planning area through the experience of air tours. Although they are not considered Park visitors, commercial air tours offer a recreational experience for those who wish to view the Park from a different vantage point. Impacts to the availability of this experience within the ATMP

planning area are considered by qualitatively analyzing how the opportunity to see the Park from an air tour within the ATMP planning area would change as a result of each alternative by comparing existing conditions to the parameters proposed under each alternative. This analysis primarily considers how routes and the number of tours authorized by each alternative could affect the availability of this experience within the ATMP planning area for air tour clients.

4.6 Environmental Justice and Socioeconomics

The study area for the environmental justice (EJ) analysis includes the county or counties that are within or partially within the Park and ½-mile of its boundary. The combination of all study areas for the other relevant impact categories represents the potential impact area for EJ, because EJ impacts may be realized in conjunction with impacts to any other impact category. Refer to each environmental impact category's respective section in the draft EA for a description of the study area limits. The analysis incorporates data presented at the county level and from U.S. Census block groups that are within and adjacent to the ATMP planning area.

U.S. Census data is used to identify the percentage of the populations within the counties that are low-income (as identified by poverty status) and minority pursuant to U.S. Department of Transportation (DOT) Order 5610.2(a), otherwise known as "EJ populations." For the purposes of this EJ analysis, FAA uses the minority and low-income definitions provided in DOT Order 5610.2a. The average of the county income and minority population percentages is compared to block group level data on income and race and ethnicity within the study area to determine if the population is an EJ community of concern. A minority census block group considered as an EJ community is a census block group with a minority population percentage greater than the average minority population percentage of the study area. Any census block group with a minority population greater than the average of the study area is designated as a census block group of EJ concern. A low-income population census block group considered as an EJ community is a census block group with a greater percentage of low-income population than the average percentage of low-income population in the study area. Each census block group with a low-income population greater than the study area average is designated a census block group of EJ concern. State and local data have also been evaluated to confirm accuracy of findings.

The EJ analysis considers the ATMP operating parameters (i.e., locations of the commercial air tour routes, altitudes, and frequencies) under each alternative as well as the results of the analyses for Noise and Noise-Compatible Land Use, Air Quality and Climate Change, and Visual Effects, as well as the corresponding environmental effects of each alternative. The analysis identifies if each alternative would cause disproportionately high and adverse effects on low-income or minority populations within the study area. The definitions for disproportionately high and adverse effects provided in DOT Order 5610.2(a) is used to conduct the analysis. The significance of the impacts to EJ populations is determined by identifying the context, intensity, and relation the impact has to other environmental impact categories. Specifically, for each environmental impact category, the analysis identifies if an EJ population would sustain more of an impact than any other population segment. In doing so, the impacts to environmental impact categories are considered, as well as if the impacts would affect the EJ population in a way that the agencies determine is unique or significant to that population.

The socioeconomic analysis considers the effects the alternatives may have on local business activity.

This could include businesses within the ATMP planning area that could be affected by noise or other effects of the ATMP, such as ranching operations, and will also evaluate effects of the alternatives on the commercial air tour industry and related businesses. Specifically, the draft EA analyzes how commercial air tour operators may support economic development by generating income for other ancillary tourism industry businesses. The draft EA describes how the number of flights authorized by each alternative compares to the current level of air tours reported by the operator.

Given the nature of the alternatives, the agencies do not anticipate impacts to the housing, race, age, or population conditions of the study area; therefore, effects to these socioeconomic characteristics within the study area have not been analyzed.

As they occur, the draft EA will document efforts that the agencies performed to incorporate EJ principles throughout the ATMP development process, including opportunities for engagement with EJ populations throughout the ATMP planning area.

4.7 Visual Effects

In accordance with FAA's 1050.1F Order²⁴, visual effects deal broadly with the text to which the alternatives would either: 1) produce light emissions that create annoyance or interfere with activities; or 2) contrast with, or detract from, the visual resources and/or visual character of the existing environment. As air tours occur during daylight, the draft EA focuses on visual effects on visual resources and character and not light emissions. Visual effects on resources discussed in other sections of the draft EA are discussed in those sections and a cross-reference to the Visual Effects section is provided.

Visual resources may include structures or objects that identify landscape features that are visually important or have unique characteristics. In addition, visual resources can include the cohesive collection of various individual visual resources that can be viewed at once or in concert from the area surrounding the site of the alternatives. Visual character refers to the overall visual makeup of the existing environment where the alternatives are located.

The study area for visual effects includes the Park and ½-mile buffer up to 5,000 ft. AGL, which corresponds with the ATMP planning area and the cultural resources APE. The impact analysis focuses on analyzing effects to Park viewsheds and notable visual resources, as identified in the Affected Environment, which notes any aesthetic value and unique aspects within the Park. The analysis analyzes how the ATMP operating parameters (e.g., number of tours, location of the routes, altitudes, and other ATMP elements that could affect Park viewsheds) for each alternative and the resultant Park viewshed resource conditions would change by comparing existing conditions to the parameters proposed in the alternative. The relative effects to Park viewsheds are also compared across all alternatives. Impacts to visual resources and visual character relate to a decrease in the aesthetic quality of the Park resulting from air tours. According to FAA's 1050.1F Order²⁵, significance of impacts is determined based on the degree the action would have to affect the visual character of the area,

²⁴ FAA. (2015). *1050.1F Order*

²⁵ FAA. (2015). *1050.1F Order*

taking into consideration the importance, uniqueness, and aesthetic value; the degree to which the action contrasts with the visual resources or character; and the degree to which views are obstructed.

4.8 Department of Transportation Act Section 4(f) Resources

Section 4(f) is applicable to historic sites and publicly owned parks, recreation areas, and wildlife and waterfowl refuges of national, state, or local significance that may be impacted by transportation programs or projects carried out by the U.S. DOT and its operating administrations, including the FAA. The study area for considering Section 4(f) resources in this draft EA corresponds with the APE used for compliance with Section 106 of the NHPA.

Historic properties are identified as part of the Section 106 consultation process (see section above: Cultural Resources). Parks, recreational areas, and wildlife and waterfowl refuges are identified using public datasets from federal, state, and local sources. Each resource that intersects the study area is included in the Section 4(f) analysis. A list of these properties as well as a short description, the approximate size, and official(s) with jurisdiction has been compiled, and the properties was mapped.

As land acquisition, construction, or other ground disturbance activities would not occur under the ATMP, the alternatives would not have the potential to cause a permanent use of a Section 4(f) resource. Therefore, analysis of potential impacts to Section 4(f) resources is limited to identifying impacts that could result in a constructive use. Evaluating potential impacts to Section 4(f) resources focuses on changes in aircraft noise exposure and visual effects resulting from implementing the alternative. A constructive use of a Section 4(f) resource would occur if there was a substantial impairment of the resource to the degree that the activities, features, or attributes of the site that contribute to its significance or enjoyment are substantially diminished. This could occur as a result of both visual and noise impacts. The FAA has evaluated the Section 4(f) resources for potential noise (including vibration) and visual impacts for the preferred alternative to determine if there will be substantial impairment to Section 4(f) resources due to the preferred alternative that would result in a constructive use.

The methodology for the noise impacts analysis will reflect that described for the Noise and Noise-Compatible Land Use resource category (see above). The methodology for the visual impacts analysis reflects that described under the Visual Effects resource category (see above). As noted, both resource analyses describe the effects of the alternative itself as well as the relative change from the environmental baseline.

Noise impacts on Section 4(f) resources are analyzed using location point data provided in the *Noise Technical Analysis* (Appendix F). Location points are used to model noise across multiple metrics (e.g., 12-hour equivalent sound level, time above 52 dBA) at specific points of interest in the study area, including forests, geological features, and historic sites, and often correspond to Section 4(f) resources. For Section 4(f) resources without corresponding location point data, noise impacts are assessed using the closest location point(s). The range of time (in minutes) above 52 dBA is reported for each Section 4(f) resource.

APPENDIX F

Noise, Air Quality, and Greenhouse Gas Emissions Technical Analysis: Canyon de Chelly National Monument

Noise, Air Quality, and Greenhouse Gas Emissions Technical Analysis: Canyon de Chelly National Monument

June 2023



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1. Introduction

The purpose of this report is to present the noise, air quality, and greenhouse gas results discussed in the Canyon de Chelly National Monument (Park) Air Tour Management Plan (ATMP) draft Environmental Assessment (EA) and to document the inputs and assumptions used in the computer modeling of air tour aircraft activity.

2. Noise

Humans perceive sound as an auditory sensation created by pressure variations that move through a medium such as water or air. Sound is measured in terms of amplitude and frequency. Amplitude, which refers to the sound pressure level or intensity, is the relative strength of sound waves which humans perceive as loudness or volume and is measured in decibels (dB). Decibels work on a logarithmic scale, such that an increase of 10 dB causes a doubling of perceived loudness and represents a ten-fold increase in sound level. Thus 20 dB would be perceived as twice as loud as 10 dB, 30 dB would be perceived as 4 times louder than 10 dB, 40 dB would be perceived as 8 times louder than 10 dB, etc. (see Table 1).

Table 1. Subjective Effect of Change in Sound Level

Change in Sound Level	Perceived Change to Human Ear
± 1 dB	Not Perceptible
± 3 dB	Threshold of Perception
± 5 dB	Obvious Change
± 10 dB	Twice / Half as Loud
± 20 dB	Fourfold or ¼ as Loud

The A-weighted decibel scale (dBA) is commonly used to describe sound levels because it reflects the frequency range to which the human ear is most sensitive.¹ The dBA scale from zero to 110 covers most of the range of everyday sounds, as shown in Figure 1. Note that sound levels in protected natural areas, such as the Park, are often lower than those of the ‘common’ outdoor areas shown, in the range of 20-30 dBA.

¹ dBA (A-weighted decibels): Sound is measured on a logarithmic scale relative to the reference sound pressure for atmospheric sources, 20 µPa. Sound levels are reported in units of decibels (dB) (ANSI S1.1-1994, American National Standard Acoustical Terminology). A-weighting is applied to sound levels to account for the sensitivity of the human ear (ANSI S1.42-2001, Design Response of Weighting Networks for Acoustical Measurements). To approximate human hearing sensitivity, A-weighting discounts sounds below 1 kHz and above 6 kHz.

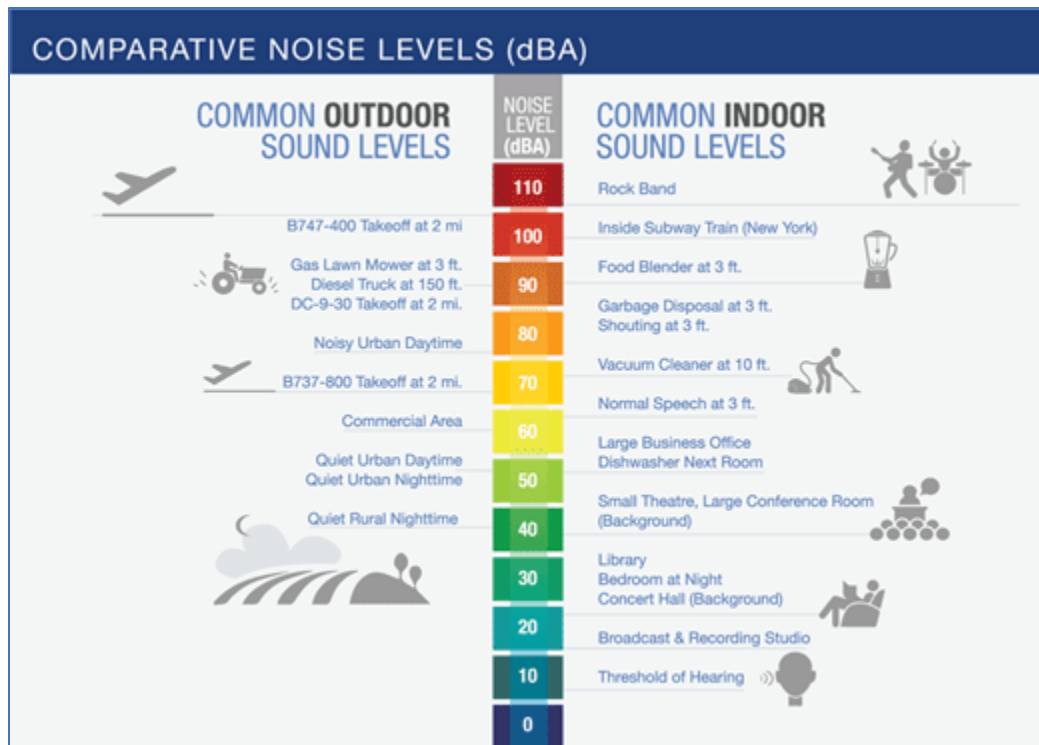


Figure 1. Comparative Sound Levels²

Section 2 discusses noise, including metrics, the affected environment, the noise model method, model results, and indirect effects. Section 3 discusses air quality and greenhouse gas emissions. Section 4 provides the literature cited.

2.1 Noise Metrics

There are numerous ways to measure noise and the potential impacts of noise from commercial air tours on the acoustic environment of a park, including intensity, duration, and spatial footprint of the noise. The noise metrics disclosed are consistent with both Federal Aviation Administration (FAA) and National Park Service (NPS) noise guidance. The FAA noise evaluation is based on guidance under FAA Order 1050.1F and uses the yearly Day Night Average Sound Level (DNL) metric; the cumulative noise energy exposure from aircraft over 24 hours. The NPS considers various different metrics to analyze impacts to park resources and values from noise, including equivalent sound level, the amount of time that the noise from a commercial air tour operation would be above specific sound levels that relate to functional effects of noise and park management objectives (e.g., 35 and 52 decibels), and maximum sound level. These metrics are discussed further in Table 2.

² Source: https://www.faa.gov/regulations_policies/policy_guidance/noise/basics/

Table 2. Primary metrics used for the noise analysis

Metric	Relevance and citation
Equivalent sound level, $L_{Aeq, 12 \text{ hr}}$	The logarithmic average of commercial air tour sound levels, in dBA, over a 12-hour day. The selected 12-hour period is selected to represent typical daytime commercial air tour operating hours.
Day-night average sound level, L_{dn} (or DNL)	<p>The logarithmic average of sound levels, in dBA, over a 24-hour day, DNL takes into account the increased sensitivity to noise at night by including a 10 dB penalty between 10 PM and 7 AM local time.</p> <p>Note: Both $L_{Aeq, 12 \text{ hr}}$ and DNL characterize:</p> <ul style="list-style-type: none"> Increases in both the loudness and duration of noise events The number of noise events during specific time period (12 hours for $L_{Aeq, 12 \text{ hr}}$ and 24-hours for DNL) If there are no nighttime events, then $L_{Aeq, 12 \text{ hr}}$ is arithmetically three dBA higher than DNL.
Time Above 35 dBA	<p>The amount of time (in minutes) that aircraft sound levels are above a given threshold (i.e., 35 dBA).</p> <p>In quiet settings, outdoor sound levels exceeding 35 dBA degrade experience in outdoor performance venues (American National Standards Institute (ANSI), 2007). This level is also shown to cause blood pressure increases in sleeping humans (Haralabidis et al., 2008); as well as exceeding recommended maximum background noise level inside classrooms (ANSI S12.60/Part 1-2010).</p>
Time Above 52 dBA	<p>The amount of time (in minutes) that aircraft sound levels are above a given threshold (i.e., 52 dBA).</p> <p>This metric represents the level at which one may reasonably expect interference with Park interpretive programs. At this background sound level (52 dBA), normal voice communication at five meters (two people five meters apart), or a raised voice to an audience at ten meters would result in 95% sentence intelligibility (United States Environmental Protection Agency, Office of Noise Abatement and Control, 1974).</p>
Maximum sound level, L_{max}	The loudest sound level, in dBA, generated by the loudest event; it is event-based and is independent of the number of operations. L_{max} does not provide any context of frequency, duration, or timing of exposure.

2.2 Affected Environment

NPS defines acoustic resources as physical sound sources, including both natural sounds (wind, water, wildlife, vegetation) and cultural and historic sounds (battle reenactments, tribal ceremonies, quiet reverence). The acoustic environment is the combination of all the acoustic resources within a given area. This includes natural sounds and cultural sounds, as well as non-natural human-caused sounds. Soundscape can be defined as the human perception of those physical sound resources.

Natural sounds are also part of the biological or other physical resource components of the Park. Examples include:

- Sounds produced by birds, chipmunks, frogs, mountain lions, mountain goats, and bighorn sheep to define territories or aid in attracting mates
- Sounds produced by bats to locate prey or navigate
- Sounds received by mice or deer to detect and avoid predators or other danger
- Sounds produced by physical processes, such as wind in the trees, claps of thunder, or falling water

One of the natural resources of the Park is the natural soundscape, also referred to as the natural ambient or “natural quiet.” The natural ambient includes all of the naturally occurring sounds of the Park, as well as the quiet associated with still nights and certain seasons. An important part of the mission of the NPS is to preserve or restore the natural soundscapes associated with units of the National Park System (NPS Management Policies, 4.9 Soundscape Management).

The term existing ambient refers to the sound level of all sounds in a given area, and includes all natural sounds as well as all mechanical, electrical, and other human-caused sounds. Human-generated noise sources may include wheeled vehicles on roads, such as passenger vehicles, tour buses, and cyclists, and aircraft overflights consisting of high-altitude commercial jet aircraft, occasional NPS flights for research or other Park purposes, commercial air tour operations, and private general aviation aircraft. Human-generated noise within the Park is typically concentrated in travel corridors and areas of high visitor use.

To characterize the natural and existing ambient conditions, acoustic monitoring was conducted for the Park in 2004 and 2010 (Lee and MacDonald, 2016). The median natural ambient (L_{50}) was between 19.4 and 31.0 dBA during the summer months, and between 19.2 and 29.2 dBA during the winter months. The median daytime existing ambient (L_{50}) was between 26.2 and 35.8 dBA during the summer months, and between 23.8 and 32.2 dBA during the winter months. Aircraft and road vehicles were noted as common sources of noise at the Park.

2.3 Noise Model Method

The FAA's Aviation Environmental Design Tool (AEDT), Ver. 3e (Lee et al., 2022) is the FAA-approved computer program for modeling noise under Appendix A of FAA's Part 150 Airport Noise Compatibility Planning (14 Code of Federal Regulations (CFR) sec. A150.103(a)). Requirements for aircraft noise modeling are defined in FAA Order 1050.1F, Environmental Impacts: Policies and Procedures, and in Federal Aviation Regulations (FAR) 14 CFR Part 150, Airport Noise Compatibility Planning.

The noise model requires detailed information regarding the aircraft source, operational, and flight route information, as well as other information³ to compute various noise metrics that can be used to assess the potential impacts of noise from commercial air tours on the acoustic environment of a park.

Route and Aircraft Data

The analysis for the No Action Alternative is based on a peak month, average day⁴ (PMAD) of commercial air tour activity – identified as one operation. For the three-year average of commercial air tour activity from 2017-2019, the PMAD was identified in terms of number of operations, and then further assessed for the type of aircraft and route flown to determine if it is a reasonable representation of the commercial air tour activity over the Park. The existing commercial air tour operator provided route information for three general route options and reports flying a Cessna 182 and a Cessna 207 – which results in six potential aircraft/route combinations for analysis. Because the PMAD is identified as one operation using a Cessna 182 aircraft, for purposes of the noise analysis, the No Action Alternative modeled the CDC-E/W route using a Cessna 182 aircraft. Figure 2 shows the modeled route. This route and aircraft combination was most frequently utilized by the operator and thus chosen as a representation of existing activity. Aircraft altitude of 1,000 feet above ground level was modeled based on information provided by the operator.

³ The noise model accounts for a number of effects over the propagation path between the aircraft source and receptor. Attenuation due to line-of-sight blockage from terrain features is computed utilizing terrain data obtained from the U.S. Geological Survey along with algorithms documented in SAE Aerospace Information Report (AIR) 6501. Atmospheric absorption is based on the 2012-2021 average temperature of 76 degrees Fahrenheit and 71% relative humidity and computed according to SAE-ARP-5534.

⁴ As required by FAA policy, the FAA typically represents yearly conditions as the Average Annual Day (AAD). However, it was determined that a peak month, average day (PMAD) representation of the operations would more adequately allow for disclosure of any potential impacts. PMAD has therefore been used as a conservative representation of assessment of AAD conditions.

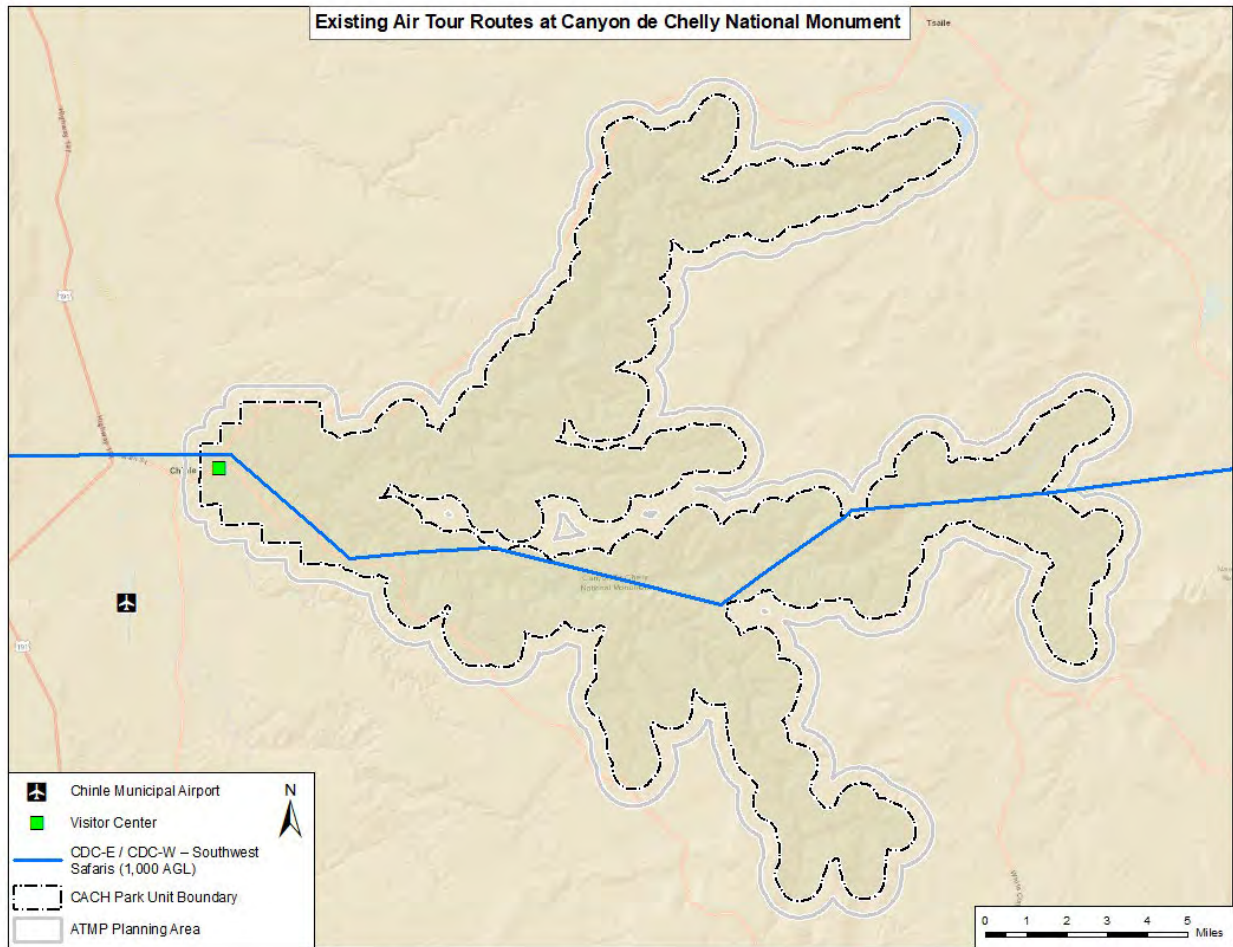


Figure 2. Modeled flight route

2.4 Noise Model Results

Noise contours for acoustic indicators Time Above 35, Time Above 52, and Maximum Sound Level under the No Action Alternative were developed using the FAA's AEDT version 3e and are provided below (Figure 3, Figure 4, and Figure 5 respectively). A noise contour presents a graphical illustration or "footprint" of the area potentially affected by the noise. The noise contour map legends indicate the cumulative percentage of the total ATMP planning area covered by each contour level. Note: Noise contour results are not presented for the $L_{Aeq,12hr}$ metric, as levels would not exceed 35 dBA for this metric for any of the alternatives.

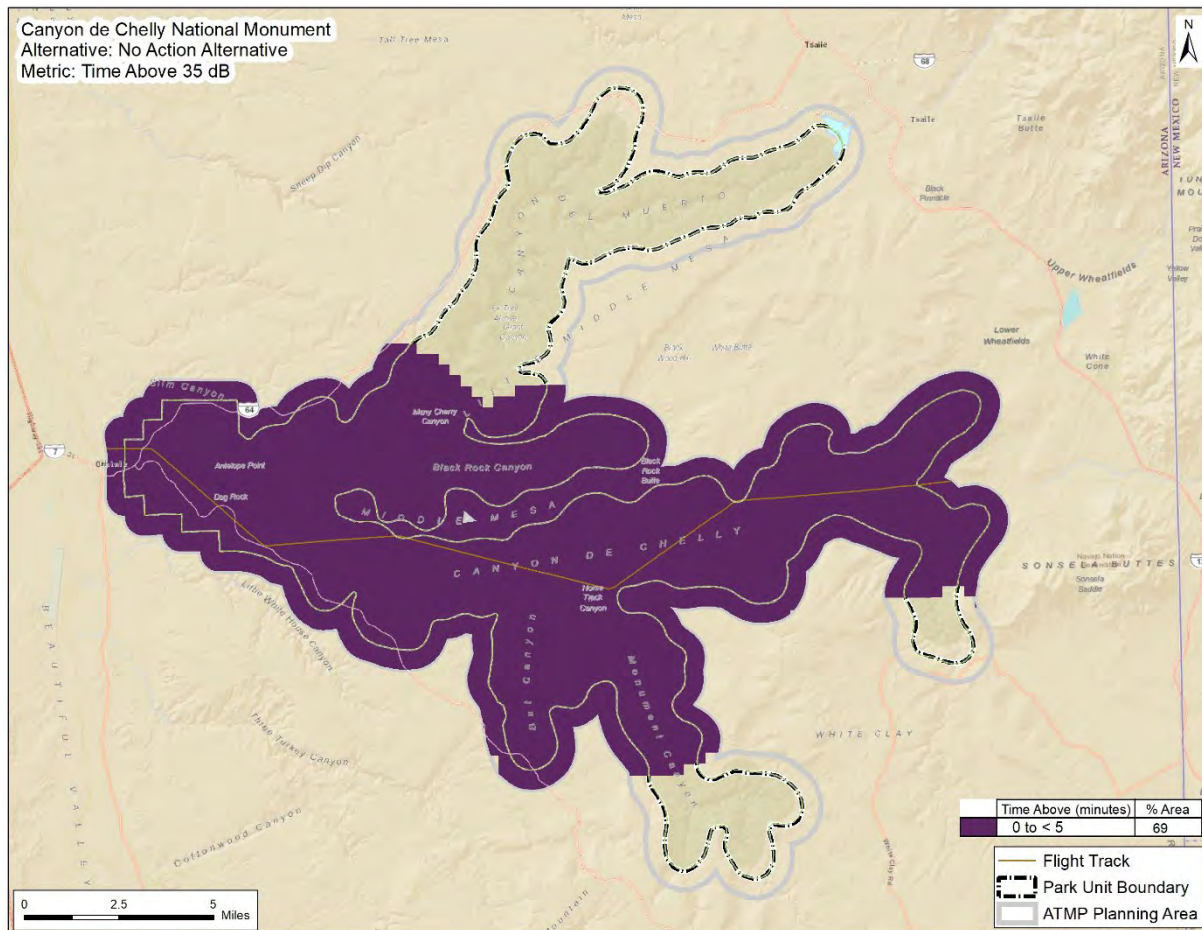


Figure 3. Time Above 35 dBA contour map for the No Action Alternative

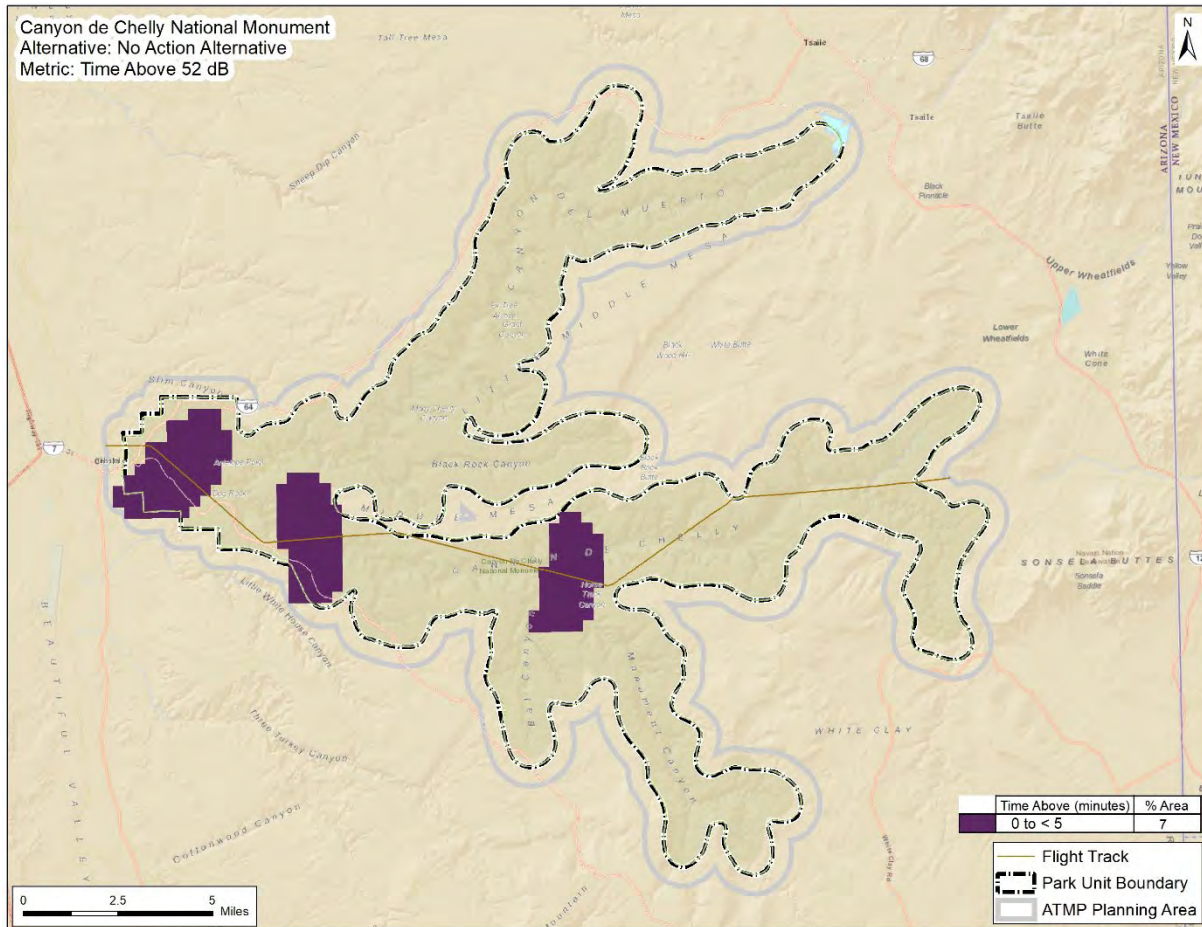


Figure 4. Time Above 52 dBA contour map for the No Action Alternative

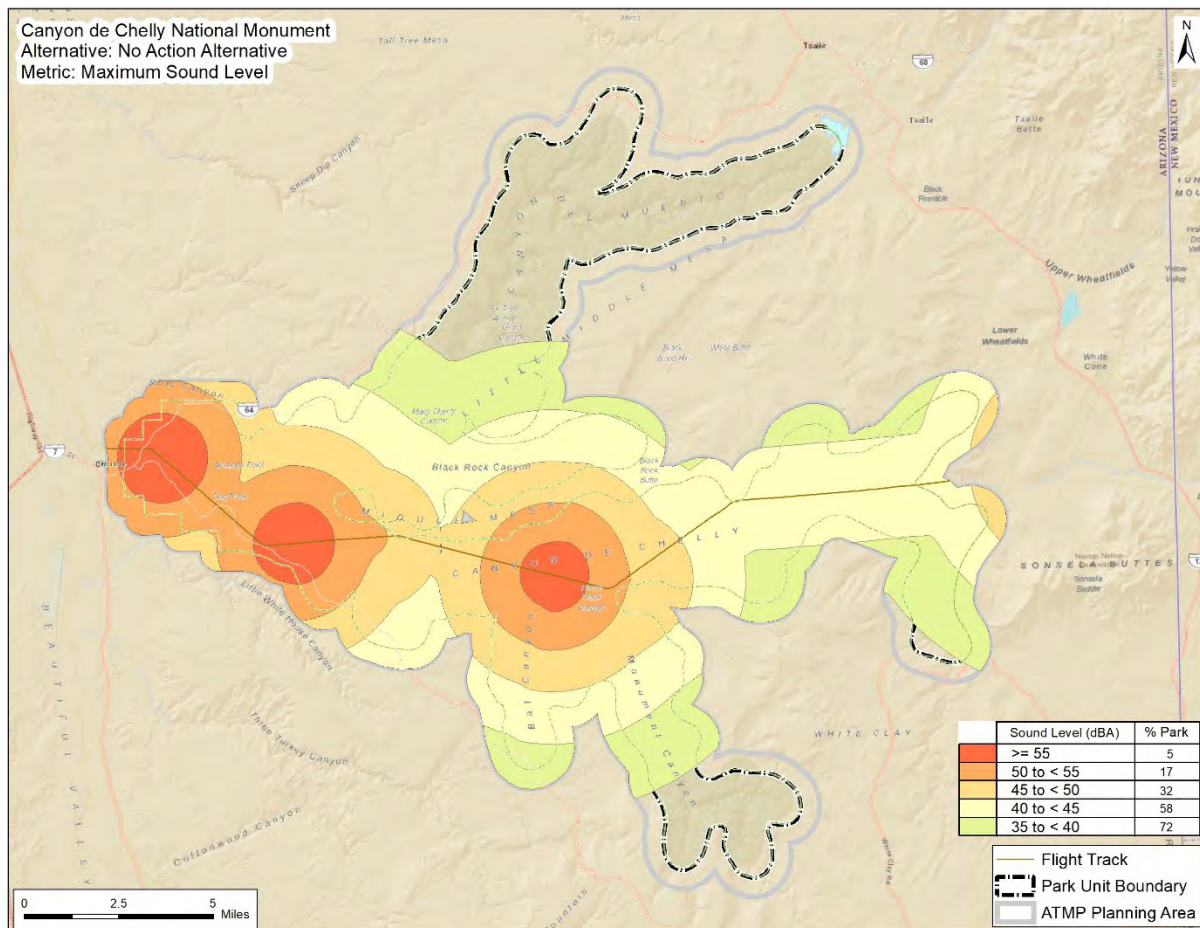


Figure 5. Maximum Sound Level contour map for the No Action Alternative

2.5 Indirect Effects

Because Alternative 2 would prohibit air tours within the ATMP planning area, it is reasonably foreseeable that current air tour operator could seek to make up lost revenue resulting from the implementation of the alternative in other ways. One of the ways that the operator could potentially generate revenue is by offering air tours outside of the ATMP planning area, as these would not be regulated by the ATMP. This type of shift in air tour activity is referred to as “air tour displacement,” and could consist of the air tour operator shifting routes or altitudes to just outside the ATMP planning area, or over the ATMP planning area at or above 5,000 ft. AGL. This could result in impacts to acoustic resources, natural soundscapes, and cultural resources near the locations where displaced air tours would occur.

Indirect Effects to ATMP Planning Area

Displaced air tours, if any, above the ATMP planning area (at or above 5,000 ft. AGL) would result in noise within the ATMP planning area. Compared to current conditions, the noise would be spread over a larger geospatial area and would be audible for a longer period, but at lower intensity. Thus, under Alternative 2, some locations within the ATMP planning area may experience less intense noise but for a longer period when compared to current conditions. Additionally, other locations within the ATMP planning area not currently experiencing air tour noise may experience some noise under Alternative 2 when compared to current conditions. However, in both cases, the intensity of noise would likely be low given the aircraft altitude; any noise that might result could also be more easily masked by opportunistic sounds such as wind and various anthropogenic noise sources. In summary, while the area of noise could be greater under the alternative, the intensity of noise, especially when compared to current conditions at locations near or directly below existing air tour routes, would be less.

Indirect Effects Outside the ATMP Planning Area

Displaced air tours have the potential to affect noise-sensitive locations outside the ATMP planning area. However, it is highly unlikely that displaced air tours would generate noise at or above DNL 65 dB. To illustrate this, a conservative, screening-level noise analysis was conducted. The analysis considers the air tour aircraft types currently operating at the Park, and assesses the activity threshold that would generate a noise at or above DNL 65 dB. For the purposes of this illustration only, the analysis assumes a hypothetical, worst-case scenario where all operations occur at a low altitude (1,000 ft. AGL for fixed-wing aircraft) on a common route outside the ATMP planning area. The noise analysis considers aircraft activity in two ways:

- For the aircraft type with the loudest noise level, what is the activity level that would generate a noise level at or above DNL 65 dB?
- For the aircraft types and fleet mix distribution within the 2017-2019 PMAD, what is the activity level that would generate a noise level at or above DNL 65 dB?

Analysis for aircraft with loudest noise level

The aircraft with the loudest noise level⁽¹⁾ currently operating at the Park is the Cessna 207. For overflight operations at 1000 ft. AGL, the number of operations over a 12-hour period to exceed a DNL 65 dB level is 4,853 (see Table 3). Other aircraft operating at the Park are the Cessna 182. The number of daily operations to exceed a DNL 65 dB level for this aircraft is 5,970.

Table 3. Overflight sound exposure levels and number of daily flights of each aircraft type that would generate a cumulative noise exposure level at or above DNL 65 dB

Aircraft	Altitude, AGL (ft.)	Overflight Sound Exposure Level (dB)	# daily flights for DNL to exceed 65 dB
Cessna 182	1,000	76.6	5,970
Cessna 207	1,000	77.5	4,853

Analysis for the aircraft types and fleet mix distribution within the 2017-2019 reporting data

This analysis compares the number of PMAD operations, since they could occur outside the ATMP planning area as a result of Alternative 2, to the number of daily flights it would take to exceed DNL 65 dB. Because the operator reported only flying the Cessna 182 during the years 2017-2019, the fleet mix is simply 100% Cessna 182. Therefore, it would take at least 5,970 daytime operations at 1,000 ft AGL to exceed a DNL 65 dB level (see Table 3). This activity level represents an increase in daily operations of 5,969 compared to the PMAD (1 operation). This indicates that it would be highly unlikely that air tours that are displaced to outside the ATMP planning area under Alternative 2 would generate noise at or above DNL 65 dB.

3. Air Quality and Greenhouse Gas Emissions

This section includes a description of the air quality and greenhouse gas (GHG) emissions technical analysis. This section also presents the results of this analysis and evaluates how the direct, indirect, and cumulative impacts on air quality and GHG emissions may change under the No Action Alternative or by implementing Alternative 2 at the Park.

3.1 Affected Environment

Air Quality

The National Ambient Air Quality Standards (NAAQS) determine whether a region is in an air quality attainment or nonattainment area. An area is considered to be in attainment if it meets the federal standard for all criteria pollutants. Subsequently, an area is in nonattainment if it does not meet (or contributes to ambient air quality in a nearby area that does not meet) the standard. When this occurs, states must submit implementation plans to the Environmental Protection Agency (EPA) discussing programs to improve air quality within that region. The Park is currently in an area of attainment for all NAAQS.

Greenhouse Gases

The Intergovernmental Panel on Climate Change estimates that aviation accounted for 4.1% of global transportation GHG emissions (FAA, 2020). GHGs are gases that trap heat in the earth's atmosphere. Naturally occurring and anthropogenic (human made) GHGs include carbon dioxide (CO₂), water vapor (H₂O), methane (CH₄), nitrous oxide (N₂O), and ozone (O₃). EPA data indicates that commercial aviation contributed to 6.6% of CO₂ emissions in 2013 in the U. S. (EPA, 2015).

3.2 Air Quality Model Method

The analysis for air quality and climate change uses the same modeling software as used for the noise analysis – the Federal Aviation Administration (FAA) Aviation Environmental Design Tool (AEDT). All model inputs and assumptions for aircraft type and route(s) flown used in the noise analysis are the same for air quality and climate change. An emissions inventory for the modeled aircraft (Cessna 182) and route(s) (CDC-E/W) was generated and then used to develop emission rates (pounds of emissions per mile flown) for the aircraft. For the aircraft type operating over the ATMP planning area, criteria pollutant emissions (tons per year) were calculated by multiplying the annual flight miles by the aircraft-specific emission factor. Annual flight miles were based on the three-year average of commercial air tour activity from 2017-2019; 43 tours. For GHG emissions impacts, CO₂ is reported in metric tons and are based on the quantity of aircraft fuel burned. The sum of emissions across all aircraft types represents the total annual emissions (by alternative) for the ATMP planning area.

3.3 Air Quality Model Results

Modeling results for the No Action Alternative are presented in Table 3 for the criteria pollutants. Note that ozone is not reported as it is not directly emitted in aircraft exhaust. Pollutant emissions are based on annual flight miles and routes for each aircraft type operating within the ATMP planning area. The emission rates (pounds of emissions per mile flown) used in modeling are aircraft engine- and fuel-specific. The results in Table 3 describe baseline emissions under existing conditions. Because reporting information provided by the commercial air tour operator was not detailed enough to be able to assign a specific number of operations to specific routes, all annual flights were assigned to the longest route as a conservative estimate of total emissions. All criteria pollutants aside from carbon monoxide (CO) were estimated at 0.001 tons per year (TPY) or less. Emissions under alternatives can be compared to baseline emissions to indicate potential impacts on air quality within the ATMP planning area.

Table 4. Summary of Criterial Pollutant Annual Emissions in Tons per Year (TPY) Under the No Action Alternative.

Criteria Pollutant	Total Annual Emissions (TPY)
Carbon monoxide (CO)	0.642
Lead (Pb)	<0.001
Nitrogen dioxide (NO ₂)	0.001
Particulate matter: aerodynamic diameter ≤ 2.5 µm (PM _{2.5})	<0.001
Particulate matter: aerodynamic diameter ≤ 10 µm (PM ₁₀)	<0.001
Sulfur dioxide (SO ₂)	<0.001

The range of total annual GHG emissions for all sources of commercial air tour aircraft emissions under the No Action Alternative is modeled to be 1.50 metric tons (MT) of CO₂. The No Action Alternative would not cause pollutant concentrations to exceed one or more of the NAAQS for any of the time periods analyzed. This analysis is based on the three-year average of flights between 2017-2019.

3.4 Indirect and Cumulative Effects

Indirect Effects

Under the No Action Alternative, commercial air tour operations within the ATMP planning area would remain consistent with existing conditions. Although operations could increase up to IOA no indirect impacts to air quality and GHG emissions would be expected to occur under this alternative.

For purposes of assessing indirect air quality and GHG impacts that would occur as a result of Alternative 2, this analysis considers whether aircraft currently operating over the Park would generate significant

emissions to affect the attainment status of the Park. Based on the analysis, the emissions of all criteria pollutants (excluding ozone because it is not a primary pollutant) and GHGs from the current number of air tours flown over the Park are minimal. Operations that may occur outside the ATMP planning area because of Alternative 2 may shift where emissions occur, but the total annual emissions are not likely to change substantially.

Because Alternative 2 would prohibit air tours within the ATMP planning area, it is reasonably foreseeable that the operator could potentially generate revenue by offering air tours in airspace outside of the ATMP planning area, as the areas outside this area would not be regulated by the ATMP. Some of this displaced activity could result in impacts to air quality although it is difficult to predict with specificity if, where, and to what extent any displaced air tours would result in impacts in different and/or new areas. The preciseness of routes and altitudes for tours flown on displaced routes are generally subject to visual flight rules (VFR) and may vary greatly.

Air tours occurring outside the ATMP planning area, if any, would not result in direct emissions-related effects within the ATMP planning area. However, prevailing winds may transport some of the emissions outside the ATMP planning area to within the ATMP planning area (i.e., indirect effects). Additionally, some areas that are not currently exposed to emissions from air tours (airspace outside the ATMP planning area) may be exposed to emissions in these scenarios thus affecting the air quality in these areas.

Because of both the number of air tours and the likely dispersal of air tours outside the ATMP planning area, it is unlikely that air tours that are displaced to outside the ATMP planning area under these alternatives would result in a measurable difference in air quality impacts or change the current attainment status of the Park. Changes in air tour operations under these alternatives would also likely have minimal impact, if any, to regional air quality.

Cumulative Effects

Because the No Action Alternative would not result in any new direct or indirect impacts compared to current conditions, there would be no cumulative effects from the No Action Alternative. Alternative 2 would likely result in a slight improvement in overall air quality in the Park, with no change in the current NAAQS attainment status. Ongoing present and future Park management actions by the NPS would continue to occur under any of the alternatives.

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APPENDIX G

Cultural Resources Consultation and Summary

Appendix G: Cultural Resources Consultation and Summary

Historic Properties

Section 106 Consultation Correspondence

Section 106 Consultation Initiation

Description of Proposed Undertaking and Area of Potential Effect

Identification of Historic Properties

Public Review and Comments on Section 106 Process

Finding of no Adverse Effect and Consulting Party Responses

Property Name	Property Type	Eligibility Status	Significant Characteristics
Canyon de Chelly National Monument	District	Listed	<p>Canyon de Chelly National Monument preserves the remains of aboriginal Anasazi ruins from the Basket Maker II, ca. A.D. 350 through Pueblo III, ca. A.D. 1300, periods. It contains several large and hundreds of small excellently preserved sites of the prehistoric Anasazi. Many of the sites are cliff dwellings containing large amounts of dry, cultural debris. In addition, 18th, 19th and 20th century A.D. sites of Navajo occupancy remain in the monument. The monument is occupied by Navajo Indians who farm and graze the Canyons today. Canyon de Chelly was the site of Carson's campaign of 1864 which ended the American wars with the Navajo.</p> <p>The remarkable scenery of Canyon de Chelly National Monument reflects the dramatic contrast of brightly colored sandstone walls and rock promontories that tower above sinuous bands of vegetation and agricultural fields along the narrow canyon floors. Canyon rim overlooks provide breathtaking panoramic views into and across the canyons to distant vistas. The presence of Navajo hogans and fields within the canyons set against a backdrop of ancient cliff dwellings visually reinforce the long span of human history and the continuing importance of the canyons for the resident Navajo community.</p>
Custodian's Residence	Building	Eligible	<p>Constructed in 1935-7, the building is an excellent example of Pueblo Revival Architecture. It is a good example of the Southwestern atmosphere of Canyon de Chelly. Although its architectural roots were not Navajo, its design was appropriate for the site in a broader, regional context. Its significance is arguably conveyed through setting and feeling by way of spatial relationships with other historic buildings nearby. The building used to be considered contributing to the Thunderbird Lodge historic district (delisted from the National Register). The character of the building's setting and feeling is still conveyed through its association with these other buildings in the Thunderbird Lodge complex.</p>
Canyon de Chelly National Monument's Mission 66 Visitor Center	Building	Eligible	<p>From 1956 to 1966, the Park Service commissioned over one hundred new visitor centers and additions to existing museum buildings. Local contract architects were responsible for some of the designs, but the bulk of the work went to Park Service architects. The Canyon de Chelly National Monument's Mission 66 Visitor Center was constructed in 1964 by Cecil Doty, an architect from Oklahoma trained in the traditional Park Service Rustic style of design. These buildings were designed to harmonize with the surrounding landscape. Some of them, including the Visitor Center, contain viewing terraces overlooking an area of the Park. The specific visitor center viewsheds at CACH overlook the mouth of the canyon from two (east and west-facing) adjoining courtyard terraces. These viewsheds are likely character defining features of the building as it is sitting at the mouth of the canyon and offers interpretive value from the building's courtyard terraces.</p>

Property Name	Property Type	Eligibility Status	Significant Characteristics
TCPs within the Park boundary	TCPs	Eligible	<ul style="list-style-type: none"> • North: ID#88, ID#395, ID#455 • West: ID#16, ID#87, ID#172, ID#182, ID#184, ID#217, ID#219, ID#373, ID#375, ID#378, ID#379, ID#392, ID#393, ID#406, ID#414, ID#424, ID#434, ID#435, ID#437, ID#477, ID#552, ID#1052, ID#1058 • East: ID#202, ID#234, ID#898 <p>Setting and feeling are significant characteristics for several of the TCPs that were identified within the APE. For example, some places are used as the person stands on the rim of an overlook and prays, for prayers in general, or as storage places for bundles or offerings that are used during ceremony.</p>
TCPs within the half-mile boundary around the Park.	TCPs	Eligible	<p>ID#32, ID#73, ID#574, ID#1080: Setting and feeling are significant characteristics for several of the TCPs that were identified within the APE. For example, some places are used as the person stands on the rim at the overlook and prays, for prayers in general or as storage places for bundles or offerings that are used during ceremony.</p>
White House TCP (ID#184)	TCP	Eligible	<p>White House Ruins in Canyon de Chelly (Kiníí'na'ígai) has an associated ceremonial history. Pre-Columbian sites can be sources of spiritual, sacred power to Navajo people. Offerings are made at these sites, and oral histories (of the people, of ceremonies, of clans) refer to these places at times when people were still living there. This place has been continuously used for contemplation and prayer by the Navajo people. Significant characteristics of this TCP include the natural scenery and vegetation, which are linked to ceremonial visions.</p>
Spider Rock TCP (ID#414)	TCP	Eligible	<p>Spider Rock is a significant TCP for the Navajo. The rock is considered the home of Spider Woman, a benevolent figure who is recognized in many traditional Native American oral stories as a guide, protector and healer, teacher, disciplinarian, adviser and/or spiritual leader. Spider Rock is eligible for inclusion in the National Register because of its association with cultural practices or beliefs that are rooted in various Southwestern Native American histories and because it is important in maintaining cultural identity. Spider Rock's natural surroundings, viewshed and noise constraints are vitally important in conveying respect for Spider Woman and her home, in sharing lessons taught by Spider Woman regarding weaving, and in establishing a geographical context for oral histories as well as healing ceremonies.</p>



United States Department of the Interior
NATIONAL PARK SERVICE
Natural Resource Stewardship & Science
Natural Sounds and Night Skies Division



United States Department of Transportation
FEDERAL AVIATION ADMINISTRATION
Office of Policy, International Affairs & Environment
Office of Environment and Energy

NATIONAL PARKS AIR TOUR MANAGEMENT PROGRAM

May 21, 2021

Re: Initiation of consultation with the Navajo THPO acting as SHPO on Navajo lands pursuant to 36 CFR 800.2(c)(2)(i)(A)

Richard Begay, Navajo THPO
Navajo Nation
P.O. Box 7440
Window Rock, AZ 86515

Dear Richard Begay,

The Federal Aviation Administration (FAA), in cooperation with the National Park Service (NPS) (collectively, the agencies) is developing an Air Tour Management Plan (ATMP) for Canyon de Chelly National Monument. The ATMP will apply to commercial air tours flown at or below 5,000 feet above ground level and within ½ mile of the park boundary. The agencies have determined that development of an ATMP is an “undertaking” subject to Section 106 of the National Historic Preservation Act (NHPA). As the entirety of Canyon de Chelly is located on Navajo tribal lands, we are initiating Section 106 consultation with you - the Navajo Nation Tribal Historic Preservation Officer (THPO) - in lieu of the State Historic Preservation Officer (SHPO) pursuant to 36 CFR 800.2(c)(2)(i)(A) for this undertaking.

Background

In response to a May 1, 2020 court order, the agencies are working to complete ATMPs for 23 parks, including Canyon de Chelly, by August 31, 2022, pursuant to a court-approved plan and schedule.¹ The ATMPs are being developed in accordance with National Parks Air Tour Management Act (NPATMA). NPATMA directs the agencies to either enter into voluntary agreements with air tour operators or to establish ATMPs for national parks where commercial air tour operations are conducted or proposed.

The FAA serves as the lead federal agency with respect to compliance with Section 106 of the NHPA for these undertakings. The FAA will be coordinating its Section 106 compliance with its analysis required under the National Environmental Policy Act (NEPA). Each ATMP will be unique and therefore, each ATMP will be assessed individually under Section 106 and NEPA.

¹ For more information about the court order and proposed plan, see here:
https://www.faa.gov/about/office_org/headquarters_offices/arc/programs/air_tour_management_plan/

We look forward to meaningful consultation on the air tours and their overall effect on historic properties. Because only Navajo lands will be overflowed by aircraft involved in a commercial air tour operation at Canyon de Chelly, we are initiating consultation with you, the Navajo Nation THPO acting as SHPO, in accordance with 36 CFR 800.2(c)(2)(i)(A) and also inviting the Navajo Nation to act as a cooperating agency in the NEPA process pursuant to 40 CFR § 1501.8.

There will be no ground disturbance, construction or demolition associated with this undertaking. Air tours have been operating over Canyon de Chelly for over 20 years. Since 2005, these air tours have been conducted pursuant to interim operating authority (IOA) as provided in NPATMA. The agencies are creating ATMPs to replace IOAs and, to the extent possible, propose to limit the number of annual air tour operations to the average for the years 2017-2019. At this time we anticipate little or no increase in air tour operations.

Information Request

We ask that you provide us with any preliminary information that you believe pertinent to this undertaking. In the near future, we will request your expertise in the development of the Area of Potential Effect and with the identification of properties of traditional religious and cultural significance to the Navajo Nation. In addition or alternatively, if you feel that this action may have significant, unique or substantial direct effects on your tribe or on the relationship or distribution of power between your tribe and the Federal government, we invite you to engage in government-to-government consultation with the FAA pursuant to Executive Order 13175 and FAA Order 1210.20.

We will follow up with you soon. In the meantime, if you would like to receive additional information regarding this undertaking, please contact Cathy Nadals at ATMPTeam@dot.gov or (202) 267-0746.

Sincerely,



Raquel Girvin
Regional Administrator
Western-Pacific Region
Federal Aviation Administration



Lyn Carranza
Park Superintendent
Canyon de Chelly National Monument
National Park Service

CC: President Jonathan Nez



United States Department of the Interior
NATIONAL PARK SERVICE
Natural Resource Stewardship & Science
Natural Sounds and Night Skies Division



United States Department of Transportation
FEDERAL AVIATION ADMINISTRATION
Office of Policy, International Affairs & Environment
Office of Environment and Energy

NATIONAL PARKS AIR TOUR MANAGEMENT PROGRAM

June 09, 2021

Re: Request to participate as a consulting party for the development of an Air Tour Management Plan at Canyon de Chelly National Monument

Kevin Dahl
Arizona Senior Program Manager
National Parks Conservation Association
307 West 200 South
Suite 5000
Salt Lake City, UT 84101

Dear Mr. Dahl:

The Federal Aviation Administration (FAA), in cooperation with the National Park Service (NPS) (collectively, the agencies) is developing an Air Tour Management Plan (ATMP) for Canyon de Chelly National Monument. The ATMP will apply to commercial air tours flown at or below 5,000 feet above ground level and within ½ mile of the park boundary. The agencies have determined that development of this ATMP is an “undertaking” subject to Section 106 of the National Historic Preservation Act (NHPA). This letter is intended to initiate Section 106 consultation with you and solicit any initial comments you may have regarding the proposed undertaking.

In response to a May 1, 2020 court order, the agencies are working to complete ATMPs for 24 national parks by August 31, 2022, pursuant to a court-approved plan and schedule.¹ The ATMPs are being developed in accordance with National Parks Air Tour Management Act (NPATMA). NPATMA directs the agencies to either enter into voluntary agreements with air tour operators or to establish ATMPs for national parks and adjacent tribal lands where commercial air tour operations are conducted or proposed.

The FAA is acting as the lead federal agency with respect to compliance with Section 106 of the NHPA for these undertakings. The FAA will be coordinating its review under Section 106 with its compliance with the National Environmental Policy Act (NEPA). As ATMPs are unique to each park, the agencies consider the development of each ATMP as a stand-alone action or undertaking and will thus comply with Section 106 for each ATMP individually.

¹ For more information about the court order and proposed plan, see here:
https://www.faa.gov/about/office_org/headquarters_offices/arc/programs/air_tour_management_plan/

There will be no ground disturbance, construction or demolition associated with this undertaking. Air tours have been operating over Canyon de Chelly National Monument for over 20 years. Since 2005, these air tours have been conducted pursuant to interim operating authority (IOA) as provided in NPATMA. The agencies are creating ATMPs to replace IOAs.

In accordance with 36 CFR 800.2(c)(5) we are inviting you to participate as a consulting party in the Section 106 process. Please let us know of your interest in participating as a consulting party for this undertaking. If we do not hear from you in the next 30 days, we will assume you do not intend to participate in the Section 106 consultation process as a consulting party. As we move into the next phase of consultation, we will seek your input during development of the Area of Potential Effect and the identification of historic properties.

If you would like to receive additional information regarding this undertaking, please contact Cathy Nadals at ATMPTeam@dot.gov or (202) 267-0746.

Sincerely,



Raquel Girvin
Regional Administrator
Western-Pacific Region
Federal Aviation Administration



Lyn Carranza
Superintendent
Canyon de Chelly National Monument
National Park Service



United States Department of the Interior
NATIONAL PARK SERVICE
Natural Resource Stewardship & Science
Natural Sounds and Night Skies Division



United States Department of Transportation
FEDERAL AVIATION ADMINISTRATION
Office of Policy, International Affairs & Environment
Office of Environment and Energy

NATIONAL PARKS AIR TOUR MANAGEMENT PROGRAM

August 6, 2021

Re: Initiation of consultation under Section 106 of the National Historic Preservation Act for the development of an Air Tour Management Plan at Canyon de Chelly National Monument.

Shanna Pearce, Planning and Zoning Assistant
Apache County (Cities of Chinle and Del Muerto)
75 West Cleveland
St. Johns, AZ 85936

Dear Ms. Pearce,

The Federal Aviation Administration (FAA), in cooperation with the National Park Service (NPS) (collectively, the agencies) is developing an Air Tour Management Plan (ATMP) for Canyon de Chelly National Monument. The ATMP will apply to commercial air tours flown at or below 5,000 feet above ground level and within ½ mile of the park boundary. The agencies have determined that development of this ATMP is an “undertaking” subject to Section 106 of the National Historic Preservation Act (NHPA). This letter is intended to initiate Section 106 consultation and solicit any initial comments you may have on the proposed undertaking.

In response to a May 1, 2020 court order, the agencies are working to complete the ATMPs for 23 national parks, by August 31, 2022, pursuant to a court-approved plan and schedule.¹ The ATMPs are being developed in accordance with National Parks Air Tour Management Act (NPATMA). NPATMA directs the agencies to either enter into voluntary agreements with air tour operators or to establish ATMPs for national parks and adjacent tribal lands where commercial air tour operations are conducted or proposed.

The FAA is acting as the lead federal agency with respect to compliance with Section 106 of the NHPA for these undertakings. The FAA will be coordinating its review under Section 106 with its compliance with the National Environmental Policy Act (NEPA). As ATMPs are unique to each park, the agencies consider the development of each ATMP as a stand-alone action or undertaking and will thus comply with Section 106 for each ATMP individually.

There will be no ground disturbance, construction or demolition associated with this undertaking. Air tours have been operating over Canyon de Chelly National Monument for over 20 years. Since 2005,

¹ For more information about the court order and proposed plan, see here:
https://www.faa.gov/about/office_org/headquarters_offices/arc/programs/air_tour_management_plan/

these air tours have been conducted pursuant to interim operating authority (IOA) as provided in NPATMA. The agencies are creating ATMPs to replace IOAs.

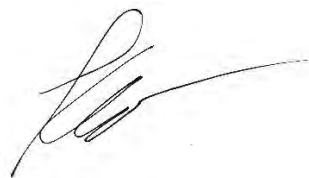
Please let us know within the next 30 days of your interest in participating as a consulting party for this undertaking. We look forward to hearing from you regarding any initial comments you may have. As a consulting party, we will seek your input in the near future regarding the Area of Potential Effect and the identification of historic properties for the undertaking.

Should you wish to receive additional information or clarification regarding any of the above, please contact Cathy Nadals at Catherine.l.nadals@faa.gov, ATMPTeam@dot.gov or (202) 267-0746.

Sincerely,



Raquel Girvin
Regional Administrator
Western-Pacific Region
Federal Aviation Administration



Lyn Carranza
Park Superintendent
Canyon de Chelly National Monument
National Park Service



United States Department of Transportation
FEDERAL AVIATION ADMINISTRATION
Office of Policy, International Affairs & Environment
Office of Environment and Energy

NATIONAL PARKS AIR TOUR MANAGEMENT PROGRAM

June 2, 2023

Re: Continuing Consultation under Section 106 of the National Historic Preservation Act for the development of an Air Tour Management Plan for Canyon de Chelly National Monument

Richard Begay
Tribal Historic Preservation Officer
Navajo Nation
P.O. Box 7440
Window Rock, AZ 86515

Dear Tribal Historic Preservation Officer Richard Begay:

The Federal Aviation Administration (FAA), in coordination with the National Park Service (NPS) (together, the agencies), seeks to continue consultation with your office under Section 106 of the National Historic Preservation Act (NHPA) for the development of an Air Tour Management Plan (ATMP) for Canyon de Chelly National Monument (Park). The FAA initiated consultation with your office by letter dated May 21, 2021.

This letter presents a description of the proposed undertaking in accordance with 36 CFR 800.3(a) and 800.16(y). This letter also describes the proposed Area of Potential Effects (APE) pursuant to 36 CFR 800.4(a)(1). The FAA has completed its initial historic property identification effort within the proposed APE in accordance with 36 CFR 800.4. The FAA specifically requests your comments on our proposed APE and initial historic property identification efforts.

Description of the Undertaking

The undertaking for purposes of Section 106 is implementing an ATMP for the Park. Consistent with the National Parks Air Tour Management Act of 2000 (NPATMA), the proposed ATMP would regulate commercial air tours over the Park or within ½ mile outside the boundary of the Park, including over tribal lands within or abutting the Park. A commercial air tour subject to the ATMP is any flight conducted for compensation or hire in a powered aircraft where a purpose of the flight is sightseeing over the Park, or within ½ mile of its boundary, during which the aircraft flies:

- (1) Below 5,000 feet above ground level (except solely for the purposes of takeoff or landing, or necessary for safe operation of an aircraft as determined under the rules and regulations of the FAA requiring the pilot-in-command to take action to ensure the safe operation of the aircraft); or

- (2) Less than one mile laterally from any geographic feature within the Park (unless more than ½ mile outside the Park boundary).

This area is referred to as the ATMP planning area. Overflights that do not meet the definition of a commercial air tour above are not subject to NPATMA and are thus outside the scope of the ATMP.

The agencies have documented the existing conditions for commercial air tour operations over the Park. One commercial air tour operator currently conducts tours over the Park, Southwest Safaris. The operator currently flies one route west to east over the southern portion of the park, two routes running east to west and back through the center of the Park, and two routes entering and exiting through the north portion of the Park and passing along the center of the Park east to west and back. Until the ATMP is in place the operators could change their operations to fly over other areas of the Park without notice to the agencies. Existing routes are depicted in **Attachment A**.

The agencies consider the existing operations for commercial air tours to be an average of 2017-2019 annual air tours flown, which is 43 air tours. Based on 2017-2019 data, there was only one instance in which flights exceeded 1 per day (2 flights on 3/19/19). A three-year average is used because it reflects the most accurate and reliable air tour conditions, and accounts for variations across multiple years. Under existing conditions, commercial air tours over the Park are conducted using fixed wing aircraft: Cessna 182 and Cessna T207A. Reported minimum altitudes range from 800 to 1,000 feet (ft.) above ground level (AGL) ¹ depending on the route.

The proposed undertaking would prohibit commercial air tour operations within the ATMP planning area. A summary of the undertaking elements is shown in the table below:

SUMMARY OF ATMP ELEMENTS

General Description and Objectives	Prohibits air tours within the ATMP planning area to maximize achievement of Park management objectives. Air tours could continue to fly outside the ATMP planning area (i.e., at or above 5,000 feet AGL or more than ½-mile outside of the Park's boundary).
Annual/Daily Number of Flights	None in ATMP planning area.
Routes	None in ATMP planning area.
Minimum Altitudes	Flights over the Park at or above 5,000 feet AGL could occur as they are outside the ATMP planning area. Flights more than ½-mile outside the Park boundary could similarly still occur as they are also outside the ATMP planning area.
Time of Day	N/A
Day of Week	N/A
Seasonal	N/A
Quiet Technology (QT) Incentives	N/A

¹ Altitude expressed in units above ground level is a measurement of the distance between the ground surface and the aircraft, whereas altitude expressed in median sea level (MSL) refers to the altitude of aircraft above sea level, regardless of the terrain below it. Aircraft flying at a constant MSL altitude would simultaneously fly at varying AGL altitudes, and vice versa, assuming uneven terrain is present below the aircraft.

Annual Meeting, Operator Training and Education	N/A
Restrictions for Particular Events	N/A
Adaptive Management	N/A
Initial Allocation, Aircraft Type, Competitive Bidding, and New Entrants	N/A
Monitoring and Enforcement	Monitoring would occur to ensure operators are complying with the terms and conditions of the ATMP.
Interim Operating Authority²	Terminates 180 days from the establishment date of the ATMP.

Proposed Area of Potential Effects (APE)

The proposed APE for this undertaking (36 CFR 800.4(a)(1)) as defined at 36 CFR 800.16(d) is the geographic area or areas within which the undertaking may directly or indirectly cause alterations in the character or use of any historic properties, if any such properties exist. FAA and NPS approval of the ATMP does not require land acquisition, construction, or ground disturbance, and the FAA anticipates no physical effects to historic properties. The FAA is therefore focusing its assessment on the potential introduction of visual or audible elements that could diminish the integrity of any identified significant historic properties.³

In establishing the proposed APE, the FAA sought to include areas where any historic property present could be affected by noise from or sight of commercial air tours that may take place under the undertaking, including those over the Park or adjacent tribal lands or those that are reasonably foreseeable. The FAA will consider the number and altitude of commercial air tours over historic properties in these areas to further assess the potential for visual effects and any incremental change in noise levels that may result in alteration of the characteristics of historic properties qualifying them for the National Register of Historic Places (National Register).

Since the undertaking will prohibit commercial air tours within the ATMP planning area, it is reasonable that air tours may potentially operate outside of the planning area and may introduce new noise or visual impacts as a result. The FAA is initially proposing an APE comprising the Park plus ½ mile outside the boundary of the Park, as depicted in **Attachment A** below. The FAA requests comments on the proposed APE. The agencies continue to gather information on the relocation of air tours as a result of the undertaking and based upon input received from consulting parties, the APE may be revised.

Preliminary Historic Property Identification

The agencies have undertaken preliminary efforts to identify historic properties within the APE. In so doing, the FAA has taken into consideration past planning, research and studies, the magnitude and

² Commercial air tours over the Park are currently conducted under interim operating authority (IOA) that NPATMA required the FAA to grant air tour operators. Interim operating authority does not provide any operating parameters (routes, altitudes, etc.) for commercial air tours other than an annual limit. Under NPATMA, IOA for a park terminates by operation of law 180 days after an ATMP is established for that park.

³ The term historic property is defined in 54 U.S.C. 300308 and 36 CFR 800.16(l)(1).

nature of the undertaking, the degree of Federal involvement, the nature and extent of potential effects on historic properties and the likely nature of historic properties within the APE in accordance with 36 CFR 800.4(b)(1). As such, the historic property identification effort has focused on properties for which setting and feeling are characteristics contributing to the property's National Register eligibility. The FAA is also considering whether air tours could affect the use of traditional cultural properties (TCPs) associated with cultural practices, customs or beliefs that continue to be held or practiced today.

The agencies have invited 23 other federally recognized tribes to participate in the consultation process for the Park. The agencies recognize that these tribes have a long-standing and deeply rooted association with the landscape that encompasses Canyon de Chelly National Monument, which include numerous sites of religious and cultural significance. The agencies recognize all of the lands within the monument remain on Navajo Nation Tribal Trust Lands.

The FAA, with assistance from NPS Park staff and using "Significant Traditional Cultural Properties of the Navajo People" by Judy Martin, has identified five historic properties within the APE for which feeling and setting are characteristics that make the properties eligible for listing in the National Register. Historic properties with unrestricted locations are shown in the proposed APE map provided in **Attachment A**. All historic properties mentioned above are listed in **Attachment C**.

Review Request

The FAA requests that you provide any comments you may have regarding the proposed APE and initial identification of historic properties. In particular, we would appreciate your views regarding the characteristics of historic properties, and any information you might have that would help us to identify additional properties for which setting or feeling is a significant characteristic. Should you wish to receive additional information regarding this undertaking, please contact Judith Walker at 202-267-4185 or Judith.Walker@faa.gov and copy the ATMP team at ATMPTeam@dot.gov.

Sincerely,



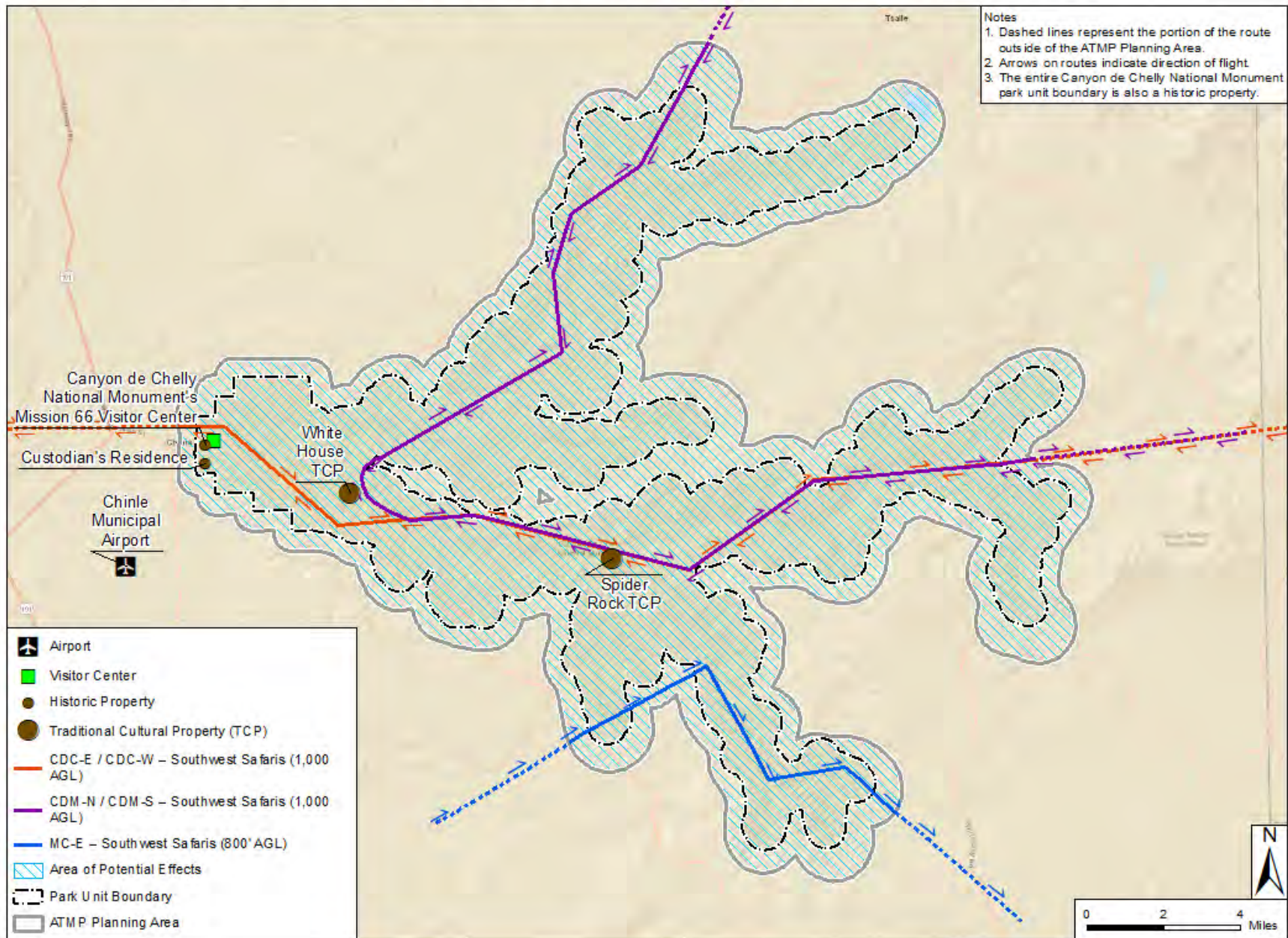
Judith Walker
Federal Preservation Officer
Senior Environmental Policy Analyst
Environmental Policy Division (AEE-400)
Federal Aviation Administration

Attachments

- A. APE Map Including Existing Commercial Air Tour Routes
- B. List of Historic Properties in the APE and Description of Historic Characteristics

ATTACHMENT A
AREA OF POTENTIAL EFFECTS MAP
INCLUDING EXISTING
COMMERCIAL AIR TOUR ROUTES

AREA OF POTENTIAL EFFECTS INCLUDING EXISTING COMMERCIAL AIR TOUR ROUTES



ATTACHMENT B
LIST OF HISTORIC PROPERTIES IN THE APE AND DESCRIPTION OF HISTORIC CHARACTERISTICS

Property Name	Property Type	Eligibility Status	Significant Characteristics
Canyon de Chelly National Monument	District	Nominated	Canyon de Chelly National Monument preserves the remains of aboriginal Anasazi ruins from the basket maker II, ca. A.D. 350 through Pueblo III, ca. A.D. 1300, periods. It contains several large and hundreds of small excellently preserved sites of the prehistoric Anasazi. Many of the sites are cliff dwellings containing large amounts of dry, cultural debris. In addition, 18th, 19th and 20th century A.D. sites of Navajo occupancy remain in the monument. The monument is occupied by Navajo Indians who farm and graze the Canyons today. Canyon de Chelly was the site of Carson's campaign of 1864 which ended the American wars with the Navajo.
White House TCP	TCP	Eligible	White House Ruins in Canyon de Chelly (Kiníí'na'ígai) has an associated ceremonial history. Pre-columbian sites can be sources of spiritual, sacred power to Navajo people. Offerings are made at these sites, and oral histories (of the people, of ceremonies, of clans) refer to these places at times when people were still living there.
Spider Rock TCP	TCP	Eligible	Spider Rock is a significant TCP for the Navajo. The rock is considered the home of Spider Woman, a benevolent figure who is recognized in many traditional Native American oral stories as a guide, protector and healer, teacher, disciplinarian, adviser and/or spiritual leader. Spider Rock is eligible for inclusion in the National Register because of its association with cultural practices or beliefs that are rooted in various Southwestern Native American histories and because it is important in maintaining cultural identity. Spider Rock's natural surroundings, viewshed and noise constraints are vitally important in conveying respect for Spider Woman and her home, in sharing lessons taught by Spider Woman regarding weaving, and in establishing a geographical context for oral histories as well as healing ceremonies.
Custodian's Residence	Building	Eligible	Constructed in 1935-7, the building is an excellent example of Pueblo Revival Architecture. It is a good example of the Southwestern atmosphere of Canyon de Chelly. Although its architectural roots were not Navajo, its design was appropriate for the site in a broader, regional context. Its significance is arguably conveyed through setting and feeling by way of spatial relationships

Property Name	Property Type	Eligibility Status	Significant Characteristics
			with other historic buildings nearby. The building used to be considered contributing to the Thunderbird Lodge historic district (delisted from the National Register). The character of the building's setting and feeling is still conveyed through its association with these other buildings in the Thunderbird Lodge complex.
Canyon de Chelly National Monument's Mission 66 Visitor Center	Building	Eligible	From 1956 to 1966, the Park Service commissioned over one hundred new visitor centers and additions to existing museum buildings. Local contract architects were responsible for some of the designs, but the bulk of the work went to Park Service architects. The Canyon de Chelly National Monument's Mission 66 Visitor Center was constructed in 1964 by Cecil Doty, an architect from Oklahoma trained in the traditional Park Service Rustic style of design. These buildings were designed to harmonize with the surrounding landscape. Some of them, including the Visitor Center, contain viewing terraces overlooking an area of the park. The specific visitor center viewsheds at CACH overlooks the mouth of the canyon from two (east and west-facing) adjoining courtyard terraces. These viewsheds are likely character defining features of the building as it siting at the mouth of the canyon offers interpretive value from the building's courtyard terraces.

*Location is restricted and therefore cannot be shown on the APE map.

SOUTHWEST SAFARIS

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505-988-4246

Ms. Judith Walker
Senior Environmental Policy Analyst
Environmental Policy Division (AEE-400)
Federal Aviation Administration
AMA-200, Building 5, Room 206
PO Box 25082
Oklahoma, OK 73125

June 9, 2023

1st Response to Request for Input re. CACH ATMP
Statement of Disagreement - Submitted by Email

Dear Ms. Walker:

This is my first response to your request for comments on the FAA's draft air tour management plan (ATMP) for Canyon de Chelly National Monument (CACH).

I find your request for comment somewhat confusing. I am not sure what you are asking me to respond to: the general position the FAA has adopted towards air tours over Canyon de Chelly; or the specifics of the ATMP, itself; or a Section 106 draft finding; or the dimensions of the proposed APE. So, I'll start at the top and analyze the entirety of FAA's proposed "undertaking." Please be more specific in the future.

I regret to say that I am shocked over the whole of the FAA's draft ATMP for Canyon de Chelly. The proposal needs to be completely reworked for obvious shortcomings. It is a shame that so much work has produced so little positive results. Clearly, this ATMP is headed for judicial review.

In the first place, the draft is blatantly discriminatory. Unlike Canyon de Chelly, the FAA allows park overflights of Arches, Canyonlands, Natural Bridges, Glen Canyon, and Bryce Canyon, all located in the same Southwest region as CACH. The FAA has even declared the "five favored parks" exempt from environmental assessment under the guise of "categorical exclusion." At least one of these parks allows local air tour operators (ATOs) well over 1,000 flights in total per year under a voluntary agreement. Such precedent notwithstanding, the FAA is now in the process of ruling that all of the handful of flights (only 73 in 2023) Southwest Safaris (SWS) conducts over Canyon de Chelly are unacceptable. Why? What is the difference between the flights? What is the difference between the air tour operators? The FAA's draft ATMP for

CACH does not even provide a hint of justification for banning SWS' flights. Furthermore, it appears that no other version of the FAA's proposal was ever even considered.

What is it about Canyon de Chelly, itself, that makes it so different from all the other parks listed above? The FAA's Office of Environment and Energy never gives an answer. The FAA's undertaking functions as an unprovoked attack on a small air tour business which has done no demonstrated harm. The FAA allows large air tour companies to continue flying their established routes over their respective parks; yet the same kind of flights over the same kind of terrain conducted less frequently are banned for the single-pilot at Canyon de Chelly. The FAA's actions bristle with hostility aimed towards a targeted small business, in blatant defiance of the fair and reasoned treatment prescribed under Section 808 of NPATMA.

I submit that the FAA's draft proposal is openly defiant of the Will of Congress, the intention of which was to reduce the noise level of aircraft over National Parks by reasonable means, not to do so by destroying the air tour industry business by business, one at a time.

Moreover, the FAA has started off with a draft proposal that represents the most extreme form of "remedy" for a "harmful" situation that the FAA cannot even document. The FAA has failed to perform any sound studies whatsoever at CACH to justify the "administrative taking" of operational rights, in open defiance of Section 808 of NPATMA. In its Section 106 nonexistent "finding" to date, the FAA has tried to hide behind NHPA to justify its refusal to perform empirical studies to determine "harm." I allege that the FAA's "undertaking" with respect to the CACH ATMP is clear abuse of administrative process. Determination of need must predate prescription of remedy.

Moving on to ATMP specifics, if you are asking whether I agree with the draft ATMP's exclusion of all air tours over Canyon de Chelly, the answer is obviously, "NO, I do not." Why has the FAA offered no alternative measures of noise mitigation? In a report issued to the United States Court of Appeals for the District of Columbia Circuit, the FAA stated that, "Based on tribal feedback, the agencies have developed alternatives to be considered in an environmental assessment" for CACH. Why were these "alternatives" not presented in the ATMP, or in an accompanying packet, for timely comment? The answer is obvious. There were no alternatives listed in the draft ATMP because no alternative plans are wanted by environmentalists, who now control the FAA. Environmental arguments have been "perfected" since the original issuance of NPATMA. The real issue today is not aircraft noise; but rather the mere presence of aircraft in the airspace over a Park. The FAA is trying to use CACH as a platform upon which to build precedent for banning all air tours over all parks, starting with the smallest operator. However, there is no provision under NPATMA for taking such extremist measures until all other remedies have been tried and failed. Therefore, I submit, the FAA's proposal must be withdrawn because it undermines the purpose and methods of NPATMA. The need for the draconian "remedies" of the draft ATMP has never been demonstrated.

If you are asking whether I agree that the Area of Potential Effect (APE) should include all of Canyon de Chelly, the answer, again, is "No, it should not." There are three areas that should be excluded from the APE. The first is the southern branch of Canyon de Chelly, beginning at Spider Rock and extending southeast, known as Monument Canyon. No persons live in that

portion of the National Monument; the draft proposal lists no historic properties in that area; and no roads access the gorge. Few people ever visit Monument Canyon, as there is no easy access, so overflights obviously have little or no impact on nonexistent persons and property there. The second APE that should be excluded includes the upper reaches of Canyon de Chelly. No one lives there, either; I never see any foot or horseback travel in the upper canyon; and there are no publicly declared sacred landmarks east of Spider Rock up to and encompassing Whiskey/Wheatfields Creeks. The third area of exclusion should be Canyon del Muerto. That canyon has a major highway paralleling it on the north side; harbors numerous noise-centered overlooks for cars, busses, and motorcycles; advertises commercial tour vehicles accessing the canyon all day long; and the draft ATMP lists no historic properties in that canyon. Aircraft noise and visual impact will have no possible adverse effect on this northern portion of the National Monument. Including all three of the itemized locations in the APE will accomplish no beneficial protection for the National Monument, as SWS's occasional overflights are already having no demonstrable adverse impact there, or anywhere else for that matter.

If you are asking whether Southwest Safaris' air tours have ever had, or might have in the future, an adverse impact on the five historic properties you listed in your draft ATMP, the answer, yet again, is also in the negative. SWS's flights will have "No Adverse Effects." The properties have never been affected in any way by SWS' overflights. Southwest Safaris makes a big effort to avoid all of the listed properties. When SWS flies abreast of the properties, our aircraft remain well outside the rim of the canyon in the vicinity of these locations, so neither aircraft noise nor physical presence of aircraft can be considered issues of valid complaint. Moreover, as I have reported above, all of the properties are visited constantly during daylight hours by noisy, 4- and 6-wheel-drive, commercial, ground vehicles carrying tourists, which trucks make many times the noise and have many times the visual impact than that of a small, lone, single-engine plane descending in low power setting 1000 feet above the surrounding landscape.

The sacredness of the historic sites listed by the FAA in its draft ATMP seems to be a relative concept, applying to the sky but not to the ground, applying to one group of businesses but not another. The cliff dwellings in the walls of Canyon de Chelly are truly historic but, with respect to each of SWS's airplanes, the aircraft propeller creates no vibrations nor does its engine create any noise that can be perceived over the roar of the ground tour vehicles. Again and again, I have asked local tour guides if they hear tour aircraft in the vicinity of the canyons, and the answer is always, "No;" but they invariably add, "The sight of a plane would be very pretty silhouetted against a turquoise sky," or something similar and equally receptive to the concept of ATOs overflying the National Monument. The undisputed fact is, no one in Canyon de Chelly has ever had any sound or visual awareness of Southwest Safaris', fixed-wing, aerial presence until the advent of the ATMP staging process of recent weeks. Local tour guides welcome the arrival of Southwest Safaris clients, have no objection to the "invisible" flights over the canyon, and, in fact, want to see SWS' air tours increase, because the flights economically benefit the local Navajo community.

If you intend to ask at a later date whether prohibiting all overflights of CACH will prevent substantial damage to persons and property on the ground, referring to Section 106 of NHPA, then my answer will be, "The FAA's finding of 'no adverse effect' in support of revocation of SWS' operating rights," is both senseless and outside the law." I will demonstrate the logical

absurdity of the FAA's inevitable future finding under NHPA in a forthcoming letter. However, what particularly galls me in the present instance is the fact that the FAA's Office of Environment and Energy has issued a public notice of "intent to act" (by issuing a draft ATMP for CACH) without actually issuing a formal "finding" under Section 106 of NHPA. A "finding" of "no adverse effect" from banning Southwest Safaris' overflights of CACH is never openly stated in the FAA's June 2, 2023 announcement, nor is there any justification in the draft ATMP for the FAA's "undertaking." Under Section 800.5(c), NHPA says:

If the agency official proposes a finding of no adverse effect, the agency official shall notify all consulting parties of the finding and provide them with the documentation specified in 800.11(e). The [consulting parties] shall have 30 days from receipt to review the finding.

Southwest Safaris alleges that the FAA has artfully concealed its implied "finding of no adverse effect" in order to discourage response to a contentious rational, and that the FAA has thereby failed to comply not only with the substantive but also with the procedural requirements of NHPA. This "failure to comply" disqualifies the FAA's "undertaking" from present consideration.

If you are asking Southwest Safaris to disprove its guilt, that is, prove that its overflights do no harm to the natural environment, to persons, or to historic properties, then I will say that you are asking a defendant to disprove a negative. You are, in effect, asserting that, in the eyes of the FAA, an ATO is guilty until proven innocent. That may be the way environmentalists think today, but it is not the way the American system of justice works. The FAA's Office of Environment and Energy knows full well that it is impossible to disprove a negative. The convicting logic of the draft proposal is unconstitutional at its core. Southwest Safaris is innocent until proven guilty by the FAA. The FAA has presented no evidence to substantiate any of its implied environmental accusations. Due process requires that the FAA give specific documentation of complaints of fixed-wing aircraft noise and/or presence (dates, times, type of aircraft, and methods of measurement) so that defense in court is possible for Southwest Safaris. I submit that the FAA can provide no such convicting evidence because, for the last 49 years that Southwest Safaris has been conducting these air tours over Canyon de Chelly, there has never been a single complaint about the way SWS specifically flies. The FAA has no witnesses and therefore no case with which to attack Southwest Safaris. The agency is relying on an artfully-contrived loophole in Section 106 of NHPA to say that it does not need to present any such evidence, that accusations alone, based on "feelings," are sufficient. I will destroy this line of argument in the above-mentioned letter of rebuttal, which will soon enough be forthcoming to your office.

In coming weeks, I will write in greater detail about many of the above objections (in addition to the above-mentioned letter of rebuttal). For now, I will conclude by saying that there is no demonstrated reason to deny Southwest Safaris the right to conduct scenic flights in a more-or-less straight line over Canyon de Chelly. Many of our flights over the canyon are for transportation purposes enroute to the Grand Canyon, Monument Valley, and Lake Powell. Other flights down the canyon are for the purpose of landing at Chinle, AZ. These flights will continue regardless of the ATMP. In any case, the local guides and hotels in Chinle make a lot


of money off Southwest Safaris' air/land adventure tours. During COVID, Southwest Safaris provided essential air service to the Navajo Nation when few others would. Why kill the goose that lays the golden egg? The FAA, NPS, and Navajo Nation have a strange way of saying "thank you."

The purpose of NPATMA was to reduce unnecessary noise in the skies over National Parks, not to eliminate air tour operators altogether. Congress was very specific about this. The FAA and the NPS (the Agencies) have flagrantly overlooked the goal of amelioration in pursuit, it appears, of a dark political objective they could not achieve by other means. The proof is the fact that the Agencies have not even considered doing sound studies in the Park Service Unit, nor have they come up with any alternative plans for reducing alleged noise that they can evidence, nor have the Agencies initiated a process of pre-judicial review to ward off needless lawsuits from an extreme and unwarranted "taking" contrary to the Will of Congress. It is the Agencies' reasoning that "will not fly." I allege that the FAA and NPS are simply fixated on putting one specific air tour operator out of business in pursuit of administrative efficiency. Storm clouds lie on the horizon.

As part of the Agencies' responsibility under NHPA to proactively consult with parties of interest, which is a 2-way process of communication, I request that the FAA, as lead agency, substantively respond in writing, within 30 days, to each of the objections I have raised. Silence will be interpreted to mean that the Agencies concur with my arguments.

Thank you for your consideration.

Sincerely,

A handwritten signature in dark ink that reads "Bruce Adams". The script is cursive and fluid, with the first name "Bruce" and last name "Adams" clearly legible.

Bruce Adams

SOUTHWEST SAFARIS

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Oklahoma, OK 73125

June 12, 2023

CACH ATMP - 2nd Response
Statement of Objection - Submitted by Email

Dear Ms. Walker:

This my second response to your “request for comments” on a draft Air Tour Management Plan (ATMP) for Canyon de Chelly (CACH, or “the Canyon”). The FAA’s proposed ATMP (the undertaking) would disallow all air tours over the Canyon. I object to the content of and instructions included with the form the FAA used to present this radical undertaking. I request that the solicitation for comments on the draft ATMP be withdrawn at this time, until the deficiencies of the invitation to comment can be corrected.

Section 800.3(a) of the National Historic Protection Act (NHPA) talks about the steps that an agency shall take to initiate a Section 106 process. Of primary importance, an agency official must decide “whether [the proposed undertaking] is a type of activity that has the potential to cause effects on historic properties.” The FAA has not yet publicly made any deliberated decision for CACH, nor has it put any related announcement out for public review.

However, the FAA has inserted a section, “Summary of ATMP Elements,” into the initial wording of the ATMP initiative which will be highly prejudicial against air tour operators (ATOs) in the final ATMP ruling. The Summary section implicitly embodies carefully-cloaked “findings” that erroneously assume the above decision was made. By bold announcement, the FAA says that no air tours will be allowed over the Park. Under Section 106 of NHPA, this infers (1) that a “finding” of “no adverse effects” has been made; (2) that the “finding” is in the interest of the public good; and (3) that this “finding” of “no adverse effect” has been preemptively approved. Without this approval, there is no path the FAA could have taken to justify including its Summary mandate in the solicitation for comment. In other words, the stated determination (that the FAA can/will ban all flights over CACH) appears to be empowered by a researched assessment (that the lack of flights over CACH will not have any adverse effect on people and property on the ground).

I argue that neither the assertion nor the assessment is true and that there was no public process used to arrive at either stipulation. In fact, these are the most contentious issues of the entire ATMP process; neither the assertion nor the assessment have been accepted by ATOs. The assumptions are simply unilateral edicts issued by the FAA without any consultation with ATOs whatsoever.

So, the FAA's request for directed comments on the draft ATMP is not actually a request for general review; rather, it is controlled input process which only allows discussion of the lesser issues (EPA and historic sites) but not of the greater determination (ATO rights). The solicitation has the appearance of duplicity. It constitutes an offer to negotiate that was never genuine and which was presented under false pretense of being a good-faith effort to arrive at a reasonable resolution of sound mitigation methods. In fact, the draft ATMP for CACH allows for no compromise at all re. the FAA's determination and represents a failed outreach to ATOs.

Specifically, the draft ATMP proposal "jumps the gun" and arrives at a conclusion (deprivation of ATO rights) without even mentioning any of the premises of the FAA's argument ("findings" supporting need for action). By devious means of art, objections to the proposed ATMP's prime "determination" are artfully and categorically excluded from documentation and discussion.

The FAA's cover letter and draft ATMP ask merely for comments on superficial "findings" having only to do with the Area of Potential Effects and a listing of proposed historic properties. The FAA gives ATOs no opportunity to critique the background assumptions that got the undertaking to this point. I submit that this is not an accidental error of omission.

This breach of due process forces ATOs who wish to reply to the draft ATMP to do mental gymnastics. In order to challenge the FAA's invisible "finding" of "no adverse effect," the ATO has first to attack the Summary determination involving deprivation of rights, which he is not given the opportunity to do. Considered the other way around, air tour operators (ATOs) are implicitly asked to challenge the determination which deprives them of their rights in order to attack an inaccessible finding of "no adverse effect." Either way, what the FAA is asking of ATOs is unfair, because both the direct object of and source justification for their complaint are out of reach. One cannot criticize a conclusion if he is denied access to the premises. The logical dilemma makes it difficult or impossible for ATOs to meaningfully critique the ATMP, to which my first letter of response testifies.

The FAA has taken the primary issue, the hidden ultimatum depriving ATOs of their rights, off the table of discussion. In addition, the FAA never tells the recipient of the solicitation what type of documents will follow, so the reader does not know if he will get another opportunity to analyze the undertaking. The ATO does not know specifically when, how, or where to direct his objections to the ATMP initiative. The result is confusion of issues and obstruction of argument. I believe this was part of the intended outcome of the deliberative process, giving the FAA the upper hand. The FAA's request for "Continuing Consultation under Section 106 of NHPA," as written, effectively makes the exercise of "continuing consultation" impossible, drawing it to a premature close contrary to the intent of NHPA.

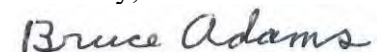
Moreover, including the Summary section in the draft ATMP implies a “finding” that the FAA has no right to make at this point. The imbedded assumption by the FAA of “no adverse effect” by-passes the legislated process for making that finding. Under NHPA, the FAA must first perform at least an environmental assessment before arriving at an environmental conclusion. The FAA has not yet performed due diligence in this regard; thus, there is no factual or circumstantial cause for initiating the FAA’s undertaking in the first place. In short, the FAA has announced a cure for a problem that it has not shown to exist and then the agency has asked those who will be most adversely impacted (ATOs) to concur if they wish to object. The FAA’s concept of due process is flawed from the outset and irreversibly prejudices the public initiative in favor of a predetermined outcome.

I thereby respectfully request that the FAA withdraw its draft ATMP plan for Canyon de Chelly National Monument until such time as the agency can manage to reintroduce the plan in accordance with the Acts (NHPA and NPATMA) under which it was initiated, including sound studies based on reasonable scientific methods. In the meanwhile, to correct the abuse of process, the FAA must: (1) withdraw its current solicitation for comment; (2) issue a corrected invitation to comment; and (3) publicly announce that it has prematurely arrived at a “determination” of operational rights based on a nonexistent “assessment” of consequential effects at the time of original publication of the draft ATMP.

Until I receive a response in writing, I respectfully ask that the 30-day window in which to further respond to the draft ATMP be stayed.

Thank you for your consideration.

Sincerely,

A handwritten signature in dark ink that reads "Bruce Adams". The signature is written in a cursive, slightly slanted style.

Bruce Adams



Air Grand Canyon

P.O. Box 3038
Grand Canyon, AZ 86023

June 15, 2023

Judith Walker
Federal Preservation Officer
Senior Environmental Policy Analyst
Environmental Policy Division (AEE-400)
Federal Aviation Administration

Submitted to: Judith Walker and ATMP Team via email

Re: Continuing Consultation under Section 106 of the National Historic Preservation Act for the development of an Air Tour Management Plan for Canyon de Chelly National Monument

Dear Ms. Walker:

Although Air Grand Canyon has not been consulted yet for the Canyon De Chelly National Monument proposed ATMP, AGC would like to make some comments regarding the proposal to eliminate all air tours over this National Monument.

AGC has only 9 Interim Operating Authority (IOA) overflights that are allotted on an annual basis. During the period of 2017-2019 AGC did not conduct any air tours. In previous years we have had clients that specifically requested to overfly the park departing from Grand Canyon National Park Airport or Page Airport. Markets trend differently over time between various National Parks and Monuments, and it is only a matter of time before we will be requested to have an air tour experience over this Monument. Passengers who have disabilities are also afforded the opportunity to view these amazing sites by air when often they are unable to have a scenic view from the ground.

The process leading to the development of an ATMP at National Parks has been deeply flawed and does not properly consider the air tour operators nor the general public. This proposal denies existing and future opportunities to experience this National Monument from the air. Our request is that the number of overflights allowed remain the same or even increase, not a decrease that effectively eliminates the opportunity for Canyon de Chelly visitors to experience the park from the air.

We request the existing overflight altitude remain at 1,000' AGL. Flying over this Monument at an altitude of over 5,000' AGL greatly diminishes the experience of a scenic air tour over Canyon de Chelly and makes the scenic points of view no longer visible and valuable to the experience.



Air Grand Canyon

P.O. Box 3038
Grand Canyon, AZ 86023

There has not been a study conducted about how AGC's 9 maximum overflights annually could negatively affect any of the resources. If there has been, it has not been published for operators to mitigate any effects and the public to review.

If demand picks up as customers and market trends shift AGC does not desire to be treated as a "new entrant" to apply for air tour allocations since it already has 9 allowed overflights.

Thank you for your consideration as an ATMP Team in allowing AGC and the public's ability to keep its existing overflights which cause zero known negative effects to the Monument and its resources.

Sincerely,

Jake Tomlin
General Manager
Air Grand Canyon



June 15, 2023

Judith Walker
Federal Preservation Officer
Senior Environmental Policy Analyst
Environmental Policy Division (AEE-400)
Federal Aviation Administration

Submitted to: Judith Walker and ATMP Team via email

Re: Continuing Consultation under Section 106 of the National Historic Preservation Act for the development of an Air Tour Management Plan for Canyon de Chelly National Monument

Dear Ms. Walker:

This letter is in response to the notification I received on June 2nd about the intent of the ATMP Team to eliminate all air tours from the Canyon de Chelly National Monument. Our company opposes eliminating 100% of the air tours at this National Monument.

Grand Canyon Airlines has been conducting aerial sightseeing flights since 1927 to millions of visitors to the National Parks and Monuments. Over the nearly 100 years of service to National Park visitors, we have experienced many ups and downs, but one thing remains constant, visitors to the National Parks demand to experience the Parks in a way that cannot be duplicated. Grand Canyon Airlines passengers are multi-generational because experiencing the National Parks from the air leaves a lasting impression that people cherish for their entire lives. The desire to experience the National Parks from the air is undeniable.

The process leading to the development of an ATMP at National Parks has been deeply flawed and does not properly consider the air tour operators nor the general public. This proposal denies existing and future opportunities to experience this National Monument from the air. Our request is that the number of overflights allowed remain the same or even increase, not a decrease that effectively eliminates the opportunity for Canyon de Chelly visitors to experience the park from the air.

GCA has only 5 Interim Operating Authority (IOA) overflights that are allotted on an annual basis. During the period of 2017-2019 GCA did not conduct any of these flights because our customers did not make any of these requests during that timeframe. In previous years we have had clients that specifically requested to overfly the park departing from Grand Canyon National Park Airport or Page Airport. Markets trend differently over time between various National Parks and Monuments, and it is only a matter of time before we will be requested to have an air tour experience over this Monument. Passengers who have disabilities are also



afforded the opportunity to view these amazing sites by air when often they are unable to have a scenic view from the ground.

We request the existing overflight altitude remain at 1,000' AGL. Flying over this Monument at an altitude of over 5,000' AGL greatly diminishes the experience of a scenic air tour over Canyon de Chelly and makes the scenic points of view no longer visible and valuable to the experience.

There has not been a study conducted about how GCA's 5 maximum overflights annually could negatively affect any of the resources. If there has been, it has not been published for operators to mitigate any effects and the public to review.

Was there any consideration given to allowing operators with quiet technology to keep their overflights or increase them? GCA is 100% outfitted with quiet technology.

If demand picks up as customers and market trends shift GCA does not desire to be treated as a "new entrant" to apply for air tour allocations since it already has 5 allowed overflights.

Thank you for your consideration as an ATMP Team in allowing GCA and the public's ability to keep its existing overflights which cause zero known negative effects to the Monument and its resources.

Sincerely,

A handwritten signature in black ink, appearing to read "Jake Tomlin", with a stylized flourish extending to the right.

Jake Tomlin
President
Grand Canyon Scenic Airlines

SOUTHWEST SAFARIS

PO Box 945
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505-988-4246

Ms. Judith Walker
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Federal Aviation Administration
AMA-200, Building 5, Room 206
PO Box 25082
Oklahoma, OK 73125

June 30, 2023

CACH ATMP – 3rd Response
Statement of Objection - Submitted by Email

Dear Ms. Walker:

This my third response to your “request for comments” on a draft Air Tour Management Plan (ATMP) for Canyon de Chelly (CACH, or “the Park”). The FAA’s proposed ATMP (the undertaking) would prohibit all air tours from operating over the Park. Southwest Safaris is the only air tour operator that currently flies over Canyon de Chelly, only doing so occasionally.

I am writing to bring attention to the fact the FAA has not complied with Section 808 of the National Parks Air Tour Management Act (NPATMA, or the Act). Apparently, the agency has no intention of doing so. Section 808 requires the FAA, in essence, to conduct sound studies in all units of the National Park Service where it intends to impose ATMPs. In my opinion, the FAA’s failure to comply with Section 808 constitutes the biggest single barrier to implementation of the Act and the creation of an acceptable Air Tour Management Plan (ATMP) for CACH and most other units of the National Park Service (UNPS). The FAA’s seemingly callous disregard for Congressional law is already spawning innumerable legal problems of significant import, upon which I will elaborate. Formal legal challenges to ATMPs will surely rise. All of this is totally unnecessary. However, Southwest Safaris has protested so long and so loudly about the FAA’s breach of duty to comply that it is impossible to assume that the alleged disregard for law was a simple “oversight.”

The complaint at hand is the FAA’s stubborn resistance to acknowledge the authority of Section 808 of NPATMA. This spawned the FAA’s determination not to perform sound studies relating to aircraft noise at Canyon de Chelly and all other units of the National Park Service (NPS). By refusing to conduct sound studies that could be used to determine the legitimacy of aircraft noise complaints in all units of the NPS, I contend, the FAA is knowingly and deliberately abusing the law, violating the Will of Congress, denying Southwest Safaris and all other air tour operators due process, and engaging in misuse of administrative discretion. The FAA has turned what

could have been a simple objective determination of aircraft noise into a nightmarish subjective assessment fraught with political complications that will only get worse with time.

I believe, and will demonstrate, that the FAA is committing gross violations of process as the agency creates Air Tour Management Plans for CACH and most other Park Service Units. First, an error of misapplication of law is everywhere apparent. The principle of primacy of law is being ignored and the principle of regulatory acquiescence to statutes is being discarded. Second, the FAA is disregarding specific instructions by Congress that the FAA not arbitrarily and capriciously dismantle the air tour industry. The facts show that the FAA is obsessed with methodically deconstructing scenic flying operations over all units of the National Parks Service, leading to systemic disablement of a significant sector of commercial air carriers without proven cause. The damage will be irreparable, so it must be stopped immediately. Third, by not allowing sound studies to be presented into evidence, the FAA has obstructed administrative justice and deprived air tour operators (ATOs) of judicial due process. Fourth, by trying to hide behind regulations instead of recognizing the sovereignty of law, and by turning a blind eye to the carnage the FAA has created amongst commercial air carriers, the FAA has exercised abuse of administrative discretion, unjustly causing ATOs many millions of dollars in damages. Congress needs to intervene, if the FAA will not take prompt corrective action, itself.

I will substantiate each one of these allegations, stating at the outset that the issues go way beyond the walls of Canyon de Chelly. Other arguments, which might at first appear to be foreign to the Park, will be shown to have direct relevance to the CACH ATMP. On the other hand, each of the principles I enumerate for CACH has immediate and consequential application to ATMPs across the country.

In my past letters, I have accused the FAA (the agency) of knowingly abusing both the National Parks Air Tour Management Act and the National Historic Preservation Act (NHPA) to get around the FAA's duty to perform aircraft sound studies at National Parks and Monuments. Specifically, in my letter to you of June 6, 2023 (re. Bandelier National Monument), I objected that the FAA is trying to use Sec. 106 of NHPA to accomplish an end-run around NPATMA's Section 808 for all units of the National Park Service. The FAA, I alleged, has incorrectly decided that NHPA controls the actual creation of Air Tour Management Plans, not NPATMA. This, despite the fact that Congress wrote NPATMA as agency-directed legislation.

I have argued in great detail that NPATMA is the controlling legal authority for all matters relating to ATMPs, and that the sound studies required by Section 808 of the Act take priority over any regulatory actions and determinations stipulated by NHPA and drafted by the Council on Environmental Quality (CEQ). I gave testimony in my letter of June 6 (re. BAND) that the agency is wrongly insisting that no sound studies are required to get a determination of "adverse effects" emanating from aircraft noise and aircraft presence. Using procedures of investigation and determination stipulated under NHPA, the agency, I asserted, erroneously contends that mere testimonies relating to "feelings" are enough to secure a finding that air tours are having a "significant adverse impact" on persons and historic properties in all units of the National Park Service.

To the contrary, I argue, Section 808 of NPATMA demands the application of “reasonable scientific methods” to all examinations of theoretical aircraft noise, “if, in fact, any excessive noise even exists” (interpreted Congressional wording). ATMPs not based on reasonable scientific inquiry into actual sound effects at each respective unit of the NPS violate the intent and legitimacy of the enabling Act. NPATMA grants no exception for National Parks that have received the status of “categorical exemption” (or, CATEX). CATEX is a regulatory creation, not a statutory reality, and it only applies to exemption from performing an Environmental Assessment (EA) or an Environmental Impact Statement (EIS). Neither EAs nor EISs actually require sound studies, though an EIS comes close. So, granting a Park CATEX status does not relieve the FAA from responsibility to perform due diligence regarding sound studies.

Therefore, one must ask whether any ATMPs to date have power of law. It is not clear that ATOs are compelled by an unactualized Act to obey ATMPs, at this point in time. The Act, I maintain, only becomes authoritative for ATOs, and ATMPs only have legal effect, after the FAA complies with Section 808, thus fulfilling Congressional directive and completing the activation of Statute.

Legal interpretation follows process, for better or worse. Being sensitive to its delicate legal position, the FAA has become noticeably hostile to “pushback” from the air tour industry. Deliberately misinterpreting NHPA, the FAA has developed a prosecutorial mindset towards ATOs, based on the unproven accusation, in a worst-case scenario, that ATOs are profiting from “environmental injustice,” i.e., deriving “unconscionable” revenue from ruining the peace and privacy of a National Park experience while providing no commensurate benefit to the public. I have alleged that the FAA is treating air tour operators as being guilty until proven innocent. I argue that this attitude is unconstitutional, because it is impossible to disprove a negative premise and because the assumption of guilt denies ATOs administrative and judicial due process by obstructing the evidentiary process. The problems the FAA is creating for itself just get worse and worse. This is particularly true of the ATMP for CACH (and BAND), where the FAA intends to ban air tours entirely.

No body of evidence would ever be sufficient to prove that hypothetical adverse effects will not be produced by aircraft noise that has never been measured at CACH. However, one can demonstrate, by use of “reasonable scientific methods,” that no adverse effects actually emanate from activities that an ATO is provably performing. By denying any reference to sound studies ... because the FAA will not produce any analysis of aircraft noise ... I allege that the FAA has deliberately deprived ATOs in general, and Southwest Safaris in specific at CACH (and BAND), of two essential judicial opportunities: (1) the ability to disprove a negative assumption (e.g., asking Southwest Safaris to prove that it is not continuing to engage in commercial abuse of the environment); and (2) the ability to provide a positive defense (e.g., asking SWS to prove that its sound emissions do not exceed a reasonable level). NPATMA states that an ATOs has the right to submit an ATMP to the courts for judicial review, but the FAA makes it impossible for Southwest Safaris to argue before a judge for lack of objective sound measurements conducted by the government (so that the studies have authority). The FAA has thus deprived Southwest Safaris, in the case of the CACH ATMP (also BAND), of administrative and judicial rights, by denying all ATOs any power of argument based on reality in the field (i.e., sound

measurements). The FAA's environmental "determinations" are, therefore, a fraud on the public as well as the courts.

I believe that the FAA and the NPS know full well that they are obligated by reason and by NPATMA to conduct sound studies at CACH (and all other units of the NPS) before the agencies arrive at any findings, or issue any determinations, regarding ATMPs. Neither agency, however, wants to invest the time, money, or effort to perform studies based on "reasonable scientific methods." The proof is the fact that for twenty years after the passage of NPATMA no progress was made to implement ATMPs, because of a contrived impasse between the FAA and NPS over sound studies. In the meanwhile, unable to face actual law as written in NPATMA, the two agencies conveniently invented the supposed logic that no sound studies are necessarily required under NHPA. In this manner, the FAA, serving as the lead agency, has not only altered the priority of law (putting NHPA above NPAMA), but reversed the effect of law, itself (denying a defendant the right of self-defense by withholding scientific evidence otherwise required by statute). The FAA has knowingly made it nearly impossible for Southwest Safaris at CACH (also BAND) in particular, and ATOs in general, to protect their right to fly over units of the National Park Service, because ATOs cannot mount a specific defense against "general environmental crimes" they are not committing. The agencies have created an unamerican system of justice where, under NHPA, accusations, themselves, are presented as convicting evidence.

The FAA's stubborn insistence on NHPA being the controlling legal ATMP authority for all units of the NPS, including CACH, had another darker purpose, however. The implementation impasse referenced above was manipulated, I allege, being allowed to become so serious that the US Court of Appeals for the District of Columbia Circuit, Washington, DC was forced to rule "against" the FAA and NPS combined, mandating the agencies to implement ATMPs immediately, regardless of administrative difficulties but ensuing violations of due process. This ploy was artfully used by the FAA and NPS to get the proverbial monkey off the agencies' backs. The Court was thus used by the agencies to "force" them to do what they had in mind all along.

Whether or not the FAA agrees with my accusation, the unintended consequence of the Court's decision has been to make a difficult situation even worse. The irony is that the Court has compelled the agencies to do what the agencies, by themselves, wanted but dared not pursue. The Court has, in essence, required the agencies to deny ATOs due evidentiary process (by not allowing time for production of sound studies) in order to rectify a failure to act in a timely manner on ATMPs from the outset. The court's cure is worse than the original disease. The end is worse than the beginning. Either way, however, with or without the Court's decision, the agencies would win and ATOs lose. If the court did not rule, the agencies would never have acted. If the courts did rule, then the agencies could act with impunity. The agencies would get their way, regardless.

The FAA has allowed the court to unwittingly turn an administrative impasse into a judicial roadblock, because of legal challenges yet unresolved. In the meantime, ATOs cannot make any plans for the future and perish in a three-way crossfire between the FAA, NPS, and the Court. These issues are still far from settled.

Not so in the minds of the FAA, however. By prematurely finalizing ATMPs, i.e., washing its hands of the whole affair, the FAA is forcing ATOs all over the country to overwhelm the courts . . . to the advantage of the FAA. This time, the FAA has artfully connived to move the monkey away from the court (making the court the agencies' friend), onto the backs of ATOs, forcing ATOs to go to court themselves for legal remedy of administrative abuse. By so doing, the FAA, has conveniently solved "the ATO problem" by callously finalizing ATMPs at no immediate cost to the agencies, while ignoring the cost to the Constitution. But I get ahead of myself.

I argue that the FAA is trying to use the National Environmental Policy Act (NEPA) to circumvent the statutory requirements for sound studies found in NPATMA. The FAA has turned to the little used and all-but-forgotten administrative "creation" of "categorical exemption" for certain favored National Parks in Utah to exclude said major Parks from the need for environmental assessment (including EIS) and, therefore, sound studies. This has been stealthily done under Title 40, Chapter V, Subchapter A, Parts 1500.4(a); 1500.5(a) and 1501.4. (The FAA has codified its own interpretation of NEPA's Council on Environmental Quality (CEQ) in FAA Order 1050.1F, Chapters 3-6.) The problem is, none of the incorporated citations, both those of the EPA and FAA, are relevant, because in the present instance the FAA is engaging in reconstruction of law. The FAA is picking and choosing which laws it will conform to, while discarding the rest, without regard to the purpose and intended effects of Congressional Act (as opposed to administrative policy). Section 808 still stands, because the emphatic Congressional "shall" clause of NPATMA preempts discretionary EPA interpretative regulations re. Section 102 of NEPA, and because NEPA drives the application of NHPA.

Nonetheless, the FAA is undeterred. Having artfully established "creative precedent" for blatantly ignoring and/or breaking the requirement for sound studies mandated under Section 808 of NPATMA, the FAA is now cleverly "reasoning" that sound studies are also not required if all air tours are banned from parks that are not "categorically exempted." The "reasoning" is that if no air tours are allowed, then sound studies are irrelevant and, thus, expendable for the sake of "simplification of process," to use a NEPA term. The FAA is trying to hide behind the EPA's CEQ regulations, which rules control the FAA's implementation of NEPA. But the FAA's efforts are to no avail. Statute takes command over regulations. I therefore disagree with both the FAA and with the EPA. So also does NPATMA, NHPA, NEPA and, surprisingly enough, even the FAA's AEE, in that order. Not only are sound studies required before ATMPs can be drafted, but ATOs must also be allowed to co-exist with National Parks and Monuments . . . which is contrary to the FAA's pending decision at CACH (and BAND).

NPATMA disagrees with the FAA's methods of ATMP enactment. According to NPATMA, Section 808:

Any methodology adopted by a Federal agency to assess air tour noise in any unit of the national park system (including the Grand Canyon and Alaska) *shall* be based on reasonable scientific methods. [Emphasis added.]

In brief, I argue that the Act grants no exceptions to the application of due process. Section 808 was designed to protect the rights of air tour operators (ATOs). There is no provision provided

in NPATMA for “agency discretion” or “prioritization of needs, values, and efficiencies” for any specific unit of the National Park Service to justify avoiding sound studies. The Section 808 stipulation is stated as an imperative, incorporating the word “*shall*.” The EPA’s Section 1500 and 1501 simplification loopholes are inapplicable. Again, law controls regulation, not the other way around.

Moreover, under NPATMA rules, sound studies have to be conducted and allowable thresholds have to be agreed upon before any ATMPs can be drafted. Otherwise, “the cart is put before the horse,” meaning that a conclusion regarding the requirement for any particular ATMP will be reached before the research is conducted to determine the respective necessity for flight restrictions in the first place. Thus, the outcomes of the “studies” will be predetermined, in violation of the intent of Section 808. By the FAA’s engaging in such orchestrated activity, I allege, the agency has completely corrupted the intent of NPATMA for the FAA’s own purposes.

NHPA also strenuously disagrees with the FAA’s methods for implementing ATMPs. The very outset of the Statute’s Section 801 declares that NPATMA is the controlling legal authority, a major point that the FAA has also “missed.” In support of this argument, I quote from the language of NHPA, itself (see 36 CFR Part 800, Subpart A, 801.2(a)(4)):

The agency official shall involve the consulting parties described in paragraph (c) of this section in findings and determinations made during the Section 106 process. The agency official should plan consultations appropriate to the scale of the undertaking and the scope of Federal involvement *and coordinate with other requirements of other statutes as applicable, such as . . . agency-specific legislation.* [Emphasis added.]

NPATMA is agency-specific legislation. NHPA officials are required to “coordinate” with “agency specific legislation,” not the other way around. That makes NPATMA primary statutory law.

I argue that NPATMA controls the rule-making process that creates ATMPs, because: (1) it calls the decision-making process into existence; (2) because NPATMA never cedes specific authority to NHPA or NEPA; and (3) because NPATMA is the most current statute, so its mandates have the most import and relevance. Section 808 of NPATMA, as written, is an iron mandate that must be followed in the case of all ATMPs, the FAA’s interpretation of NHPA and NEPA notwithstanding. No administrative discretion . . . such as a ruling that “purpose and need” for a park take priority over congressionally-directed due process . . . is allowed under NPATMA. Section 808 must be complied with by “operation of law,” to use a phrase from NHPA.

The sound studies required of NPATMA’s Section 808 are not just a means of achieving technically defensible environmental remedies. The studies are mandated in order to give ATOs some small measure of fairness in determining the means, measures, and mandates of ATMPs. Without sound studies, ATOs are deprived of any way to defend their right of operation and to ensure a fair and equitable outcome from the ATMP process. The sound studies are required to ensure that the Will of Congress (to allow ATOs to prove that they do no harm, as Congress suspects is the case) is safeguarded. So, by denying the necessity for sound studies, the FAA has

not only distorted the facts relating to ATMPs, but also denied ATOs due process. Sound studies play a multiple roll in the creation of ATMPs and are part of the essential fabric of NPATMA. Sound studies and ATMPs cannot be separated.

NEPA, too, is adamant in its disagreement with the FAA's implementation of ATMPs. The FAA employs counter-logical use of Sec. 106 of NHPA and 101 of NEPA to ban air tours over Canyon de Chelly, or over any other unit of the National Park Service. In order to arrive at the decision to disregard NPATMA, the FAA first turns to the National Environmental Policy Act. The FAA argues, incorrectly, that the dictates to "preserve important historic, cultural, and natural aspects of our national heritage" (NEPA 101(b)(4)) together justify excluding all overflights of Canyon de Chelly National Monument. Then, using extremist interpretation of NHPA (namely exaggerated claims of environmental injustice, social impact, and historic-property rights violations) the FAA contends that all that is further necessary to ban Park overflights is untested testimony, allegation, conjecture, supposition, hearsay, innuendo, opinion, speculation, and feelings of abuse. In other words, the FAA uses NPATMA to activate NEPA, then NEPA to activate NHPA, and then uses NHPA to negate (exempt itself from) NPATMA. The FAA contrives its grand "criteria of adverse effect" (36 CFR, Part 800.5(a)(1), (2)(v)) to "prove" its finding of harmful impacts without ever having to perform sound studies. In fact, the FAA has "proven" nothing at all. The FAA's strategic tactic is affective only to "confuse the issue" in order to get away with legal slight-of-hand. The FAA adds insult to abuse by then claiming that under NEPA all the FAA is required to perform is a brief Environmental Assessment including a cursory summery of its findings. In brief, the FAA uses NPATMA to justify not performing sound studies required by NPATMA, using NHPA as its authority. The legal shenanigans, once exposed, are quickly found to be contrary to the overriding purpose of NEPA, the basis for all environmental statutes.

The real NEPA now screams to be heard. To quote from the grandfather of all environmental law (modifying language extracted), NEPA Title 1, Sec. 101(a) says:

The Congress, recognizing...new and expanding technological advances, declares that it is the continuing policy of the Federal Government...to use all practicable means and measures, including technical assistance, ...to create and maintain conditions under which man and nature can exist in productive harmony.

I term this "the prime directive" of NEPA. It was precisely the approach to "environmental remedy" used by Congress to draft NPATMA. After numerous public hearings and internal investigations, Congress found no demonstrated reason to exempt ATOs from flying over National Parks and Monuments. Recognizing the politics of the times, Congress simply stated that it wished to identify and ameliorate excess aircraft noise, "if any," (Congressional wording) from said parks. Congress did not desire to arbitrarily put air tour operators out of business (see Congressman Duncan below), but wished, as stated in NEPA and which policy was in effect at the time NPATMA was drafted, "to create and maintain conditions under which man and nature can exist *in productive harmony*" [emphasis added]. This concept has specific application to air tours and "environmental, land-based protectorates" (meaning, units of the National Park Service).

By setting aside this prime directive in its implementation of the CACH ATMP (and also that of BAND), I maintain that the FAA has flagrantly ignored the Will of Congress by first refusing to afford Southwest Safaris statutory due process through sound studies; and then by taking harsh, unjustified measures to adversely affect the operations of that ATO and thereby insure the carrier's demise.

The concept of allowing air tours to operate over units of the National Park Service is buttressed over and over by NEPA. In Title 1, Sec. 101(b)(3), the Statute says that Congress wishes to "attain the widest range of beneficial uses of the environment...without degradation...or other undesirable and unintended consequences." This is the whole purpose of NPATMA and Congressional insistence on conducting sound studies, i.e., to first measure adverse effects, "if any," and then determine that a cure, "if any," (again, Congressional wording) is even necessary, in that order.

Going on, in Title 1, Sec. 101(b)(4), NEPA says that it is the Intent of Congress to "preserve...and maintain, wherever possible, an environment which supports diversity and variety of individual choice." This, once more, speaks to the inclusion of air tours as a viable and eco-sensitive way to view units of the National Park Service.

The concept of allowing air tours over Parks is yet again clarified in NEPA's Paragraph 5 of subsection 101(b), in which Congress states that it wishes to "permit high standards of living and a wide sharing of life's amenities." The FAA's regulations ensure the highest standards of aviation safety and the existence of air tours guarantees a wide sharing of life's enjoyments with long-lasting, positive, environmental effects that outweigh fleeting undocumented impacts.

Moreover, Congress goes on to say in Sec. 102(2)(A and B, combined) that "all agencies of the Federal Government shall utilize a systematic, interdisciplinary approach...in planning...and decision-making along with economic and technical considerations." This "approach" specifically points to Section 808 of NPATMA, requiring sound studies based on "reasonable scientific methods" (referred to by NEPA as the employment of "technical considerations").

NEPA, contrary to the radical determinations of the FAA Office of Environment and Energy, is adamantly in favor of preserving the rights of air tour operators, which is the position of Congress, the FAA and NPS notwithstanding. NEPA is in favor of using science to determine the extent of any alleged but unproven complaints of aircraft noise, and of using a "systematic, interdisciplinary approach" to problem solving, not relying solely on radical findings of two heavily biased agencies (FAA and NPS). NEPA is in favor of conducting detailed economic analysis on the totality of impact of agency undertakings, not just on the most immediate and narrow interpretation of "impact." NEPA wants to encourage technological innovation applied in such a manner as to encourage human interaction with nature, as long as the two (nature and man) can coexist in a "harmonious manner," respectful of the rights of ALL. In other words, NEPA trumpets the rights of ATOs and welcomes their contribution to society, with the provision that the safeguards in NHPA can be insured by application of sound studies required by NPATMA. NEPA stands shoulder to shoulder with air tour operators and with Congress to protest the FAA's self-serving logic to shut down the air tour industry in general, but Southwest Safari in specific at CACH (and BAND).

The FAA is attempting to outright deny Southwest Safaris permission to fly over Canyon de Chelly and Bandelier National Monuments. Soon, other units of the National Park Service will be added to the list. The agency is inexorably moving to deprive Southwest Safaris of fair administrative decision without regards to the intent of NPATMA, NEPA, and NHPA, combined. The FAA, I argue, has demonstrated, specifically in its ATMP initiatives for Canyon de Chelly (and Bandelier National Monument), complete disregard for facts, science, law, and due process.

Furthermore, with regards to Southwest Safaris and CACH (also BAND), the language of NEPA, as quoted above, requires the FAA to engage in serious and comprehensive economic studies of intended and unintended adverse financial impact on the entirety of governmental “undertakings.” A finding of “no adverse effects” must include studies that go way beyond a simplistic determination that denial of all operating rights cannot possibly significantly affect a greater society than those immediately below a certain flightpath. Alas, with regards to the CACH (also BAND) solicitation(s) for comment on economic impact, the agency has again failed to comply with NPATMA, NHPA, and NEPA. and even to heed explicit forward-looking statements by important members of Congress at the time the Act was drafted.

The intent of Congress to encourage air tour operations over National Parks and Monuments is everywhere evident both in NEPA and in Congressional hearings, reinforcing my interpretation of NEPA. In fact, there is an abundance of authoritative Congressional testimony in support of air tours conducted over National Parks and Monuments. On November 17, 1997, in Dixie College, St. George, Utah, the House of Representatives, Subcommittee on National Parks and Public Lands (Committee on Resources joint with the Subcommittee on Aviation, Committee on Transportation and Infrastructure) held a public meeting to discuss the pending regulation of air tours over units of the National Park Service. Congressman John Duncan went on record with a prepared statement, which summed up most of the Congressional testimonies that day. His prepared statement is particularly relevant because, at the time, Rep. Duncan headed the House - Transportation and Infrastructure Committee. On 2/11/1999, Rep. Duncan introduced *H.R. 717 - National Parks Air Tour Management Act of 1999* to the 106th Congress (1999-2000). That bill became the final *National Parks Air Tour Management Act of 2000*.

STATEMENT OF HON. JOHN J. DUNCAN, JR., A REPRESENTATIVE IN CONGRESS
FROM THE STATE OF TENNESSEE

Chairman Hansen, Congressman Ensign, it is a pleasure to be here today in this wonderful community and in the State of Utah.

I am fortunate to have the opportunity to serve both on the Parks Subcommittee and as Chair of the Aviation Subcommittee in the Congress, which enables me to have a unique perspective on all sides of this issue.

Let me make clear at the outset that I strongly support the goal of protecting our National Parks from unnecessary aircraft noise.

There are many legitimate methods for management of aircraft over Parks which will achieve the appropriate balance between aircraft use and protection of the visitor experience, including but not limited to: limitation on time, place and

number of aircraft, quiet aircraft technology and management of visitor use patterns.

These management actions are not dissimilar to actions taken to address other resource use allocation issues or management of other uses of park areas.

I also believe that sightseeing by aircraft is a legitimate manner in which to experience the Grand Canyon National Park and other Park areas.

. With the efforts put forth by the Aviation Working Group, which consists of Federal, private, environmental, and other organizations, ***I believe that we can develop a [viable] solution which will permit continuation of aircraft overflights*** while enhancing opportunities for Park visitors to experience natural quiet.

If we work together to develop consensus on a reasonable and common-sense approach, then I think we will be very successful on this and many other issues.

Mr. Chairman, I look forward to hearing from the expert witnesses we have before us today. [Emphasis added]

The Will of Congress at the time of the Act could not have been clearer. The warning was that we can either “work together” constructively to allow air tours over units of the National Park Service (note, CACH and BAND), or pull apart with unfortunate public consequence.

Therefore, I respectfully petition the FAA’s Office of Environment and Energy to halt any further promulgation of the CACH and BAND ATMPs, as well as all other ATMPs, until the courts can rule on: (1) the issue of primacy of law; (2) the power of agency regulation to override Congressional law (e.g., by means of “categorical exemptions”); (3) the FAA’s failure to heed Section 808 of the NPATMA; and (4) the FAA’s failure to conduct comprehensive economic analysis of its “undertakings.” In previous letters, I have petitioned using the same force of argument for the same determinations of law and facts. I further petition the FAA, in keeping with the Will of Congress, to rescind its two draft-ATMPs for CACH and BAND which would disallow all air tour operations over said parks.

Humorously, even the FAA seems to agree that NPATMA is the controlling legal authority when it comes to the creation and management of ATMPs. Many an ATO has argued, unsuccessfully, that ATMPs unjustly put all the “blame” of alleged excessive aircraft noise on the backs of commercial air tour operators. In parks such as CACH and BAND, a single ATO only very occasionally flies over the Park Service Units. To be fair, an extremist might contend, all general aviation flights should be banned from such overflights, not only to actually reduce the totality of noise over Parks and Monuments, but also to achieve consistency in the FAA’s regulations. The FAA rightly is quick to point out, however, that NPATMA only applies to air tours, and thus the agency has no authority to ban all flights over National Parks. In self-serving fashion, the FAA does not see that the same authority of NPATMA mandates sound studies before respective ATMPs can be implemented. If the FAA does not want to pursue shutting down all flights over all National Parks, the FAA must agree that the authority of NPATMA is universal.

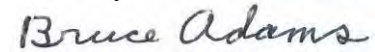
In closing, I allege that the above abuses of law and due process have not occurred by accident. It is impossible to conclude that two giant agencies, the FAA and the NPS, have both innocently overlooked all three major Acts of Congress. I allege that there is a conspiracy afoot to dismantle the air tour industry, contrary to the Will of Congress. The modus operandi, as I alluded to before, is the US Court of Appeals for the District of Columbia Circuit, Washington, DC. The Court has given the agencies only two years in which to bring all units of the National Park Service into compliance with the requirement for ATMPs. The agencies have willingly fallen into line, sacrificing the rights of air tour operators for political expediency while fixing the source of blame on the Court. All the while, the agencies have tried to hide behind not only the Court but also EPA and its Council on Environmental Quality. The agencies have deliberately overlooked the requirement of NPATMA to conduct sound studies, because: (1) it is not possible to do so in the time allotted by the Court; and because (2) the sound studies would open the door to errors of interpretation alleged by ATOs, thus giving ATOs a well-justified seat at the ATMP negotiating table. Without sound studies, the agencies realize that ATOs can mount no defense of administrative abuse, so the agencies persist.

The FAA's Office of Environment and Energy is the worst offender. The philosophy of that Office seems to be, "If you want to make an omelet, you have to break a few eggs." The office seems to think that the end (speedy implementation of ATMPs) justifies the means (denying ATOs of due process and defying the Will of Congress). The FAA's "logic" for proceeding with ATMP implementation is all too transparent to the eye and all too tragic for the Constitution.

I therefore ask that the highest offices of the FAA conduct a serious, top-level, review of their administrative philosophies and procedures and put an end to the administrative abuse aimed at air tour operators. I reinforce my original petition to Mr. Lawrence Fields, AFX-1 Executive Director, for reconsideration of the ABQ FSDO's premature decision to modify the Operations Specifications of Southwest Safaris before the FAA can go back to the Court and ask for rulings on the judicial issues I have raised. The FAA has so far refused to comply with Congressional Act, but persists in piecemeal, selective application of NPATMA and other statutes to achieve an outcome clearly contrary to the workings of law and the Will of Congress. My allegations are very serious; please take them to heart. A summary brush-off will not stand. The course of action of the agencies sets a dangerous precedent for the Country. We are still a Nation under Law, but that Constitutional premise is being tested by my appeals. I see storm clouds on the horizon.

Thank you for your kind consideration.

Sincerely,


Bruce Adams

cc: Ms. Polly Trottenberg, Acting FAA Administrator
Mr. Lawrence Fields, AFX-1 Executive Director



United States Department of Transportation
FEDERAL AVIATION ADMINISTRATION
Office of Policy, International Affairs & Environment
Office of Environment and Energy

NATIONAL PARKS AIR TOUR MANAGEMENT PROGRAM

October 26, 2023

Re: Continuing Consultation under Section 106 of the National Historic Preservation Act for the development of an Air Tour Management Plan for Canyon de Chelly National Monument

Buu Nygren
President
Navajo Nation
PO Box 7440
Window Rock, AZ 86515

Dear President Nygren:

The Federal Aviation Administration (FAA), in coordination with the National Park Service (NPS), seeks to continue consultation with your office under Section 106 of the National Historic Preservation Act (NHPA) for the development of an Air Tour Management Plan (ATMP) at Canyon de Chelly National Monument (the Park). At this time, the FAA is seeking your valuable input and requests your comments on the historic properties we have identified within the area of potential effects (APE), in accordance with 36 CFR 800.4, as detailed below.

The FAA initiated consultation with your office by letter dated May 21, 2021. In a follow-up letter dated June 2, 2023, we described the proposed undertaking in more detail, proposed the APE, and provided the results of our preliminary identification of historic properties within the proposed APE.

This letter describes the FAA's further efforts to identify and evaluate historic properties within the APE, which is depicted in **Attachment A**, and the results of those efforts, as summarized below.

Identification of Historic Properties

The FAA, in cooperation with the NPS, coordinated with Park staff to identify known historic properties located within the APE. The FAA also coordinated with the Navajo Nation Heritage and Historic Preservation Department to collect data for previously identified properties that may be listed in or are eligible for listing in the National Register of Historic Places (National Register). The FAA and NPS performed an in-person records search at the Navajo Nation Heritage and Historic Preservation Department on September 13, 2023, which focused on identifying known Traditional Cultural Properties (TCPs) within the APE. The FAA also consulted with the various consulting parties, including federally recognized tribes, listed in **Attachment B** regarding the identification of any other previously

unidentified historic properties that may also be located within the APE. While the TCPs are noted in **Attachment C** in a general manner, they are not mapped in **Attachment A** to ensure confidentiality.

The historic property identification effort has focused on identifying properties for which setting and feeling are characteristics contributing to a property's National Register eligibility, as they are the type of historic property most sensitive to the effects of aircraft overflight. These may include isolated properties where a cultural landscape is part of the property's significance, rural historic districts, outdoor spaces designed for meditation or contemplation, and certain TCPs. The FAA has taken into consideration the views and input of consulting parties, past planning, research and studies, magnitude and nature of the undertaking, degree of Federal involvement, nature and extent of potential effects on historic properties, and the likely nature of historic properties within the APE in accordance with 36 CFR 800.4(b)(1). Informed by the records search at the Navajo Nation Heritage and Historic Preservation Department, the presence of TCPs has been added to the preliminary list of historic properties to generate the revised historic property list enclosed as **Attachment C**.

Consultation Summary

The FAA contacted 23 federally recognized tribes via letter on March 26, 2021, inviting them to participate in consultation and request their expertise regarding historic properties, including TCPs that may be located within the APE. On December 3, 2021, and December 9, 2021, the FAA sent follow up emails to the federally recognized tribes once again inviting them to participate in Section 106 consultation. On December 15, 2021, and December 20, 2021, the FAA followed up with phone calls to those tribes that did not respond to our prior consultation requests. The FAA received responses from four tribes expressing interest in participating in the Section 106 consultation process: Pueblo of Acoma, Pueblo of Isleta, Pueblo of Tesuque, and Pueblo of Picuris. Five tribes asked to opt out of additional consultation for the undertaking: Pueblo of Pojoaque, Pueblo of Sandia, Pueblo of Santa Ana, San Carlos Apache Tribe, and White Mountain Apache Tribe.

On June 2, 2023, the FAA sent the participating federally recognized tribes a Section 106 consultation letter describing the proposed undertaking in greater detail in which we proposed an APE and provided the results of our preliminary identification of historic properties. The agencies recognize that these tribes have a long-standing and deeply rooted association with the landscape that encompasses Canyon de Chelly National Monument, which includes numerous sites of religious and cultural significance. The agencies recognize all of the lands within the Park remain on Navajo Nation Tribal Trust Lands. The tribes whom the FAA contacted as part of this undertaking are included in the list of consulting parties enclosed as **Attachment B**.

On June 2, 2023, the FAA also invited the National Trust for Historic Preservation, Southwest Safaris, and Grand Canyon Airlines to consult under Section 106. The National Parks Conservation Association – Arizona and Apache County were also invited to participate in consultation by letter dated June 9, 2021, and August 6, 2021, respectively. On June 15, 2023, Grand Canyon Airlines and Air Grand Canyon responded to the FAA noting that they oppose eliminating air tours over the Park and requesting that the number of allowed air tour operations remain the same or be increased. Southwest Safaris provided comments in letters dated June 9, 2023, June 12, 2023, and June 30, 2023. In those letters, Southwest Safaris did not agree with the proposed undertaking and noted that overflights do not harm historic properties. On July 31, 2023, the National Parks Conservation Association provided comments stating that they did not have additions to the preliminary list of historic properties and encouraged the FAA to continue consulting with the Navajo Nation.

Review Request

In accordance with 36 CFR 800.4, the FAA has made a reasonable and good faith effort to identify historic properties within the APE. Those efforts resulted in the identification of one National Register-listed historic district, which includes many contributing properties and encompasses the entire Park, and two National Register-eligible buildings. A total of 29 TCPs within the Park boundary and 4 TCPs within the half-mile boundary around the Park were identified, some of which are within the larger cultural landscape of the historic district. The identified historic properties are listed in **Attachment C** and shown in the APE map provided in **Attachment A**.

The FAA is seeking your valuable input and requests that you provide any comments you may have regarding the historic property identification efforts. In particular, we would appreciate your views regarding the significant characteristics of listed or eligible properties, and any information you might have that would help us to identify additional properties for which setting or feeling is a characteristic of significance.

Should you have any questions regarding any of the above, please contact Judith Walker at 202-267-4185 or Judith.Walker@faa.gov and copy the ATMP team at ATMPTeam@dot.gov.

Sincerely,



Judith Walker
Federal Preservation Officer
Senior Environmental Policy Analyst
Environmental Policy Division (AEE-400)
Federal Aviation Administration

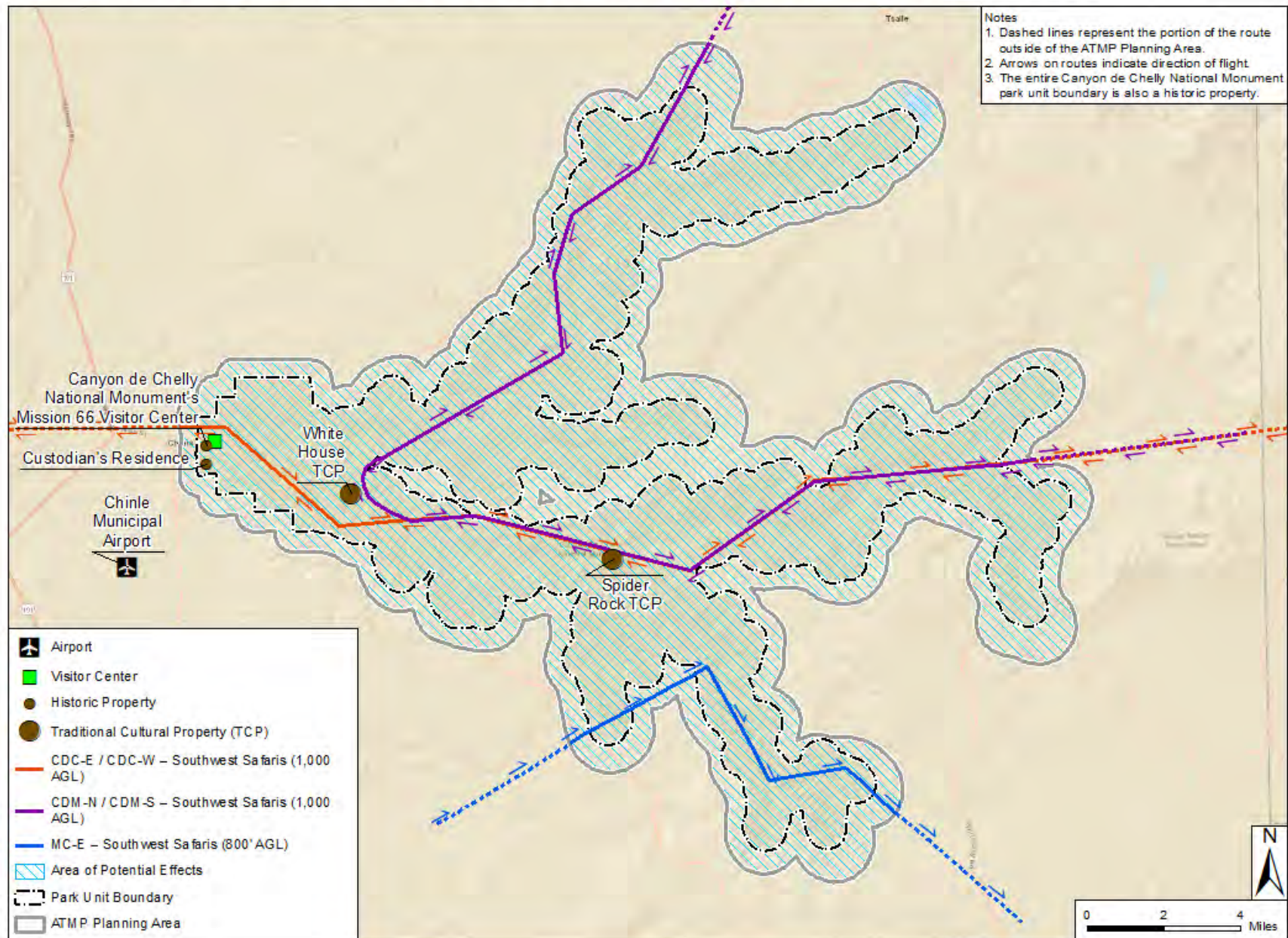
Attachments

- A. APE Map Including Existing Commercial Air Tour Routes
- B. List of Parties Invited to Participate in Consultation for the Undertaking
- C. List of Historic Properties in the APE and Description of Historic Characteristics

ATTACHMENT A

**Area of Potential Effects Map
Including Existing
Commercial Air Tour Routes**

AREA OF POTENTIAL EFFECTS INCLUDING EXISTING COMMERCIAL AIR TOUR ROUTES



ATTACHMENT B

List of Additional Consulting Parties Invited to Participate in Section 106 Consultation

Apache County (Cities of Chinle and Del Muerto)
Grand Canyon Airlines, Inc. (Grand Canyon Airlines, Scenic Airlines, Grand Canyon Scenic Airlines) ²
Hopi Tribe of Arizona
Kewa Pueblo
National Parks Conservation Association -Arizona
National Trust for Historic Preservation
Navajo Nation
Ohkay Owingeh
Pueblo de Cochiti
Pueblo of Acoma
Pueblo of Isleta
Pueblo of Jemez
Pueblo of Laguna
Pueblo of Nambe
Pueblo of Picuris
Pueblo of Pojoaque ¹
Pueblo of San Felipe
Pueblo de San Ildefonso
Pueblo of Sandia ¹
Pueblo of Santa Ana ¹
Pueblo of Santa Clara
Pueblo of Taos
Pueblo of Tesuque
Pueblo of Zia
San Carlos Apache Tribe of the San Carlos Reservation ¹
Southwest Safaris

White Mountain Apache Tribe of the Fort Apache Reservation ¹
Ysleta Del Sur Pueblo
Zuni Tribe of the Zuni Reservation

¹Consulting party has opted out of further Section 106 consultation for the undertaking.

²The point of contact for Air Grand Canyon and Grand Canyon Airlines are the same.

ATTACHMENT C

List of Historic Properties in the APE and Description of Historic Characteristics

Property Name	Property Type	Eligibility Status	Significant Characteristics
Canyon de Chelly National Monument	District	Listed	<p>Canyon de Chelly National Monument preserves the remains of aboriginal Anasazi ruins from the Basket Maker II, ca. A.D. 350 through Pueblo III, ca. A.D. 1300, periods. It contains several large and hundreds of small excellently preserved sites of the prehistoric Anasazi. Many of the sites are cliff dwellings containing large amounts of dry, cultural debris. In addition, 18th, 19th and 20th century A.D. sites of Navajo occupancy remain in the monument. The monument is occupied by families who farm and graze the Canyons today. Canyon de Chelly was the site of Carson's campaign of 1864 which ended the American wars with the Navajo.</p> <p>The remarkable scenery of Canyon de Chelly National Monument reflects the dramatic contrast of brightly colored sandstone walls and rock promontories that tower above sinuous bands of vegetation and agricultural fields along the narrow canyon floors. Canyon rim overlooks provide breathtaking panoramic views into and across the canyons to distant vistas. The presence of Navajo hogans and fields within the canyons set against a backdrop of ancient cliff dwellings visually reinforce the long span of human history and the continuing importance of the canyons for the resident Navajo community.</p>
Custodian's Residence	Building	Eligible	<p>Constructed in 1935-7, the building is an excellent example of Pueblo Revival Architecture. It is a good example of the Southwestern atmosphere of Canyon de Chelly. Although its architectural roots were not Navajo, its design was appropriate for the site in a broader, regional context. Its significance is arguably conveyed through setting and feeling by way of spatial relationships with other historic buildings nearby. The building used to be considered contributing to the Thunderbird Lodge historic district (delisted from the National Register). The character of the building's setting and feeling is still conveyed through its association with these other buildings in the Thunderbird Lodge complex.</p>
Canyon de Chelly National Monument's	Building	Eligible	<p>From 1956 to 1966, the Park Service commissioned over one hundred new visitor centers and additions to existing museum buildings. Local contract architects were responsible for some of the designs, but the bulk of the work went to Park Service architects. The Canyon de Chelly National Monument's Mission 66 Visitor Center was constructed in 1964 by Cecil Doty, an architect from</p>

Property Name	Property Type	Eligibility Status	Significant Characteristics
Mission 66 Visitor Center			Oklahoma trained in the traditional Park Service Rustic style of design. These buildings were designed to harmonize with the surrounding landscape. Some of them, including the Visitor Center, contain viewing terraces overlooking an area of the Park. The specific visitor center viewsheds at CACH overlook the mouth of the canyon from two (east and west-facing) adjoining courtyard terraces. These viewsheds are likely character defining features of the building as it is sitting at the mouth of the canyon and offers interpretive value from the building's courtyard terraces.
TCPs within the Park boundary	TCPs	Eligible	<ul style="list-style-type: none"> • North: ID#88, ID#395, ID#455 • West: ID#16, ID#87, ID#172, ID#182, ID#184, ID#217, ID#219, ID#373, ID#375, ID#378, ID#379, ID#392, ID#393, ID#406, ID#414, ID#424, ID#434, ID#435, ID#437, ID#477, ID#552, ID#1052, ID#1058 • East: ID#202, ID#234, ID#898 <p>Setting and feeling are significant characteristics for several of the TCPs that were identified within the APE. For example, some places are used as the person stands on the rim of an overlook and prays, for prayers in general, or as storage places for bundles or offerings that are used during ceremony.</p>
TCPs within the half-mile boundary around the Park.	TCPs	Eligible	ID#32, ID#73, ID#574, ID#1080: Setting and feeling are significant characteristics for several of the TCPs that were identified within the APE. For example, some places are used as the person stands on the rim at the overlook and prays, for prayers in general or as storage places for bundles or offerings that are used during ceremony.
White House TCP (ID#184)	TCP	Eligible	White House Ruins in Canyon de Chelly (Kiníí'na'ígai) has an associated ceremonial history. Pre-Columbian sites can be sources of spiritual, sacred power to Navajo people. Offerings are made at these sites, and oral histories (of the people, of ceremonies, of clans) refer to these places at times when people were still living there. This place has been continuously used for contemplation and prayer by the Navajo people. Significant characteristics of this TCP include the natural scenery and vegetation, which are linked to ceremonial visions.
Spider Rock TCP (ID#414)	TCP	Eligible	Spider Rock is a significant TCP for the Navajo. The rock is considered the home of Spider Woman, a benevolent figure who is recognized in many traditional Native American oral stories as a guide, protector and healer, teacher, disciplinarian, adviser and/or spiritual leader. Spider Rock is eligible for inclusion in the National Register because of its association with cultural practices or beliefs that are rooted in various Southwestern Native American histories and because it is important in

Property Name	Property Type	Eligibility Status	Significant Characteristics
			maintaining cultural identity. Spider Rock's natural surroundings, viewshed and noise constraints are vitally important in conveying respect for Spider Woman and her home, in sharing lessons taught by Spider Woman regarding weaving, and in establishing a geographical context for oral histories as well as healing ceremonies.

SOUTHWEST SAFARIS

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Ms. Judith Walker
Senior Environmental Policy Analyst
Environmental Policy Division (AEE-400)
Federal Aviation Administration
Washington, DC

November 14, 2023

CACH ATMP - 4th Response
Re. Historic Properties & Sec. 106

Dear Ms. Walker:

This my fourth response to your “request for comments” on a draft Air Tour Management Plan (ATMP) for Canyon de Chelly (CACH, or “the Park”). I am writing in response to your letter of October 26, 2023. In that transmittal, you asked for comments from Southwest Safaris (SWS) relating to the selection of historic sites under Section 106 and the Area of Potential Effects (APE) for the proposed ATMP for Canyon de Chelly National Monument.

First, I will comment on the specific sites that the FAA has added to the list of Traditional Cultural Properties (TCPs) the FAA would like to include in the Area of Potential Effect of the CACH ATMP. I will then transition to a general discussion of the flaws in the Section 106 process that you and I have addressed piecemeal on so many occasions, hoping to clarify under permission of continuing consultation my overall objections to the way the FAA is managing regulation under the National Historic Preservation Act (NHPA). Our differences of opinion on process implementation are significant.

I disagree with the FAA’s selection of historic sites for inclusion in the APE at CACH. Title 36, Part 60 gives the regulations relating to the eligibility of properties to the National Register of Historic Places (National Register, or NR). §60.4 specifies the “Criteria for Evaluation” to be eligible for listing on the National Register. Southwest Safaris argues that, according to 36 CFR §60.4, none (with the exception of White House Ruin) of the Traditional Cultural Properties listed in Attachment C of your letter of Oct. 26 qualify for listing on the NR as historic properties (HPs), based on the information the FAA has presented.

In your letter of October 26, the FAA states:

The historic property identification effort has focused on identifying properties for which setting and feeling are characteristics contributing to a property's National Register eligibility, as they are the type of historic property most sensitive to the effects of aircraft overflight.

According to §60.4, “setting” and “feeling” alone are not enough to make a property eligible for listing on the NR. The NR regulation concerning qualification of properties reads as follows:

§60.4 *National Register criteria for evaluation.* The quality of significance in American history, architecture, archeology, engineering, and culture is present in districts, *sites*, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association and (a) that are associated with events that have made a significant contribution to the broad patterns of our history; **or** (b) that are associated with the lives of persons significant in our past; **or** (c) that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; **or** (d) that have yielded, or may be likely to yield, information important in prehistory or history. (Emphasis added.)

There is an “and” coordinating conjunction involved in the regulation, followed by a long line of “or” conditionals. The regulation is a logic syllogism consisting of “and/or” construction. In order to be eligible for listing on the National Register for religious/spiritual/cultural reasons, property categories of the classes the FAA mentions would need to have “setting/feeling” qualities plus meet at least one of the “criteria considerations” listed in the above regulation stipulation.

All but one of the TCP properties listed in Attachment C fail to meet the standards of the “or” clauses/ subparagraphs (a) through (d) above. With the exception of White House Ruin, none of the individual TCP properties are even generally associated with identifiable historic events of significant record, (a); none are associated with specific persons, (b); none but White House Ruin are associated with works of construction or creative design, (c); and none but White House Ruin “yield information important in prehistory or history,” (d). In the case of Spider Rock, Spider Woman is a figure of current reality to the Navajo people; she is a living figure whose importance is primarily in the present. Attachment C lists no identifiable connection with historic events, citing no specific commemorative aspects of Spider Woman’s actuality, only general reference to her as a teacher of timeless spiritual values. A towering rock monolith is not an architectural achievement; it is a landmark, not a structure. No historic battles occurred at Spider Rock. Moreover, the NR makes no mention of anthropomorphic qualities passing from spiritual persons to physical properties so that the identity of a natural object would become that of the spiritual, allowing the property to take on timeless historic significance. Spider Rock is a popular tourist attraction, lacking privacy and silence viewed from the overlooking parking lot.

Beyond listed NPS buildings, other possible historic properties in the Park are only identified in Attachment C by number. With the exception of White House Ruin, nothing substantive is said about the individual identities, histories, or integral importance of these numbered properties to the overall historic characteristics of the Park, only that several of the sites have “setting and feeling” attributes that are “significant,” whatever that means. By concealing the majority of the

sites' identities, the FAA has deliberately made the sites impossible to critique for veil of secrecy. The FAA denies ATOs due process by withholding from ATOs constructive opportunity to comment on the numbered properties. I challenge the numbered properties authenticity. I argue that the 33 numbered TCPs within and outside the Park boundary should be eliminated from eligibility in the National Register for lack of qualifying criteria (specificity and relevance) and eliminated from consideration in the proposed CACH ATMP for lack of connection with any particular route (lack of definition and location).

All but one of the TCP's fail the eligibility test for reason of itemized "criteria considerations." These §60.4 stipulations follow in the regulation immediately after the "National Register Criteria for Evaluation" paragraph referenced above. Cemeteries and graves of historical figures and properties primarily commemorative in nature are not considered eligible for the NR. §60.4 states that "Ordinarily properties . . . used for religious [including prayerful, meditative, and ceremonial] purposes . . . shall not be considered eligible for the National Register." None of the listed extenuating exceptions to this rule apply under §60.4, with the possible allowance for (f) as it pertains to White House Ruin.¹ However, none of the other properties in question are "primarily commemorative in intent," nor do they have "*exceptional* significance." None of the other properties listed were originally created by man for celebratory purposes, and natural properties do not "inherit" man-made "traditional significance" over time unless an extraordinary historic event is directly associated therewith. The FAA makes no claim that any of the listed TCPs have commemorative association attached to identifiable events. Therefore, all but one of the numbered properties lack overall "integrity" of presentation with respect to the NR.

The criteria for eligibility of listing on the NR do not include landscape locations "that have been continuously used for contemplation and prayer," nor do the criteria for eligibility allow listing "because of association with cultural practices or beliefs." The concept of "cultural landscape" including "outdoor spaces designed for meditation or contemplation" is completely foreign to the wording of the Criteria for Evaluation and to the qualities of stipulated exception/eligibility that follow, the FAA having artfully crafted the misleading and prejudicial terminology. The NR considers such sweeping categories to be much too broad. On the other hand, individual TCPs are not automatically and separately included in the NR just because they have cultural importance for current time. Their eligibility for listing comes solely from being part of the Park.

The main justification for all but one of the TCPs (White House Ruin) being included in the APE as historic sites is that they fall within the boundaries of CACH, which is a "district" that does meet the criteria for listing on the NR. However, the majority of the properties, considered by themselves, would not meet the criteria. Moreover, the exception for reason of district inclusion is nullified by the fact that the individual properties are not "integral parts of districts," meaning that they cannot be cognitively recognized as such by laymen and cannot readily be observed as historic sites by normal visual means, lacking unique physical characteristics (again, with the exception of White House Ruin). Their presence is not essential to the identity of the Park. They are cultural locations of importance to local residents, not material or objective sites that contain

¹ With regards to exceptions for governing listing on the NR, §60.4 says: "However, such properties will qualify if they are integral parts of districts that do meet the criteria of if they fall within the following categories: (f) A property primarily commemorative in intent if design, age, tradition, or symbolic value has invested it with its own exceptional significance; or . . ."

specific historic importance/relevance to the Park, having only general “setting and feeling” of note.

The FAA would have realized the accuracy of my objections if the agency had complied with 36 CFR §800.4(b)(2), which requires, under heading of “Identification of Historic Properties,” the FAA to “conduct an appropriate level of field investigation, taking into account the number of alternatives under consideration, the magnitude of the undertaking and its likely effects . . .” The FAA has no authority, I claim, to ask for comments relating to itemized historic properties till it has walked the Park. Under regulation, this obligation cannot be delegated to another agency.

Moreover, even TCP sites such as White House Ruin lose their viability as historic properties for the purpose of the APE. The FAA is claiming that the historic properties need to be protected from air tours for reasons of noise, visual intrusion, and physical violation of spiritual space associated with prayer and meditation experienced from a wide number of observation points on the rim of the canyons. These contentions are invalid on the face of argument.

There are no historic properties of any kind in the Park that need to be protected from air tours, because air tours are conducted so infrequently as to be of de minimis quantifiable objection. 99.9% of the supposed noise, visual intrusion of viewsheds, and spiritual trespass occurs by welcome permission of the Navajos and NPS in the form of tourist travel by car and commercial, Navajo-owned, four/six-wheel-drive, back country vehicles that cruise the rim and bottom of the canyon floors continuously, every day of the week. White House Ruin and Spider rock are two of the most traveled sites, the noise there and all along the tour routes being significant, well above 54 dBA.² The FAA has provided no current “pertinent”³ sound studies that would contradict this observation. I argue that it would be difficult to hear an aircraft overhead with all the vehicle and sightseer noise in and around the canyon. Furthermore, the steep canyon walls make it impossible to observe air tours by anyone standing on the canyon floor, because of the lateral stand-off distance from the immediate canyon by tour aircraft. Roads line the tops of both Canyon de Chelly and Canyon del Muerto. The eye is naturally drawn to vehicles of close proximity, not to small targets on the distant horizon. The concept of protecting the historic properties in the Park from infrequent air tours that have no physical contact with historic structures, while allowing continuous visitation of the properties by foot, car, trucks, buses, and four/six-wheel-drive SUVs, makes a mockery of the entire ATMP undertaking. These are significant Section 106 realities that the FAA has failed to take into consideration in compiling the Section 106 list of affected historic properties and the draft CACH ATMP.

² According to NPS statements, interference with Park interpretive programs would reasonably occur at 52 dBA. Noise related to ground-visitation of the Park are well above that level. On the other hand, the “Time Above 52 dBA” for air tours at CACH is so low as to be unmeasurable, if such a metric even exists at the Park. The NPS does not contest the low audio levels associated with air tours at CACH. Instead, the agencies (FAA & NPS) wrongly argue Section 106 allegations against air tours at the Park solely on Theory of Mere Presence (See Footnote #4), which NPATMA and the FAA (everywhere else) do not allow. Distinguishable adverse noise impacts on TCPs from air tours at CACH under Section 106 have not been shown by the agencies to exist. The TCPs, based on FAA presentation of them, are phantom distractions of argument.

³ In Southwest Safaris’ letter to Volpe of August 7, 2023, on page 17, SWS defined “pertinent” sound-study data to mean “current, comprehensive, relevant, accurate, and science-based.” See also Appendix.

Just because a property might have cultural importance for present times does not make it a “historic property.” Just because a TCP might actually be a HP does not mean that the presence of the HP in the APE has relevance to the purpose of the ATMP. Neither air tour noise nor invasion of sacred privacy are objectionable considerations for CACH ... because of the dominant competing existing noises in the Park which drown out those of aircraft and because the overwhelming presence of persons and vehicles everywhere in the Park make visual trespass by air tours a moot point ... and are therefore outside the scope and/or relevance of Sec. 106.

The listing of questionable TCPs is just a distraction of argument, designed to prejudice the opinion of the reader. The entirety of the Park is highly advertised/promoted by the Navajo Nation as a tourist attraction. Of all the methods of visiting the Park, rare air tours have the least lasting impact thereon. There being no objection to the other modes of visitation, under Section 106 there should be even less for air tours, which are rarely, if ever, even noticed.

Protesting air tours over the Park on the basis of cultural intrusion and physical violation of spiritual space ... which are the very evidentiary reasons that the numbered TCPs were added to the list of historic properties ... is also beyond the scope of NPATMA, so their listing under Section 106 is unfounded for reason of relevancy, the National Parks Air Tour Management Act being the controlling legal authority for the creation of ATMPs. NPATMA brings ATMPs into existence, not NHPA, so its methods and purposes limit the scope and applicability of Sec. 106.

The FAA appears to agree. The Act is based on “existing conditions,” not “no air tours.” The arguable base-line assumption of “no air tours” at CACH ... a determinant assumption buried deep within the Section 106 investigation of historic properties ... is predicated on the theory that the mere presence of air tours over the Park is a violation of the Act. The FAA has already argued against this theory in the case of Hawaii Volcanoes National Park (HAVO). In response to the ACHP’s charge that “there does not appear to be a way to eliminate the potential for adverse effects” from HAVO air tours, the FAA replies in a letter of rejoinder to the ACHP dated September 12, 2023:

Though its reasoning is not clear, the ACHP seems to assume that air tour operations under existing conditions have an adverse effect on historic properties. Therefore, [the false argument goes,] the FAA’s undertaking must completely ban air tours to remove the adverse effect, and any action that does less than a total ban does not address the adverse effect of air tours. That view goes beyond the authority of the Section 106 process and its implementing regulations [i.e., NPATMA, NHPA, and NEPA].

Using the FAA’s own logic ... which discredits the Theory of Mere Presence,⁴ the FAA having rejected arguments elsewhere against air tours based on simple operational existence, for lack of

⁴ The Theory of Mere Presence is brought forward by parties opposed to the conduct of air tours in any form or manner over units of the National Park Service. The Theory of Mere Presence states that air tours, by definition, impose adverse impacts on persons and property on the ground, including religious and cultural sites and events, and that there is no way to lessen the impact of same, invasion of privacy in particular. According to this theory, all Air Tour Management Plans must completely ban all air tours of all types to eliminate any possibility for adverse effects in the future. This extremist theory asserts that any Plan that does not ban all air tours does not address “the problem” of air tours at all. In the case of Hawaii Volcano National Park (HAVO), the FAA flatly states that it will not consider the theory. For unstated reasons, the FAA appears to have reversed its opinion at CACH. The FAA

any other documentable objection ... mention of the additional TCPs in Attachment C must be omitted. The allowance and justification for the extra TCPs being included in Attachment C was to prove that the mere existence of air tours is objectionable for general reasons of “setting and feeling,” which theory of rejection, according to the FAA at HAVO, is predicated on disallowed conceptual assumptions “beyond the authority of the Section 106 process and its implementing regulations,” including both NPATMA and NEPA. However, at CACH the FAA’s implied main argument for including the numbered properties within the APE is precisely that “setting and feeling” are violated by “mere presence.” Thus, the FAA argues against itself.

Moreover, with reference to the APE for Canyon de Chelly, it is not fair to ask an ATO to comment on boundaries based on TCPs that the FAA will not identify as to location. The offer for ATOs to comment on the area of the APE, in this instance, is hollow and indicative of agency indifference to due process. All claimed historic properties at CACH should be identified on a map, the argument for privacy notwithstanding. The FAA is wrongly withholding the locations of historic sites that would be essential for planning air tour routes. The requirement to withhold location of unmapped sacred sites for reason of confidentiality should not legally apply to situations where persons claiming said sites as TCPs request route modification based on the very denied location of those sites.

Additionally, because of the principle of Primacy of Law,⁵ making the National Parks Air Tour Management Act of 2000 the controlling legal authority in the creation of ATPMs, the FAA errs by acting preemptively to initiate the Section 106 investigation of CACH without having first acted on Section 808 of NPATMA in order to test the “if any” condition contained in the “Objective” paragraph of the Act, 49 USC §(b)(1)(B). Additionally, the Principle of Continuity of Law⁶ means that Section 106 cannot be called upon by the FAA to negate the effect of NPATMA, the agency otherwise being able to declare by means of Section 106 that sound studies at selected Parks are irrelevant to determination of adverse impact of air tours on TCPs. Without the Principle of Continuity of Law, the FAA could ground its objections to air tours over CACH on the Theory of Mere Presence (setting aside consistency of argument) and simple allegations of noise intrusion, ignoring the requirement for noise studies altogether.⁷ The power

added 33 TCPs to the original list of historic properties primarily to buttress a NHPA-originated claim of potential adverse impact of air tours on cultural sites that encompass the whole of the Park, based entirely on theoretical proximate presence of air tours anywhere in the area. The suddenly but conveniently “revised” opinion held by the FAA ... that the mere presence of air tours in the Park is objectionable, in contrast to HAVO ... lacks explanation and, therefore, credibility. The FAA everywhere else claims that the standard for determination of adverse impact of air tours under NPATMA is “existing conditions,” not “no air tours.”

⁵ The principle of Primacy of Law directs the order of application of laws in a vertical manner. Where multiple laws affect a result, course of action, or determination, the laws must be satisfied in accordance with the most controlling to the least. See my letters to the FAA dated September 25 and October 1, 2023, wherein I give a detailed discussion on the Principle of Primacy of Law as it applies to NPATMA, NEPA, and NHPA working together.

⁶ The principle of Continuity of Law means that one law cannot horizontally contradict another where they overlap.

⁷ The FAA tries to use Section 106 to end run NPATMA, there being no requirement under NHPA to conduct sound studies to prove the validity of claims for adverse effect of air tours on historic properties as defined by the NR. Under Section 106, a mere claim of the potential for adverse effect is considered evidentiary proof of legitimacy of

of the two principles working together means that Section 106 cannot be used to bypass Section 808. Moreover, it means that Section 106 is only called into conditional effect ... meaning that NHPA decisions must be based on comprehensive, relevant, and current sound studies ... after NPATMA passes authority to it by means of satisfying the all determining “if any” phraseology of the Act. Therefore, the FAA is currently exceeding its authority by prematurely asking for comment on historic properties within the APE before the subject of air tour noise has even been addressed by NPATMA, the FAA having failed to comply with Section 808 and standards of due diligence.

In other words, the FAA has not determined by means of NPATMA’s Section 808 that there is any need to proceed with changes to existing conditions based on the alleged impact of aircraft noise on Traditional Cultural Properties. ATMPs only apply to certain units of the NPS, not all units. Until certain conditions and exceptions are met for individual parks, the requirement for an ATMP does not exist; that is, the requirement for an ATMP (and, therefore, for an “undertaking”) does not exist just because the Act exists. In the case of CACH, if legal procedures were followed, the creation of an ATMP would be an “undertaking,” 36 CFR §800.16(y). Southwest Safaris argues that by law, Section 106 cannot be activated without the existence of an “undertaking,” 36 CFR §800.3(a). The FAA appears to agree. Paradoxically, therein lies a major problem and source of paralyzing disagreement between SWS and the FAA.

In the case of the CACH ATMP initiative, Southwest Safaris argues that legal process has not been followed. An “undertaking” in the case of an ATMP cannot commence without the “if any” phrase of NPATMA being satisfied by science-based sound studies (see Appendix) using “pertinent data” (see footnote #2) ; or, it cannot begin unless the NPS determines that creating an ATMP is necessary to “protect park resources and values or park visitor use and enjoyment,” 49 USC §40128(a)(5)(B), the NPS nonetheless having to prove the necessity for bypassing normal categorical exclusion rulemaking in *extraordinary* circumstances, 40 CFR §1501.4. In any case, either way, the “if any” and Section 808 requirements of NPATMA must be fully satisfied by law; Section 808 cannot be bypassed, because inclusion of its “shall clause” makes it mandatory in all circumstances.

In the case of CACH, said “pertinent” (see footnote #3) sound studies have not been conducted, nor has the NPS demonstrated, outside of claiming Theory of Mere Presence ... which argument is not allowed by the FAA elsewhere ... that critical park resources and values or visitor use and enjoyment are adversely affected by air tours under “existing conditions.” No “extraordinary circumstances” per 40 CFR §1501.4(b)(1) exist at CACH, Tribal objection arguably founded on the Theory of Mere Presence notwithstanding.

allegation. Therefore, NHPA, considering the “if any” phrase in NPATMA and Section 808 methodology of compliance, is inconsistent with NPATMA ... the Act requiring thorough sound studies to satisfy the “if any” conditional test ... and must, at least at first, be set aside under the twin Theory of Primacy of Law and Consistency of Law, until NPATMA conditionally allows it by making sound studies mandator as a condition for NHPA review, the Act being the controlling legal authority for ATMPs. Regardless, at CACH, Section 106 only comes into qualified force and effect if and when NPATMA passes authority to it ... which happens only when a *legal* undertaking is commenced, not before.

The relevant undisputed fact is that Southwest Safaris has been conducting air tours over CACH for 49 years, without a single documentable complaint. Until the present ATMP process was initiated, the Navajo Tribe and Chapter Houses on the perimeter of CACH were unaware that fixed-wing air tours were even being conducted over the Park. Any alleged “potential” impacts of air tours on the few TCPs within the park that are protected by Section 106 are purely theoretical, imaginary, and conjectural, based on deductive assertions (NHPA), not inductive research (NPATMA).⁸ Existing conditions at Canyon de Chelly include the conduct of very noisy ground tours which dominate the soundscape of the Park during all daylight hours. This reality makes the presence of rare air tours under Section 106 immaterial for argument.

The FAA’s Section 106 request for comments on TCPs at CACH at this time, in fact all of NHPA currently, lacks justification and authority, both under NHPA and NHPA, for lack of initiation of a *legitimate* CACH “undertaking,” the safeguards of NPATMA⁹ for air tour operators having been purposefully ignored by agency.

The FAA, I argue, errs in assuming that Section 106 process can begin just because the agency has declared that an ATMP “undertaking” has commenced, even if the “undertaking” is being federally financed. The FAA, I allege, has wrongly begun the ATMP process at CACH without going through Congressionally-directed process necessary to activate the “undertaking.” The FAA, I assert, is illegally funding an “undertaking” which has no authorization. The FAA’s action leads to multiple disturbing legal complications, not the least of which is abuse of process and misappropriation of Federal funds.¹⁰

⁸ The conflict between NHPA and NPATMA over deductive versus inductive determination can only be resolved by acknowledging that NPATMA is the controlling legal authority, the Principle of Continuity of Law being, once again, of critical affect. Guided additionally by the Principle of Primacy of Law and Intent of Congress, all assessments of air tour noise under Section 106 re. ATMPs must be based on “reasonable scientific methods” and “pertinent” data, per Section 808 of the Act. By refusing to comply, under Section 106 the FAA fails to act/decide according to law.

⁹ Congress never intended that NPATMA would be used to destroy the air tour industry. In order to ensure the rights of air tour operators (ATOs), including due process of hearing, Congress insisted that all ATMP initiatives under NPATMA would have to pass the test of reasonableness, the standard of determination being that of “existing conditions,” not “no air tours.” To safeguard these rights, Section 808 was added to the Act, the purpose of which was to create measures of decision that could be tested against science-based observations and allow for judicial review. By failing to conduct timely science-based noise studies using “pertinent data” (footnote #3), the FAA has knowingly deprived ATOs of the ability to defend their right of operation by means of hard sound data and, thus, deprived them of constructive administrative and judicial hearing. Had timely, science-based, sound studies been conducted early in the ATMP process, most of the ATMPs the FAA has since created would have been proven to be without cause. Air tour operators cry “foul!” The FAA’s lack of regard for Section 808 serves to negate operators’ right of judicial review under 49 US §40128(b)(5), it being impossible under both NPATMA and Section 106 to provide credible evidence without authoritative sound studies.

¹⁰ After NPATMA was passed by Congress, it would have been appropriate for the FAA to expend funds to test for conditions that would trigger the creation of ATMPs. Prior to that determination, predicated on Section 808 science-based studies, no further federal money was authorized by Congress to be spent. In no case was an “undertaking” to arbitrarily and capriciously put air tour operators out of business. The FAA and NPS (the agencies), I allege, have together conspired to misuse Federal funds to achieve a political agenda, involving the radical curtailment of the air tour industry, never contemplated by Congress. In the process, I allege, the agencies have defrauded the U.S. Court of Appeals for the District of Columbia Circuit by deliberately withholding relevant information so as to deceive the court to “compel” the agencies to prematurely initiate “undertakings” that had, as

To emphasize the point, in the case of CACH, a legal Federal “undertaking” does not exist just because the FAA and NPS have inappropriately expended Federal funds to initiate process. An “undertaking” must first be *legally* triggered. This has enormous implications for NHPA and NEPA considerations. Legal order must precede political expediency. A decision by the U.S. Court of Appeals for the District of Columbia Circuit¹¹ to expedite implementation of ATMPs does not excuse the FAA from proceeding with implementation of ATMPs contrary to Law of Congress.

Because the “undertaking” for Canyon de Chelly has not been *legally* triggered, I argue, the “undertaking” for CACH to this day does not legitimately exist. Therefore, the development, implementation, and funding of the CACH ATMP is out of order, including the Section 106 process as well as the Environmental Assessment that is currently being compiled under cloak of NEPA.

I allege that the FAA errs by having commenced the ATMP-related Section 106 process at CACH without first initiating a legal “undertaking” of any sort, as defined by the above criteria, and that by so doing the FAA is in violation of NPATMA, NEPA¹², and NHPA, all three, the Court order for the FAA to expedite ATMP process notwithstanding. A court cannot compel an unlawful act. An order to expedite process is not an order to break Congressional law. Under NHPA, the FAA may begin investigative initiatives prior to activation of an “undertaking” under certain conditions, but the Agency cannot implement decision-making actions (e.g., requests for input and/or concurrence) prior to actual existence of a legal “undertaking,” 36 CFR §800.1(c). Under NEPA, the FAA has no such latitude to commence work on a draft EA without “authorization” from the NPATMA process. The FAA’s alleged flagrant disregard for NPATMA’s controlling legal authority, using Court order as cover for action, leads to the grave and probably irreversible injury, even demise, of the general air tour industry, to the detriment of the economy of rural America.¹³

of then and now, no legal basis for coming into existence, the requirements for same not being satisfied. The results are all too obvious for all to see: abuse of law and tragic/unnecessary destruction of the air tour industry.

¹¹ See USACA Casse #19-1044, Document #2001434, Filed 5/31/2023.

¹² NEPA is equally impacted by the Controlling legal authority of NPATMA. The requirement for satisfying the “if any” phrase and Section 808 sound studies under NPATMA are mandatory prior to the justification for, and commencement of, a NEPA Environmental Assessment. After the former is accomplished, NPATMA permits the latter to commence, in that order, if the creation of an ATMP is justified by the Objectives of the Act.

¹³ For these reasons, I submit that it would be much better to stop the ATMP process at CACH now, correct the situation (there and at other units of the NPS, Bandelier National Monument, Badlands, and Mount Rushmore in particular), and then proceed, rather than force the issue of ATMP management back before the U.S. Court of Appeals, the outcome of which would be far from certain for all parties.

Finally, the FAA's failure to establish a legal undertaking before beginning an ATMP initiative leads to violation of fundamental clauses of the Constitution. I refer to the Fifth and Fourteenth Amendments, both guaranteeing due process.

The Fifth Amendment protects persons from being forced to testify against themselves. Section 106 is being used by the FAA at CACH to commit a substantial breach of law. The whole purpose of asking under Section 106 for the identification of additional TCPs in the Park is to build the case for disallowing flights over any portion of the Park. The next step the FAA plans to take ... as the FAA is currently attempting to do while implementing an ATMP at Bandelier National Monument ... will be to force ATOs operating in the park to concur with a Finding of "No Adverse Effects" from denying all air tours over the entire Park. The FAA at CACH is in the process of "requesting" that ATOs defend themselves against a syllogism of double negatives. The FAA is preparing to issue a demand, cloaked as it is, via a formal Statement of Concurrence, that air tour operators disprove that "no flights over CACH can have no adverse effects on the Park."

As a matter of formal logic, it is impossible to disprove a syllogism based on a double negative. The FAA has artfully contrived a means by which ATOs are forced to testify against themselves no matter how they address the challenge of rebuttal, which is a violation of their civil rights.¹⁴ Moreover, under both the 5th and the 14th Amendments, ATOs are guaranteed the right to fair trial and/or administrative hearing. By failing to honor the language of the 5th and 14th Amendments, and the requirement of Section 808 of NPATMA at CACH, the FAA makes it impossible, as I said in Footnote #9, for ATOs to bring their grievances under NHPA and NPATMA before a body of hearing, because the ATOs have been denied the right to constructive argument under NHPA and the ability to present current objective evidence under NPATMA that ATOs could otherwise present in their own defense. Therefore, the FAA violates under Section 106 both the Constitution and the judicial review clause of NPATMA per 49 US §40128(b)(5).

¹⁴ If the ATO agrees that imposition of Alternative 2 (no air tours allowed over the Park) of the pending draft CACH ATMP would have "no adverse effect," he loses his defense for right of operation. If the ATO declines to engage in pointless argument against a flawed and self-fulfilling double-negative syllogism leading to a conclusion favoring a decision of "no adverse effect," the FAA will decide against him, the ATO having made no argument to the contrary. If the ATO argues against the finding of "no adverse effect," his arguments are thrown out for not being relevant to Section 106, but to NEPA. Section 106 language is built into the entirety of the agencies' draft BAND ATMP and EA, so the distinction between Sec 106 and NEPA argument is very difficult, if not impossible, to delineate and untangle. This makes defense against a decision in favor of "no adverse effect" and "no air tours allowed" nearly impossible, constituting obstruction of argument, which is not allowed under the 5th and 14th Amendments. The FAA's "request" for a Statement of Concurrence amounts to a forced acknowledgement by the ATO that depriving him of the right to fly over the Park will have no adverse impact on the Park, grossly prejudicing a decision of the agencies (FAA and NPS) against his right of operation.

In somewhat simpler language, the 5th and 14th Amendments were both drafted to ensure a review process of executive actions that would guarantee fundamental fairness, both substantively and procedurally considered. The FAA's application of NHPA and NPTMA to the CACH ATMP defies both. The FAA disallows substantive argument under rules of logic (Section 106) and makes presentation of credible facts under rules of evidence impossible (the Act), in the meanwhile forcing ATOs to testify against their own interests.

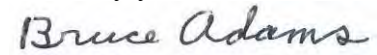
I respectfully request, then, that the FAA's multiple notices for comment on Section 106 historic properties at CACH be withdrawn, as such untimely requests for opinion greatly, unfairly, and intentionally prejudice the outcome of the agency's eventual ATMP determinations, in violation of due process, and because the Sec. 106 initiatives at this time are being implemented contrary to Federal regulation and law.

I also ask that the FAA respond in writing to this petition, the need for the courts to rule on these matters of jurisprudence being imminent.

I further request that the entirety of my objections, including all my letters relating to Canyon de Chelly, be brought to the attention of the ACHP for third-party opinion, the issues being materially and procedurally related to, but applicably different from, those of Bandelier National Monument, for which the FAA is currently seeking separate ACHP concurrence.

I appreciate the opportunity to comment on historic properties and Section 106.

Sincerely yours,


Bruce Adams

Appendix

Section 106 Sound Studies Conducted under NPATMA

The FAA's second letter of October 26, 2023 ... wherein the agency requested input for CACH to help "identify additional properties of which setting or feeling is a characteristic of significance" ... is part of an investigation into the effects of air tour noise on Traditional Cultural Properties (TCPs) at Canyon de Chelly National Monument. The FAA states that it "has focused on identifying properties for which setting and feeling are characteristics contributing to a property's National Register eligibility, as they are the type of historic property most sensitive to the effects of aircraft overflight."

A major part of Section 106 involves assessment of air tour impact on Areas of Potential Effect within units of the NPS governed by ATMPs. To do this, Section 106 relies, directly and indirectly, on measurement of noise generated by tour aircraft.

The FAA incorrectly, I argue, relies on noise modeling technology to make its determinations as to the level of air tour noise at CACH. This reliance, I maintain, adversely impacts the correct assessment of harmful impact of said noise on TCPs and, therefore, incorrectly influences FAA opinion and determinations under Section 106.

At Canyon de Chelly National Monument, the FAA is in violation of NPATMA, NEPA, and NHPA because the use of noise models does not satisfy Section 808.

NPATMA says that "*any methodology*" used by the FAA to assess air tour noise shall be based on "reasonable scientific methods." Noise models do not constitute scientific methodology, especially if the studies do not incorporate timely (which means, current), accurate, thorough, and objective data obtained from vigorous field research ... none of which was provided at CACH. A noise model is just another term for an "Aviation Environmental Design Tool" (AEDT), to use an FAA term. The output from an AEDT is totally dependent on whatever numbers (including formulas) are input. The input data the FAA is using at CACH is too old, too few, too isolated, and too infrequently gathered, representing unreliable assumptions of present conditions, this on top of biased formulas. Southwest Safaris claims that the FAA, under Section 106, is relying on noise modeling at CACH to control the input so as to get a predetermined output that is contrary to the interests of the ATO.

Spreadsheets, themselves, are not science. Science is based on acquiring original data gathered by observation in the field. Noise models, in contrast, are based on deductive armchair reasoning. Therefore, I argue, principal reliance on AEDT technology is not allowable under NPATMA (and, therefore, NHPA) as the primary or conclusive means of determining "adverse impact." This is one of the reasons I have argued in the body of this letter that NPATMA is the controlling legal authority for ATMPs, not NHPA or NEPA, for that matter. Under NPATMA, Section 808, the NEPA §1502.23 possible allowance for using AEDT technology does not exist, because NEPA regulations are incompatible with NPATMA law, per 40 CFR §1500.3.

Even if NEPA's §1502.23 did apply, the FAA would still be required to use scientific methodology to control the input with current, comprehensive, relevant, accurate, and science-based (i.e., pertinent) data. I argue that the FAA's input data for CACH, even if one allows use of AEDT noise modeling, falls short of these tests.

Noise modeling is particularly problematic at CACH, where the FAA conducts no actual current noise studies in the field but relies entirely on its Aviation Environmental Design Tool (AEDT), i.e., noise modeling technology, and outdated data upon which to base its calculations of "adverse impact." This is allowable under NEPA. 40 CFR §1502.23 of NEPA says, "Agencies are not required to undertake new scientific and technical research to inform their analyses." However, this statement is directly contrary to NPATMA, which is the controlling legal authority in the present instance.

I point out that §1502.23 does not apply to NPATMA because of the "shall clause" (Section 808). Moreover, Congress does not refer to §1502.23 in NPATMA's §40128(b)(4)(C), in order to grant special exception. So, the requirement for noise studies based on "reasonable scientific method" still applies, NEPA notwithstanding.

NPATMA imposes a clear and unequivocal requirement to conduct pertinent sound studies, using "reasonable scientific methods," before implementing ATMPs for respective Parks. NPATMA is the controlling legal authority, not NHPA or NEPA. The FAA has a duty, therefore, to perform sound studies which cannot be excused. This is a due diligence mandate.

So, the use of noise modeling technology does not satisfy the requirements of Sec. 808 for use of "reasonable scientific methods." Noise modeling may incorporate sophisticated computer technology, but it is not science, and it is prone to error. In support of my theory, I direct the reader's attention to a FAA Memorandum, dated June 13, 2018, titled "Noise Screening Assessments,"¹⁵

In general, the Memorandum is intended to "clarify existing FAA policy and guidance on noise screening assessments and the appropriate use of noise screening tools and methodologies." The Memorandum makes it abundantly clear that noise screening tools and methodologies afford only approximate analysis of air tour noise impacts, and are not appropriate for detailed EA or EIS analysis presented to the public, nor for Section 106 analysis. Therefore, the FAA has chosen to use AEDT (Version 3e), instead, as that constitutes "approved" analysis technology. The FAA does not say who approved it.

Regardless, the Memorandum also makes it abundantly clear that noise modeling ... irrespective of the technology incorporated, whether noise screening or technical noise analysis (AEDT) ... is not science. The inadequacies of AEDT technology (noise modeling) logically follow the shortcomings of sound-level estimation (noise screening). Had Congress wanted to allow reliance on AEDT analysis of air tour noise, it could have easily specified to that effect in the Act (i.e., done so expressly). This is a noticeable omission, but *not* by oversight. Reliance on AEDT technology is *not* allowed under NPATMA any more than reliance on noise screening. In

¹⁵ See http://www.faa.gov/sites/faa.gov/files/air_traffic/environmental_issues/environmental_tetam/screening-memo.pdf.

any case, the data fed into either modeling tool would have to be “pertinent,” defined by reason to mean “current, comprehensive, relevant, accurate, and science-based.” Both noise modeling methodologies used by the FAA (noise screening and AEDT) fail to make use of “pertinent” data at CACH, so the outcome from noise modeling at CACH is flawed from the outset, irrespective of the computer programs used for analysis.

For all of the above reasons, I argue that the FAA’s efforts to gather input on TCPs for CACH are misplaced for lack of appropriate sound data at this time upon which to base decision. This conclusion is in addition to the fact, as I explained in the body of this letter, that no legal “undertaking” has yet occurred at CACH which would authorize pursuit of a Section 106 determination, either, for much the same logic.

contracting Scorecard and the governmentwide prime contracting scorecard by disregarding actions using Funding Office code 36135Y. This code refers to the Office of Integrated Veteran Care within the Veterans Health Administration, which reports the claims for payments under the CCN contracts for submission to FPDS.

Larry Stubblefield,

Acting Associate Administrator, Office of Government Contracting and Business Development.

[FR Doc. 2023–24206 Filed 11–1–23; 8:45 am]

BILLING CODE 8026–09–P

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

Notice of Availability of Consultation Documents for Public Comment Under Section 106 of the National Historic Preservation Act

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Notice of availability of consultation documents for public comment under section 106 of the National Historic Preservation Act.

SUMMARY: The FAA, in cooperation with the National Park Service (NPS) (together the agencies), has initiated development of an Air Tour Management Plan (ATMP) for Canyon de Chelly National Monument (the Park) pursuant to the National Parks Air Tour Management Act (NPATMA) of 2000 and its implementing regulations. The agencies determined that the development of an ATMP constitutes a Federal undertaking subject to compliance the National Historic Preservation Act of 1966, as amended (NHPA). The agencies have initiated the section 106 process with the Navajo Nation Tribal Historic Preservation Officer, Tribes, and other consulting parties. This notice announces the opportunity for the public to comment on the results of the FAA's efforts to identify historic properties, evaluate the properties' significance, and assess the undertaking's effects on them. The agencies are seeking public input on the FAA's efforts to date in identifying consulting parties, determining the area of potential effects, identifying historic properties, and assessing the effects of the undertaking on historic properties within the area of potential effects. The agencies are providing the description of the undertaking, the consulting party list, the delineation of the proposed Area of Potential Effects (APE), the

results of the agencies' efforts to identify historic properties within the APE, the evaluation of their significance, and the agencies' approach to assessing the undertaking's effects upon the identified historic properties. Supporting documentation can be found at the following link: <https://parkplanning.nps.gov/CACHATMP>.

DATES: Any member of the public is encouraged to provide views on this project to the agencies. The agencies will accept and consider comments related to section 106. Comments must be received on or before December 1, 2023, by 11:59 MDT. Comments will be received on the PEPC website. The Park's website link is <https://parkplanning.nps.gov/CACHATMP>.

Before including your address, phone number, email address, or other personal identifying information in your comment, be advised that your entire comment—including your personal identifying information—may be made publicly available at any time. While you can ask in your comment to withhold from public review your personal identifying information, we cannot guarantee that we will be able to do so.

ADDRESSES: The public is encouraged to provide written comments regarding the section 106 documents provided in the PEPC website throughout the comment period.

Contact: Any request for reasonable accommodation related to providing comments on the Section 106 documents should be sent to the person listed on the Park's PEPC website. The U.S. Department of Transportation and U.S. Department of the Interior are committed to providing equal access to the meetings for all participants. If you need alternative formats or services because of a disability, such as sign language, interpretation, or other ancillary aids, please contact the person listed in the **FOR FURTHER INFORMATION CONTACT** section.

FOR FURTHER INFORMATION CONTACT: Sandra Fox, (202) 267–0928, Sandra.Y.Fox@faa.gov.

SUPPLEMENTARY INFORMATION:

Description of the Undertaking. The undertaking for purposes of section 106 is implementing an ATMP for the Park. Consistent with the NPATMA, the proposed ATMP would regulate commercial air tours over the Park or within ½ mile outside the boundary of the Park, including over tribal lands within or abutting the Park. A commercial air tour subject to the ATMP is any flight conducted for compensation or hire in a powered aircraft where a purpose of the flight is

sightseeing over the Park, or within ½ mile of its boundary, during which the aircraft flies:

(1) Below 5,000 feet above ground level (except solely for the purposes of takeoff or landing, or necessary for safe operation of an aircraft as determined under the rules and regulations of the FAA requiring the pilot-in-command to take action to ensure the safe operation of the aircraft); or

(2) Less than one mile laterally from any geographic feature within the Park (unless more than ½ mile outside the Park boundary).

Overflights that do not meet the definition above of a commercial air tour are not subject to the NPATMA and are thus outside the scope of the ATMP.

The agencies have documented the existing conditions for commercial air tour operations over the Park. Although there are four air tour operators with IOA (Interim Operating Authority), only one commercial air tour operator currently conducts tours over the Park. The operator currently flies one route west to east over the southern portion of the park, two routes running east to west and back through the center of the Park, and two routes entering and exiting through the north portion of the Park and passing along the center of the Park east to west and back. Until the ATMP is in place the operators could change routes to fly over other areas of the Park without notice to the agencies. Existing routes are depicted in Attachment A in the supporting documentation. The agencies consider the existing operations for commercial air tours to be an average of 2017–2019 annual air tours flown, which is 43 air tours. Based on 2017–2019 data, there was only one instance in which flights exceeded 1 per day (2 flights on 3/19/19). A three-year average is used because it reflects the most accurate and reliable air tour conditions, and accounts for variations across multiple years. Under existing conditions, commercial air tours over the Park are conducted using fixed wing aircraft: Cessna 182 and Cessna T207A. Reported minimum altitudes range from 800 to 1,000 feet (ft.) above ground level (AGL)¹ depending on the route. The proposed undertaking would prohibit commercial air tour operations within the ATMP planning area. A summary of

¹ Altitude expressed in units above ground level is a measurement of the distance between the ground surface and the aircraft, whereas altitude expressed in median sea level (MSL) refers to the altitude of aircraft above sea level, regardless of the terrain below it. Aircraft flying at a constant MSL altitude would simultaneously fly at varying AGL altitudes, and vice versa, assuming uneven terrain is present below the aircraft.

the undertaking elements is shown in the table below:

SUMMARY OF ATMP ELEMENTS

General Description and Objectives	Prohibits air tours within the ATMP planning area to maximize achievement of Park management objectives. Air tours could continue to fly outside the ATMP planning area (<i>i.e.</i> , at or above 5,000 feet AGL or more than ½-mile outside of the Park's boundary).
Annual/Daily Number of Flights	None in ATMP planning area.
Routes	None in ATMP planning area.
Minimum Altitudes	Flights over the Park at or above 5,000 feet AGL could occur as they are outside the ATMP planning area. Flights more than ½-mile outside the Park boundary could similarly still occur as they are also outside the ATMP planning area.
Time of Day	N/A.
Day of Week	N/A.
Seasonal	N/A.
Quiet Technology (QT) Incentives	N/A.
Annual Meeting, Operator Training and Education	N/A.
Restrictions for Particular Events	N/A.
Adaptive Management	N/A.
Initial Allocation, Aircraft Type, Competitive Bidding, and New Entrants	N/A.
Monitoring and Enforcement	Monitoring would occur to ensure operators are complying with the terms and conditions of the ATMP.
Interim Operating Authority ²	Terminates 180 days from the establishment date of the ATMP.

Delineation of the Proposed APE and Historic Property Identification. In establishing the proposed APE, the FAA sought to include areas where any historic property present could be affected by noise from or sight of commercial air tours that may take place under the undertaking, including those over the Park or adjacent tribal lands or those that are reasonably foreseeable. The FAA proposed an APE comprising the Park plus ½ mile outside the boundary of the Park. A map of the APE can be found on the Planning, Environment and Public Comment System (PEPC) website linked below.

To identify historic properties within the APE, the FAA coordinated with Park staff to identify known historic properties located within the APE. The FAA also coordinated with the Navajo Nation Heritage and Historic Preservation Department to collect data for previously identified properties that may be listed in or be eligible for listing in the National Register of Historic Places (National Register). The agencies performed an in-person records search at the Navajo Nation Heritage and Historic Preservation Department on September 13, 2023, which focused on identifying known Traditional Cultural Properties (TCPs) within the APE. The agencies have also consulted with other

consulting parties, including Tribes that have an interest in the area, to identify any historic properties not previously identified in the APE or additional information on historic properties previously documented in the APE. A summary of the identified historic properties and whether they are listed or eligible to be listed on the National Register can be found on the PEPC website linked below.

Assessment of Effects. In assessing the effect of the undertaking on historic properties within the APE, the FAA will take into consideration that the undertaking does not include land acquisition, construction, or ground disturbance and will not result in physical effects to historic properties. The agencies will assess the effects of the undertaking on a historic property to determine if it alters the characteristics that qualify the property for eligibility for listing or inclusion in the National Register. Effects are considered adverse if they diminish the integrity of a property's elements that contribute to its significance. The agencies will focus the assessment of effects on the potential for adverse effects from the introduction of audible or visual elements that could diminish the integrity of the property's significant historic features. The FAA is also considering whether air tours could affect the use of TCPs associated with cultural practices, customs, or beliefs that continue to be held or practiced today.

The agencies request that you provide any comments you may have regarding the undertaking, the historic property identification efforts, your views

regarding the significant characteristics of listed or eligible properties, and any information you might have that would help identify additional properties for which setting or feeling is a characteristic of significance. Your feedback on the potential of the undertaking to cause adverse effects to the historic properties is also welcomed.

This notice affords the public an opportunity to participate in section 106 activities for the development of an ATMP at Canyon de Chelly National Monument, including reviewing and providing comments on the section 106 process to date. The FAA and NPS encourage public participation and provide information on how to submit comments or feedback below. Supporting documentation can be found at the following link: <https://parkplanning.nps.gov/CACHATMP>.

The FAA and NPS are issuing this notice pursuant to section 800.2(d) of 36 CFR part 800, Protection of Historic Properties, and section 106 of 54 U.S.C. Subtitle III, National Historic Preservation Act. The section 106 implementing regulations at 36 CFR part 800 require FAA, as the lead Federal agency, to identify any properties within the project area that are listed in or eligible for listing in the National Register; to assess the effects the undertaking may have on historic properties; and to seek ways to avoid, minimize, or mitigate any adverse effects.

The FAA and the NPS are inviting comments from the public, Federal and State agencies, Tribes, and other interested parties on the section 106

² Commercial air tours over the Park are currently conducted under interim operating authority (IOA) that NPATMA required the FAA to grant air tour operators. Interim operating authority does not provide any operating parameters (routes, altitudes, etc.) for commercial air tours other than an annual limit. Under NPATMA, IOA for a park terminates by operation of law 180 days after an ATMP is established for that park.

process for Canyon de Chelly National Monument.

The FAA and the NPS have determined that the ATMP constitutes a Federal undertaking subject to compliance with section 106 of the NHPA and its implementing regulations at 36 CFR part 800. The FAA and the NPS have consulted with the Tribal Historic Preservation Officer, federally recognized Tribes, and other interested parties to identify historic properties and assess the potential effects of the ATMP on them.

The proposed APE for this undertaking (36 CFR 800.4(a)(1)) as defined at 36 CFR 800.16(d) is the geographic area or areas within which the undertaking may directly or indirectly cause alterations in the character or use of any historic properties, if any such properties exist. FAA and NPS approval of the ATMP does not require land acquisition, construction, or ground disturbance, and the FAA anticipates no physical effects to historic properties. The FAA is therefore focusing its assessment on the potential introduction of visual or audible elements that could diminish the integrity of any identified significant historic properties.

The historic property identification effort has focused on identifying properties for which setting and feeling are characteristics contributing to a property's National Register eligibility, as they are the type of historic property most sensitive to the effects of aircraft overflight. These may include isolated properties where a cultural landscape is part of the property's significance, rural historic districts, outdoor spaces designed for meditation or contemplation, and certain TCPs. The agencies have taken into consideration the views and input of consulting parties, past planning, research and studies, magnitude and nature of the undertaking, degree of Federal involvement, nature and extent of potential effects on historic properties, and the likely nature of historic properties within the APE in accordance with 36 CFR 800.4(b)(1). The historic property identification effort has focused on properties for which setting and feeling are characteristics contributing to the property's National Register eligibility.

In assessing the effects of the undertaking on historic properties in the APE, the FAA will consider the number and altitude of commercial air tours over historic properties to further assess the potential for visual effects and any incremental change in noise levels that may result in alteration of the characteristics of historic properties

qualifying them for the National Register.

The comment period is open to the public. The FAA and the NPS request that comments be as specific as possible. All written comments become part of the official record. Written comments regarding the section 106 consultation documents can be submitted via PEPC or sent to the mailing addresses provided on the Park's PEPC site. Comments will not be accepted by fax, email, or any other way than those specified above.

Issued in Washington, DC, on October 30, 2023.

Sandra Fox,

*Environmental Protection Specialist, FAA
Office of Environment & Energy.*

[FR Doc. 2023–24191 Filed 11–1–23; 8:45 am]

BILLING CODE 4910–13–P

DEPARTMENT OF TRANSPORTATION

Federal Railroad Administration

[Docket No. FRA–2023–0002–N–22]

Proposed Agency Information Collection Activities; Comment Request

AGENCY: Federal Railroad Administration (FRA), Department of Transportation (DOT).

ACTION: Notice of information collection; request for comment.

SUMMARY: Under the Paperwork Reduction Act of 1995 (PRA) and its implementing regulations, this notice announces that FRA is forwarding the Information Collection Request (ICR) summarized below to the Office of Management and Budget (OMB) for review and comment. The ICR describes the information collection and its expected burden. On August 25, 2023, FRA published a notice providing a 60-day period for public comment on the ICR.

DATES: Interested persons are invited to submit comments on or before December 4, 2023.

ADDRESSES: Written comments and recommendations for the proposed ICR should be sent within 30 days of publication of this notice to www.reginfo.gov/public/do/PRAMain. Find the particular ICR by selecting “Currently under Review—Open for Public Comments” or by using the search function.

FOR FURTHER INFORMATION CONTACT: Ms. Arlette Mussington, Information Collection Clearance Officer, at email: arlette.mussington@dot.gov or telephone: (571) 609–1285 or Ms.

Joanne Swafford, Information Collection Clearance Officer, at email:

joanne.swafford@dot.gov or telephone: (757) 897–9908.

SUPPLEMENTARY INFORMATION: The PRA, 44 U.S.C. 3501–3520, and its implementing regulations, 5 CFR part 1320, require Federal agencies to issue two notices seeking public comment on information collection activities before OMB may approve paperwork packages. See 44 U.S.C. 3506, 3507; 5 CFR 1320.8 through 1320.12. On August 25, 2023, FRA published a 60-day notice in the **Federal Register** soliciting public comment on the ICR for which it is now seeking OMB approval. See 88 FR 58435. FRA has received no comments related to the proposed collection of information.

Before OMB decides whether to approve this proposed collection of information, it must provide 30-days' notice for public comment. Federal law requires OMB to approve or disapprove paperwork packages between 30 and 60 days after the 30-day notice is published. 44 U.S.C. 3507(b)–(c); 5 CFR 1320.12(d); see also 60 FR 44978, 44983, Aug. 29, 1995. OMB believes the 30-day notice informs the regulated community to file relevant comments and affords the agency adequate time to digest public comments before it renders a decision. 60 FR 44983, Aug. 29, 1995. Therefore, respondents should submit their respective comments to OMB within 30 days of publication to best ensure having their full effect.

Comments are invited on the following ICR regarding: (1) Whether the information collection activities are necessary for FRA to properly execute its functions, including whether the information will have practical utility; (2) the accuracy of FRA's estimates of the burden of the information collection activities, including the validity of the methodology and assumptions used to determine the estimates; (3) ways for FRA to enhance the quality, utility, and clarity of the information being collected; and (4) ways to minimize the burden of information collection activities on the public, including the use of automated collection techniques or other forms of information technology.

The summary below describes the ICR that FRA will submit for OMB clearance as the PRA requires:

Title: Critical Incident Stress Plans.

OMB Control Number: 2130–0602.

Abstract: Under 49 CFR part 272, Class I, intercity passenger, and commuter railroads are required to develop, and submit to FRA for approval, a critical incident stress plan

Copies of All Public Comments Received for the National Historic Preservation Act Section 106 Documents for Air Tour Management Plan

Correspondence ID: 1 Project: 103419 Document: 132671
Name: Winney, Melissa S
Received: Nov,02 2023 11:14:10
Correspondence Type: Web Form

Correspondence: Good Morning,

I agree with the National Park Service I believe there should be NO air tours to fly over the Canyon De Chelly Monument. I feel that our canyon is scared to us and should be preserved as long as we can plus the noise from the aircrafts will disturb historic ruins and animal life not to mention the pollution it will cause in the air from the aircrafts. My family has land down in the canyon and I don't support air tours.

Thank you

Correspondence ID: 1863 Project: 103419 Document: 132671
Name:
Received: Nov,30 2023 11:44:49
Correspondence Type: Web Form

Correspondence: NO. NO to air tours over Canyon de Chelly. Air tours are not hozho. The rock and stone nations say NO. The plant and tree nations DO NOT want air traffic polluting their air, water, and ground. The four legged and winged nations DO NOT want the unnatural noise of air traffic. NO to colonizing the canyons air space. NO AIR TOURS.

Correspondence ID: 1864 Project: 103419 Document: 132671
Name: B, M
Received: Dec,04 2023
Correspondence Type: Web Form

Correspondence: I DO NOT support the 106 Documents for Air Tour Management Plan for Canyon de Chelly National Park. Our family lived in Chinle for years and continue to return to visit family. We have always enjoyed going into the canyon for various family reasons. We enjoy the beauty, the peacefulness and the connection to the land, water, plants, gardens, animals and families in the canyon. We also went up the canyon rims to get away from town to feel and smell the fresh air, listen to and watch the birds, lizards and wildlife around us.

If there are air tours around the canyon everything I mentioned would be invaded upon. There would be un-natural noise pollution, air pollution and a feeling of being watched like our people are on exhibit. Overtime I believe the noise/sound waves would begin to shake, vibrate and cause our ancient ruins to crumble. The same noise would scare the wildlife and upset the natural ecosystem that exists today. We need to keep our beautiful canyons as is for our future generations. There are already ways for tourists to see the canyon. That's enough, leave our airspace alone. Let our people have some peace and quiet and privacy. We are not here to further abuse Mother Earth and disrespect the gifts She has given us. DO NOT APPROVE AIR TOURS FOR CANYON DE CHELLY!

Correspondence ID: 1865 Project: 103419 Document: 132671
Name: Draper, Pliny M
Received: Dec,04 2023 16:35:57
Correspondence Type: Web Form

Correspondence: Canyon Del Muerto/De Chelly National Monument contains the two canyons that are the heartland of the Dine' (Navajo). These canyons differ from others, because they have so much history that they are sacred. They are also the spiritual home of the Anasazi, who lived there from more than 2,000 years. I am half Dine' and half Hopi, so my bloodline goes back over 2,000 years (Antelope House ruin is where my clan originated). The Hopi still make trips to their canyon shines. The White man is not spiritual, so he cannot understand that these spirits still live there. He also does not understand that the animal and trees and wind have spirits.

I have held a grazing permit for half of Canyon Del Muerto, since April 1978 (45 years). I inherited it from my grandfather, Philip Draper, Sr. The late US Senator Barry Goldwater was an avid hiker, and visited my grandfather, in the canyon, more than once. My great, great Dine' grandmother is believed to have been the first captured by Kit Carson and his army, in 1863. Before her, were our family ancestors that lived there for more than 500 years.

There are very strong canyon cross winds and updrafts, and the canyon walls very close in some places. It is not a safe place for helicopters. There are family homes in some of these areas. The canyon walls are solid sandstone that echo sounds for at least 10 miles away. I live 19.3 miles from the canyon mouth, so I would hear them before they halfway to my home. The canyons are the last refuge for many of the animals and plant life, due to "progress" on the rim. Some the plant and wildlife are on the endangered species list. The helicopter noise would likely cause stress, leading to lower birth rates.

The canyons are not a national monument to us, they are home to us, the animals, birds, plants and trees. What if the canyons were your home?

Correspondence ID:	1866	Project: 103419	Document:	132671
Name:	Tsosie, Charmaine T			
Received:	Dec,04 2023 21:31:52			
Correspondence Type:	Web Form			

Correspondence: "Canyon de Chelly National Monument preserves the remains of aboriginal Anasazi ruins from the Basket Maker II, ca. A.D. 350 through Pueblo III, ca. A.D. 1300, periods. It contains several large and hundreds of small excellently preserved sites of the prehistoric Anasazi. Many of the sites are cliff dwellings containing large amounts of dry, cultural debris. In addition, 18th, 19th and 20th century A.D. sites of Navajo occupancy remain in the monument. The monument is occupied by families who farm and graze the Canyons today. Canyon de Chelly was the site of Carson's campaign of 1864 which ended the American wars with the Navajo.

The remarkable scenery of Canyon de Chelly National Monument reflects the dramatic contrast of brightly colored sandstone walls and rock promontories that tower above sinuous bands of vegetation and agricultural fields along the narrow canyon floors. Canyon rim overlooks provide breathtaking panoramic views into and across the canyons to distant vistas. The presence of Navajo hogans and fields within the canyons set against a backdrop of ancient cliff dwellings visually reinforce the long span of human history and the continuing importance of the canyons for the resident Navajo community" Canyon DE Chelly and Canyon Del Muerto is home to Navajo residents. Airway traffic WILL disrupt the natural order of animal life and the preserved ruins and even the Canyon itself. Vibrations from the air traffic will weaken any loose walls and destroy the Canyon formation. Families still plant and reside with grazing animals in the Canyon. Please do not allow air traffic planning to proceed. It will not benefit our livelihood and will further destroy any remaining preserved historical sites and will disrupt natural habitat for people and animals alike.

Correspondence ID:	1867	Project: 103419	Document:	132671
Name:	Tsosie, Jon			
Received:	Dec,04 2023 21:43:18			
Correspondence Type:	Web Form			

Correspondence: The idea of having air tours is not in the interest of the Navajo people . Who is going to benefit from this? Definitely not the residents of Canyon de Chelly or surrounding areas. It is a selfish act on the NPS for their benefit. If NPS what's to do something, then why not open the restrooms inside the canyon for the guest

to use. Open white house trail and let the people have the freedom to sell their art without harassment.
Once again who benefits from this?
With air traffic, wildlife and domestic animals will be affected by the noise.
Who is going to control the traffic too?
With so many fragile things the noise could damage what my ancestors have built and left for use to care for .
I do not agree with the idea and hope that the idea is left at that, just a idea
No air tours over canyon de chelly

Correspondence ID:	1868	Project: 103419	Document:	132671
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Name:	Richards, Lisa
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Received:	Nov,29 2023
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Correspondence Type:	Letter
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Correspondence: Nov. 29, 2023

To: Nation Park Service Canyon do Chelly, National Monument + Volpe National Transportation

From: Lisa Richards, Phillip Draper's Granddaughter
Big Flow Canyon Canyon del Muerto

To whom it may concern -

This is a formal request to oppose the introduction of helicopter tours, to fly over, any part of Canyon del Muerto and Canyon de Chelly.

As a canyon resident in the summer, noise from the helicopters would greatly disrupt the peace and quiet, and pastoral environment, the animals and people need, to restore their spirit, and find solace in the canyon. The loud echoes would be unbearable.

Please do not allow any air tours over the canyon.

Sincerely,
Lisa + Mark + the Draper Family

Correspondence ID:	1869	Project: 103419	Document:	132671
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Name:	Lem, Deborah
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Received:	Dec,4 2023
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Correspondence Type:	Other
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Correspondence: December 04, 2023

Dear Sir or Madam,

My name is Deborah Lem, I'm full Diné, and I reside within the boundaries of Canyon De Chelly, AZ.

Thank you for giving us the opportunity to comment on air tours above our serene homeland Canyon De Chelly, Tseyi'. As a person who tries to co exist, honor, and respect all living beings above me, beneath me, and around me, this plan of air tours wil be of no benefit whatsoever to our Diné, Tseyi' community, in fact it will compromise and further frustrate our commitment of sacred Tseyi' stewardship from times millenia. The air pollution will envitably cause irrevocable, adverse, and tragic effects, from the sky above Tseyi' to the land beneath. It will cause irreparable, irreversible, harm and damage, to the precious, delicate, fragile, historic ancient homesites, which abound in Tseyi'. Canyon De Chelly has been home for past Native peoples for thousands of years. Our ancestors' ancient homes, rock art panels, burial sites, historic fortresses, peach orchards, trails, pole ladders, ceremonial chambers still stand and are intact to this day. These sacred art panels, trails and ancient home sites are monuments to us. Surely, NPS, nor FAA would allow low, daily, tourism flyovers over the Statue of Liberty or Mount Rushmore.. WHY OUR BEAUTIFUL Canyon De Chelly, TSEYI' MONUMENT?? Most of our ancestral monuments stand today because of our sacred respect and deep, abiding ties to our homeland and the tender teaching of KE', which means respect in Diné. Respecting, caring, and being sensitive to those all around, the physical and spiritual, the

land, the animals; air, water, sky, rocks, trees, plants, and most certainly our ancestors' homes and pathways. These ancient sites draw visitors worldwide. One of the primary comments visitors make is that the canyon is so quiet, so serene. Ancient, amazing architecture stand today because of our ancestors respectful, responsible, canyon land management. As Diné children we were taught to never enter or bother archaeological sites.

Our family has had land in the canyon for many centuries. Canyon De Chelly is one of the most beautiful places on earth, attracting and sustaining many ancient peoples from before Jesus Christ time. I have land in the canyon maintaining our traditional farming ways. I also hold a legal "land use permit" in Canyon De Chelly. My time in the canyon is always a time of physical rejuvenation and spiritual restoration. Our canyon is alive and living, giving life, and sustaining life. We enjoy the solitude and dont want that disrupted by air tours.

The current air restrictions above Canyon De Chelly should remain in place so that we can maintain our sacred, beautiful, serene, partnership of life with our awesome Tseyi'. Thank you for your time and attention in this matter.

Sincerely,

Deborah Lem/Canyon De Chelly Resident
PO Box 3471
Chinle, AZ 86503

Correspondence ID:	1870	Project: 103419	Document:	132671
Name:	McClanahan, Lupita			
Received:	Nov,25 2023			
Correspondence Type:	Other			
Correspondence:	November 25, 2023			

To whom it may concern:

My name is Lupita McClanahan and my family has lived in Canyon de Chelly for as long as there have been stories. When Charles Linberg landed his plan alongside my family, we welcomed him. Then his companions got out and took pottery from our ancestors' homes. Another story is when we visited the beautiful Beehive Cave Cliff Dwelling in its pristine condition. Then the government's airplane testing, their sonic booms caused rock falls and destroyed some of the cliff dwellings.

I make my living by giving people from the modern world a sense of what traditional Diné (Navajo) relationship with the land, the air, and the canyon can be. What I can offer is becoming more and more rare everyday. Bringing airplanes overhead, accelerates the decay of our connection to the land. The Park Service has told us that we cannot use ATV's, generators, water pumps, and other noisy machines. Why should an air tour airplanes be allowed?

Most importantly, by flying over my ancestral land you are blocking my spiritual connection with "Talking God". I would suggest that you speak more openly to the residents and the elderlies - the medicine man and woman before you do this. Many of us still practice the secret ways of our ceremonies. Quietness and privacy are always required.

We (I) feel that an intrusion into our ceremonies in this way, is a violation of the freedom of religion act. Therefore, we (I) are considering legal action to prevent this happening.

However, I know that if people developed the same kind of relationship with the land and the air breath, there would be no possible way for this to happen. I invite you to come and visit me in my hogan on the canyon floor to listen to the silence and connect with the creators. Then we can talk about if any of this makes sense.

Thank you for your time and I look forward to your visit.

Lupita McClanahan / Resident of Canyon de Chelly



United States Department of Transportation
FEDERAL AVIATION ADMINISTRATION
Office of Policy, International Affairs & Environment
Office of Environment and Energy

NATIONAL PARKS AIR TOUR MANAGEMENT PROGRAM

December 28, 2023

Re: Continuing Consultation and Finding of No Adverse Effect under Section 106 of the National Historic Preservation Act for the development of an Air Tour Management Plan for Canyon de Chelly National Monument

Buu Nygren
President
Navajo Nation
PO Box 7440
Window Rock, AZ 86515

Dear President Nygren:

Introduction

The Federal Aviation Administration (FAA), in coordination with the National Park Service (NPS) (together, the agencies), seeks to continue consultation with your office under Section 106 of the National Historic Preservation Act (NHPA) for the development of an Air Tour Management Plan (ATMP) for Canyon de Chelly National Monument (the Park). At this time, the FAA requests your concurrence with its proposed finding that the undertaking would have no adverse effect on historic properties, in accordance with 36 CFR 800.5(c). On this date, we are also notifying all consulting parties of this proposed finding and providing the documentation below for their review.

In accordance with the requirements of 36 CFR 800.11(e), this letter provides: a description of the undertaking - an ATMP that would not permit commercial air tours in the planning area (the preferred alternative under the National Environmental Policy Act (NEPA)); the Area of Potential Effects (APE); a description of steps taken to identify historic properties; a description of historic properties in the APE and the characteristics that qualify them for listing in the National Register of Historic Places (National Register); and an explanation of why the criteria of adverse effect do not apply to this undertaking. This letter also describes the Section 106 consultation process and public involvement for this undertaking.

The FAA initiated Section 106 consultation with your office by letter dated May 21, 2021. In a follow-up letter dated June 2, 2023, we described the proposed undertaking in more detail, proposed a preliminary APE, and provided our initial list of historic properties identified within the APE. In a letter dated October 26, 2023, we provided an updated list of historic properties identified within the APE for

review and comment. Similar letters were sent to all consulting parties listed in **Attachment A**. Section 106 consultation with consulting parties including federally recognized tribes is further described below.

The agencies invited public involvement for this undertaking through a Federal Register Notice and NPS's Planning, Environment and Public Comment System (PEPC) website. Through these platforms, the public was invited to participate in Section 106 activities, specifically reviewing and providing comments on the Section 106 process and the FAA's efforts to identify consulting parties, determine the APE, identify historic properties, and assess the effects of the undertaking on historic properties within the APE. In total, five comments were received during the thirty-day comment period. Of the five, two of the comments opposed air tours over the Park generally. One commenter stated, "I feel that our canyon is [sacred] to us and should be preserved as long as we can plus the noise from the aircrafts will disturb historic ruins and animal life not to mention the pollution it will cause in the air from the aircrafts." Another commenter mentioned that "ancestors' ancient homes, rock art panels, burial sites, historic fortresses, peach orchards, trails, pole ladders, ceremonial chambers still stand and are intact to this day... As Dine' children we were taught to never enter or bother archaeological sites." A fifth commentor expressed that air tours over ancestral land block spiritual connections during sacred ways of ceremonies, which require quietness and privacy.

Description of the Undertaking

The undertaking for the purposes of Section 106 compliance is implementing an ATMP that applies to all commercial air tours over the Park and within ½ mile outside the Park's boundary. Under NPATMA and its implementing regulations, a commercial air tour subject to the ATMP is any flight conducted for compensation or hire in a powered aircraft where a purpose of the flight is sightseeing over the Park, or within ½ mile of its boundary, during which the aircraft flies:

- (1) Below 5,000 feet above ground level (except solely for the purposes of takeoff or landing, or necessary for safe operation of an aircraft as determined under the rules and regulations of the FAA requiring the pilot-in-command to take action to ensure the safe operation of the aircraft); or
- (2) Less than one mile laterally from any geographic feature within the Park (unless more than ½ mile outside the Park boundary).

The area regulated by the ATMP is referred to as the ATMP planning area. Overflights that do not meet the definition of a commercial air tour above are not subject to NPATMA and are thus outside the scope of the ATMP.

The agencies have documented the existing conditions for commercial air tour operations over the Park. Although there are four air tour operators with IOA (Interim Operating Authority), only one commercial air tour operator, Southwest Safaris, currently conducts tours over the Park. The agencies consider the existing operations for commercial air tours to be an average of 2017-2019 annual air tours flown, which is 43 air tours that occurred. A three-year average is used because it reflects the most accurate and reliable air tour conditions, and accounts for variations across multiple years. Under existing conditions, commercial air tours over the Park are conducted using a fixed wing aircraft, CE-182-R and CE-T207A. The fixed-wing operator flew 38 tours in 2017, 30 tours in 2018, and 62 tours in 2019. Southwest Safaris conducts commercial air tours on the three routes depicted in **Attachment B**. Reported minimum

altitudes range from 800 ft. to 1,000 ft. AGL¹. Under existing conditions, the operator is not required to use these routes and may change the routes without notice to the agencies.

The proposed undertaking would prohibit commercial air tour operations within the ATMP planning area. A summary of the undertaking elements is shown in the table below:

SUMMARY OF ATMP ELEMENTS

General Description and Objectives	Prohibits air tours within the ATMP planning area to maximize achievement of Park management objectives. Air tours could continue to fly outside the ATMP planning area (i.e., at or above 5,000 feet AGL or more than ½-mile outside of the Park's boundary).
Annual/Daily Number of Flights	None in ATMP planning area.
Routes	None in ATMP planning area.
Minimum Altitudes	Flights over the Park at or above 5,000 feet AGL could occur as they are outside the ATMP planning area. Flights more than ½-mile outside the Park boundary could similarly still occur as they are also outside the ATMP planning area.
Time of Day	N/A
Day of Week	N/A
Seasonal	N/A
Quiet Technology (QT) Incentives	N/A
Annual Meeting, Operator Training and Education	N/A
Restrictions for Particular Events	N/A
Adaptive Management	N/A
Initial Allocation, Aircraft Type, Competitive Bidding, and New Entrants	N/A
Monitoring and Enforcement	Monitoring would occur to ensure operators are complying with the terms and conditions of the ATMP.
Interim Operating Authority²	Terminates 180 days from the effective date of the ATMP.

¹ Altitude expressed in units above ground level (AGL) is a measurement of the distance between the ground surface and the aircraft, whereas altitude expressed in median sea level (MSL) refers to the altitude of aircraft above sea level, regardless of the terrain below it. Aircraft flying at a constant MSL altitude would simultaneously fly at varying AGL altitudes, and vice versa, assuming uneven terrain is present below the aircraft.

² Commercial air tours over the Park are currently conducted under interim operating authority (IOA) that the Act required the FAA to grant air tour operators. Interim operating authority does not provide any operating parameters (routes, altitudes, etc.) for commercial air tours other than an annual limit. Under the Act, IOA for a park terminates by operation of law 180 days after an ATMP is established for that park.

Area of Potential Effects (APE)

The undertaking does not require land acquisition, construction, or ground disturbance. In establishing the APE, the FAA sought to include areas where any historic property present could be affected by noise from or sight of commercial air tours that may take place under any of the selectable draft alternatives, including those over the Park or those that are reasonably foreseeable to take place adjacent to the ATMP planning area. The FAA considered the number and altitude of commercial air tours over historic properties in these areas to further assess the potential for visual effects and any incremental change in, or elimination of, noise levels that may result in alteration of the characteristics of historic properties qualifying them for listing in the National Register.

The APE was delineated based on the undertaking's potential effects in consultation with the Navajo Nation's Tribal Historic Preservation Officer (THPO) and in consideration of input by consulting parties. The FAA also requested input on the relocation of air tours outside of the ATMP planning area but did not receive any additional input on this issue. Therefore, the APE for this undertaking comprises the Park plus ½ mile outside the boundary of the Park, as depicted in **Attachment B** below.

The APE for the undertaking was proposed in the Section 106 consultation letter dated June 2, 2023, which was sent to all consulting parties. On June 15, 2023, Grand Canyon Airlines and Air Grand Canyon responded to the FAA noting that they oppose eliminating air tours over the Park and requesting that the number of allowed air tour operations remain the same or be increased. Southwest Safaris provided comments in letters dated June 9, 2023, June 12, 2023, and June 30, 2023. In those letters, Southwest Safaris did not agree with the proposed undertaking and took the position that overflights do not harm historic properties. On July 31, 2023, the National Parks Conservation Association provided comments stating that they did not have additions to the preliminary list of historic properties and encouraged the FAA to continue consulting with the Navajo Nation. The THPO did not provide input on the APE and no additional comments were received regarding the APE. Therefore, the APE has not changed.

Summary of Section 106 Consultation

The FAA contacted the Navajo Nation and 23 federally recognized tribes via letter on March 26, 2021, inviting them to participate in consultation and requesting their expertise regarding historic properties, including Traditional Cultural Properties (TCPs) that may be located within the APE. On December 3, 2021, and December 9, 2021, the FAA sent follow up emails to the federally recognized tribes once again inviting them to participate in Section 106 consultation. On December 15, 2021, and December 20, 2021, the FAA followed up with phone calls to those tribes that did not respond to prior consultation requests. The FAA received responses from four tribes expressing interest in participating in the Section 106 consultation process: Pueblo of Acoma, Pueblo of Isleta, Pueblo of Tesuque, and Pueblo of Picuris. Five tribes opted out of additional consultation for the undertaking: Pueblo of Pojoaque, Pueblo of Sandia, Pueblo of Santa Ana, San Carlos Apache Tribe, and White Mountain Apache Tribe.

On June 2, 2023, the FAA sent the participating federally recognized tribes a Section 106 consultation letter describing the proposed undertaking in greater detail in which a proposed APE and the results of the preliminary identification efforts of historic properties was provided. The agencies recognize that these tribes have a long-standing and deeply rooted association with the landscape that encompasses Canyon de Chelly National Monument, which includes numerous sites of religious and cultural significance. All of the lands within the Park are Navajo Nation Tribal Trust Lands.

The FAA invited the National Parks Conservation Association (Arizona Field Office) and Apache County to participate in consultation by letter dated June 9, 2021, and August 6, 2021, respectively and included them as consulting parties in subsequent consultation. On June 2, 2023, the FAA also invited the National Trust for Historic Preservation, Southwest Safaris, and Grand Canyon Airlines to consult under Section 106 and provided a Section 106 consultation letter describing the proposed undertaking and proposed an APE. In the June 2, 2023, letter, the FAA also provided the results of our preliminary identification of historic properties.

The consulting parties whom the FAA contacted as part of this undertaking are included in the list of consulting parties enclosed as **Attachment A**.

Identification of Historic Properties

In accordance with 36 CFR 800.4, the FAA has made a reasonable and good faith effort to identify historic properties within the APE. As the undertaking would not result in physical effects, the identification effort focused on identifying properties where setting and feeling are characteristics contributing to a property's National Register eligibility, as they are the type of historic properties most sensitive to the effects of aircraft overflights. These may include isolated properties where a cultural landscape is part of the property's significance, rural historic districts, and outdoor spaces designed for meditation or contemplation. The FAA is specifically considering whether air tours could affect the use of TCPs associated with cultural practices, customs or beliefs that continue to be held or practiced today. In so doing, the FAA has taken into consideration the views of consulting parties, past planning, research and studies, the magnitude and nature of the undertaking, the degree of Federal involvement, the nature and extent of potential effects on historic properties, and the likely nature of historic properties within the APE in accordance with 36 CFR 800.4(b)(1).

The initial identification of historic properties relied upon data submitted by the NPS regarding known historic properties in the Park. The FAA also coordinated with the Navajo Nation Heritage and Historic Preservation Department to collect data for previously identified properties that may be listed in or are eligible for listing in the National Register. The FAA and NPS performed an in-person records search at the Navajo Nation Heritage and Historic Preservation Department on September 13, 2023, which focused on identifying known TCPs within the APE. While the TCPs are noted in **Attachment C** in a general manner, TCPs identified solely by ID number in **Attachment C** are not mapped in **Attachment B** to ensure confidentiality.

The FAA also consulted with the consulting parties, including federally recognized tribes listed in **Attachment A** regarding the identification of any other previously unidentified historic properties that may be located within the APE. The FAA also invited the public to provide feedback on the list of historic properties identified.

A preliminary list of historic properties was provided to all consulting parties for their review and comment in a letter dated June 2, 2023. A letter dated October 26, 2023, sent to all consulting parties, described FAA's further efforts to identify and evaluate historic properties within the APE and provided results of those efforts. The list of historic properties within the planning area and a description of significant characteristics can be found in **Attachment C**. The agencies did not receive any comments from consulting parties identifying additional historic properties within the APE.

The effort described resulted in the identification of 39 historic properties within the APE for which feeling and setting are characteristics that make the properties eligible for listing on the National Register, which are listed in **Attachment C**. Those historic properties identified with available non-restricted location data are shown in the APE map provided in **Attachment B**. There are approximately 1,600 additional inventoried and recorded below-ground archaeological sites within the APE; however, these below-ground archaeological resources are not further described in this letter because feeling and setting are not characteristics that make these properties eligible for listing on the National Register and there is no potential for the undertaking to affect these resources.

Assessment of Effects

The undertaking could have an effect on a historic property if it alters the characteristics that qualify the property for eligibility for listing or inclusion in the National Register. The characteristics of the historic properties within the APE that qualify them for inclusion in the National Register are described in **Attachment C**. Effects are considered adverse if they diminish the integrity of a property's elements that contribute to its significance. The undertaking does not include land acquisition, construction, or ground disturbance and will not result in physical effects to historic properties. The FAA, in coordination with the NPS, focused the assessment of effects on the potential for adverse effects from the introduction of audible or visual elements that could diminish the integrity of the property's significant historic features.

Assessment of Noise Effects

To assess the potential for the introduction of audible elements, including changes in the character of aircraft noise, the agencies considered whether there would be a change in the annual number, daily frequency, routes, or altitudes of commercial air tours, as well as the type of aircraft used to conduct those tours. The level of commercial air tour activity under the ATMP is expected to improve the protection of cultural resources within the APE.

The ATMP prohibits commercial air tours within the ATMP planning area and would reduce noise effects to historic properties. Therefore, the undertaking would not alter the characteristics of historic properties within the APE in comparison to existing conditions. The elimination of air tours within the ATMP planning area will reduce maximum noise levels at sites directly below commercial air tour routes compared to existing conditions. All historic properties within the APE would experience a reduction in noise from air tours.

For purposes of assessing noise impacts from commercial air tours on the acoustic environment of the Park under NEPA, the FAA noise evaluation is based on Yearly³ Day Night Average Sound Level (L_{dn} or DNL); the cumulative noise energy exposure from aircraft over 24 hours. The DNL analysis indicates that the undertaking would not result in any noise impacts that would be "significant" or "reportable" under the FAA's policy for NEPA.⁴

³ Yearly conditions are represented as the Average Annual Day (AAD)

⁴ Under FAA policy, an increase in the Day-Night Average Sound Level (DNL) of 1.5 dBA or more for a noise sensitive area that is exposed to noise at or above the DNL 65 dBA noise exposure level, or that will be exposed at or above the DNL 65 dBA level due to a DNL 1.5 dBA or greater increase, is significant. FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures*, Exhibit 4-1. Noise increases are "reportable" if the DNL increases by 5 dB or more within areas exposed to DNL 45-60 dB, or by 3 dB or more within areas exposed to DNL 60-65 dB. FAA Order 1050.1F, Appendix B, section B-1.4.

As part of the ATMP noise analysis, the NPS provided supplemental metrics to further assess the impact of commercial air tours in quiet settings: time above 35 dBA, time above 52 dBA And Maximum Sound Level (L_{max}). These metrics account for the amount of time in minutes that aircraft sound levels are above a given threshold (i.e., 35 dBA and 52 dBA). In quiet settings, outdoor sound levels exceeding 35 dB degrade experience in outdoor performance venues (American National Standards Institute (ANSI), 2007). Interference with Park interpretive programs would reasonably occur at 52 dBA. **Attachment D** provides further information about the supplemental noise metrics and presents the results of modeling.

Attachment D presents noise contours (i.e. graphical illustration depicting noise exposure) for existing conditions. Under existing conditions, noise related to commercial air tours is greater than 35 dBA for less than 5 minutes within 69% of the ATMP planning area on days in which air tours occur and greater than 52 dBA for less than 5 minutes in 7% of the ATMP planning area on days in which air tours occur. Because noise is modeled using conservative assumptions (see **Attachment D**) and implementing the ATMP would eliminate flights and routes within the ATMP planning area, noise is expected to be reduced within the ATMP planning area. The elimination of air tours within the ATMP planning area will also reduce the likelihood that an air tour would interrupt traditional practices such as ceremonies, as compared to existing conditions. Therefore, the undertaking would not diminish the integrity of any historic property's significant historic features.

Assessment of Visual Effects

Recognizing that some types of historic properties may be affected by visual effects of commercial air tours, the agencies considered the potential for the introduction of visual elements that could alter the characteristics of a historic property that qualify it for inclusion in the National Register. Aircraft are transitory elements in a scene and visual impacts tend to be relatively short. The elimination of flights within the ATMP planning area make it unlikely a historic property within the ATMP planning area would experience a visual effect from the undertaking. The agencies also considered the experience of tribal members who may be conducting ceremonies or practices that could involve looking toward the sky. The elimination of air tour aircraft overhead represents an improvement as compared to existing conditions.

The ATMP prohibits commercial air tours within the ATMP planning area and would not introduce visual elements that would alter the characteristics of any historic property that qualifies it for inclusion in the National Register. All historic properties within the APE would experience a reduction in visual intrusions from air tours, therefore the undertaking would not introduce visual elements that would alter the characteristics of any historic property that qualifies it for inclusion in the National Register.

Indirect Effects

Because the undertaking would eliminate air tours within the ATMP planning area, the agencies also considered the potential for indirect effects on historic properties within the APE that could occur from air tours displaced outside the ATMP planning area as a result of the undertaking. It is unlikely that the operator would continue to conduct commercial air tours of the Park by flying along the perimeter of the ATMP planning area because it is difficult to see the predominant features of the Park from outside the ATMP planning area. Flights at or above 5,000 ft. AGL are unlikely due to the Park's elevation and safety requirements for unpressurized aircraft flying over 10,000 ft. MSL for more than 30 minutes. If air tours are conducted at or above 5,000 ft. AGL over the ATMP planning area, the increase in altitude

would likely decrease impacts on ground level resources as compared to current conditions because the noise would be dispersed over a larger geographical area. Noise from air tours conducted at or above 5,000 ft. AGL would be audible for a longer period, but at lower intensity. Similarly, aircraft are transitory elements in a scene and visual impacts tend to be relatively short, especially at higher altitudes.

Finding of No Adverse Effect Criteria

To support a Finding of No Adverse Effect, an undertaking must not meet any of the criteria set forth in the Advisory Council on Historic Preservation's Section 106 regulations at 36 CFR 800.5(a). This section demonstrates the undertaking does not meet those criteria. The undertaking would not have any physical impact on any property. The undertaking would not result in any alteration or physical modifications to historic properties. The undertaking would not remove any property from its location. The undertaking would not change the character of any property's use or any physical features in any historic property's setting. As discussed above, the undertaking would not introduce any auditory or visual elements that would diminish the integrity of the significant historical features of any historic properties in the APE. The undertaking would not cause any property to be neglected, sold, or transferred.

Proposed Finding and Request for Review and Concurrence

FAA and NPS approval of the undertaking would not alter the characteristics of any historic properties located within the APE in a manner that would diminish its integrity as there would be a reduction in audible or visual effects from existing conditions. Based on the above analysis, the FAA proposes a finding of no adverse effect on historic properties. We request that you review the information and respond whether you concur with the proposed finding within 30 days of receiving this letter.

Should you have any questions regarding any of the above, please contact Judith Walker at 202-267-4185 or Judith.Walker@faa.gov and copy the ATMP team at ATMPTeam@dot.gov.

Sincerely,

A handwritten signature in black ink, appearing to read 'Judith Walker', with a long, sweeping horizontal line extending to the right.

Judith Walker
Federal Preservation Officer
Senior Environmental Policy Analyst
Environmental Policy Division (AEE-400)
Federal Aviation Administration

Attachments

- A. List of Consulting Parties
- B. APE Map including existing Commercial Air Tour Routes
- C. List of Historic Properties in the APE and Description of Historic Characteristics
- D. Summary of Noise Technical Analysis from NEPA Review

ATTACHMENT A
List of Consulting Parties

American Aviation
Apache County (Cities of Chinle and Del Muerto)
Grand Canyon Airlines, Inc. (Grand Canyon Airlines, Scenic Airlines, Grand Canyon Scenic Airlines) and Air Grand Canyon ²
Hopi Tribe of Arizona
Kewa Pueblo
National Parks Conservation Association -Arizona
National Trust for Historic Preservation
Navajo Nation
Ohkay Owingeh
Pueblo de Cochiti
Pueblo of Acoma
Pueblo of Isleta
Pueblo of Jemez
Pueblo of Laguna
Pueblo of Nambe
Pueblo of Picuris
Pueblo of Pojoaque ¹
Pueblo of San Felipe
Pueblo of San Ildefonso
Pueblo of Sandia ¹
Pueblo of Santa Ana ¹
Pueblo of Santa Clara
Pueblo of Taos
Pueblo of Tesuque
Pueblo of Zia
San Carlos Apache Tribe of the San Carlos Reservation ¹

Southwest Safaris
White Mountain Apache Tribe of the Fort Apache Reservation ¹
Ysleta Del Sur Pueblo
Zuni Tribe of the Zuni Reservation

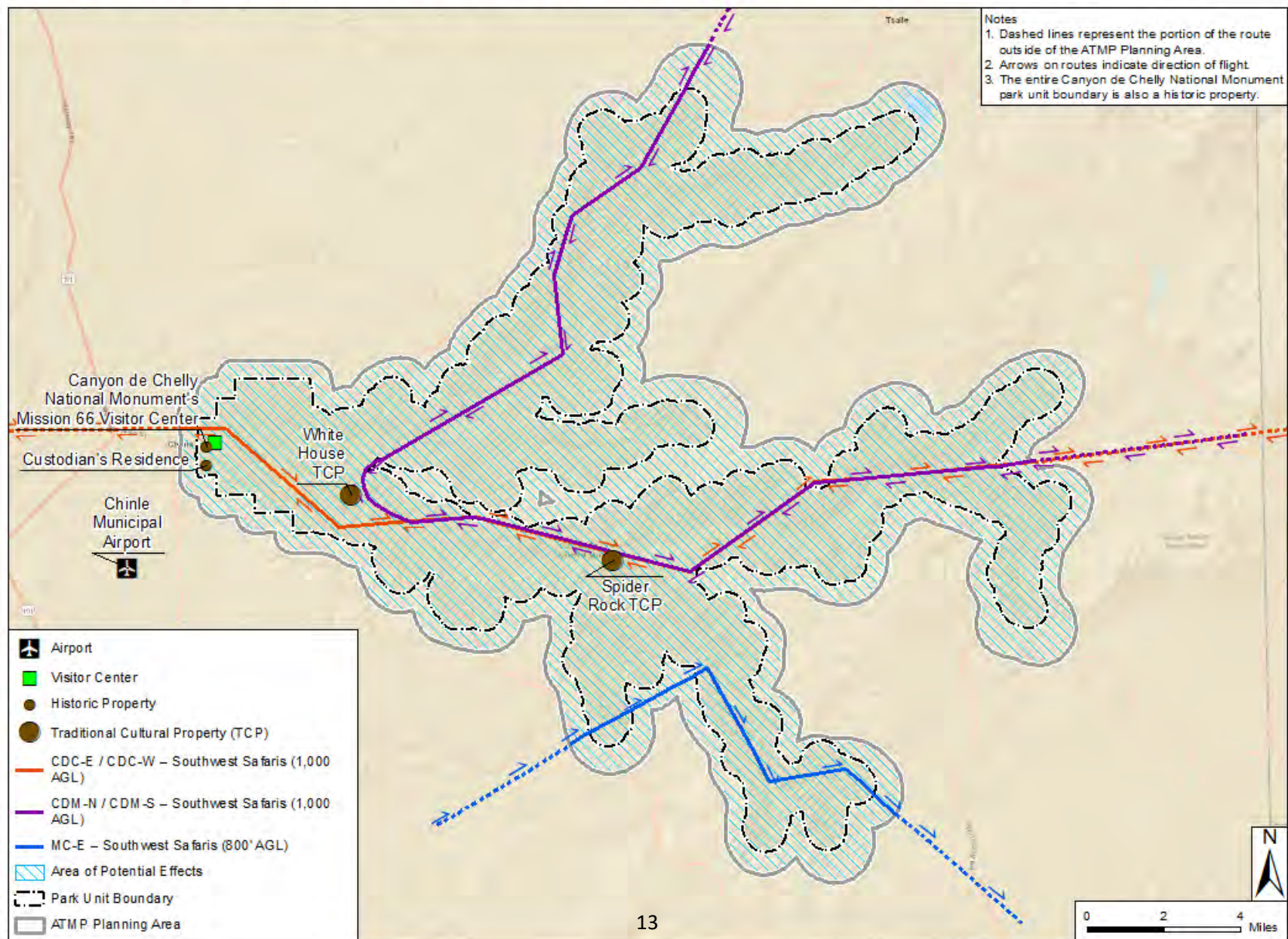
¹Consulting party has opted out of further Section 106 consultation for the undertaking.

²The point of contact for Air Grand Canyon and Grand Canyon Airlines are the same.

ATTACHMENT B

**Area of Potential Effects Map
Including
Existing Commercial Air Tour Routes**

AREA OF POTENTIAL EFFECTS INCLUDING EXISTING COMMERCIAL AIR TOUR ROUTES



ATTACHMENT C

List of Historic Properties in the APE and Description of Historic Characteristics

Property Name	Property Type	Eligibility Status	Significant Characteristics
Canyon de Chelly National Monument	District	Listed	<p>Canyon de Chelly National Monument preserves the remains of aboriginal Anasazi ruins from the Basket Maker II, ca. A.D. 350 through Pueblo III, ca. A.D. 1300, periods. It contains several large and hundreds of small excellently preserved sites of the prehistoric Anasazi. Many of the sites are cliff dwellings containing large amounts of dry, cultural debris. In addition, 18th, 19th and 20th century A.D. sites of Navajo occupancy remain in the monument. The monument is occupied by families who farm and graze the Canyons today. Canyon de Chelly was the site of Carson's campaign of 1864 which ended the American wars with the Navajo.</p> <p>The remarkable scenery of Canyon de Chelly National Monument reflects the dramatic contrast of brightly colored sandstone walls and rock promontories that tower above sinuous bands of vegetation and agricultural fields along the narrow canyon floors. Canyon rim overlooks provide breathtaking panoramic views into and across the canyons to distant vistas. The presence of Navajo hogans and fields within the canyons set against a backdrop of ancient cliff dwellings visually reinforce the long span of human history and the continuing importance of the canyons for the resident Navajo community.</p>
Custodian's Residence	Building	Eligible	<p>Constructed in 1935-7, the building is an excellent example of Pueblo Revival Architecture. It is a good example of the Southwestern atmosphere of Canyon de Chelly. Although its architectural roots were not Navajo, its design was appropriate for the site in a broader, regional context. Its significance is arguably conveyed through setting and feeling by way of spatial relationships with other historic buildings nearby. The building used to be considered contributing to the Thunderbird Lodge historic district (delisted from the National Register). The character of the building's setting and feeling is still conveyed through its association with these other buildings in the Thunderbird Lodge complex.</p>
Canyon de Chelly National Monument's Mission 66 Visitor Center	Building	Eligible	<p>From 1956 to 1966, the Park Service commissioned over one hundred new visitor centers and additions to existing museum buildings. Local contract architects were responsible for some of the designs, but the bulk of the work went to Park Service architects. The Canyon de Chelly National Monument's Mission 66 Visitor Center was constructed in 1964 by Cecil Doty, an architect from Oklahoma trained in the traditional Park Service Rustic style of design. These buildings were</p>

Property Name	Property Type	Eligibility Status	Significant Characteristics
			designed to harmonize with the surrounding landscape. Some of them, including the Visitor Center, contain viewing terraces overlooking an area of the Park. The specific visitor center viewsheds at CACH overlook the mouth of the canyon from two (east and west-facing) adjoining courtyard terraces. These viewsheds are likely character defining features of the building as it is sitting at the mouth of the canyon and offers interpretive value from the building's courtyard terraces.
TCPs within the Park boundary ⁵	TCPs	Eligible	<ul style="list-style-type: none"> • North: ID#88, ID#395, ID#455 • West: ID#16, ID#87, ID#172, ID#182, ID#184, ID#217, ID#219, ID#373, ID#375, ID#378, ID#379, ID#392, ID#393, ID#406, ID#414, ID#424, ID#434, ID#435, ID#437, ID#477, ID#552, ID#1052, ID#1058 • East: ID#202, ID#234, ID#898 <p>Setting and feeling are significant characteristics for several of the TCPs that were identified within the APE. For example, some places are used as the person stands on the rim of an overlook and prays, for prayers in general, or as storage places for bundles or offerings that are used during ceremony.</p>
TCPs within the half-mile boundary around the Park. ⁵	TCPs	Eligible	ID#32, ID#73, ID#574, ID#1080: Setting and feeling are significant characteristics for several of the TCPs that were identified within the APE. For example, some places are used as the person stands on the rim at the overlook and prays, for prayers in general or as storage places for bundles or offerings that are used during ceremony.
White House TCP (ID#184)	TCP	Eligible	White House Ruins in Canyon de Chelly (Kiní'na'ígai) has an associated ceremonial history. Pre-Columbian sites can be sources of spiritual, sacred power to Navajo people. Offerings are made at these sites, and oral histories (of the people, of ceremonies, of clans) refer to these places at times when people were still living there. This place has been continuously used for contemplation and prayer by the Navajo people. Significant characteristics of this TCP include the natural scenery and vegetation, which are linked to ceremonial visions.
Spider Rock TCP (ID#414)	TCP	Eligible	Spider Rock is a significant TCP for the Navajo. The rock is considered the home of Spider Woman, a benevolent figure who is recognized in many traditional Native American oral stories as a guide, protector and healer, teacher, disciplinarian, adviser and/or spiritual leader. Spider Rock is eligible for inclusion in the National Register because of its association with cultural practices or beliefs

⁵ Location is restricted and therefore cannot be shown on the APE map.

Property Name	Property Type	Eligibility Status	Significant Characteristics
			that are rooted in various Southwestern Native American histories and because it is important in maintaining cultural identity. Spider Rock's natural surroundings, viewshed and noise constraints are vitally important in conveying respect for Spider Woman and her home, in sharing lessons taught by Spider Woman regarding weaving, and in establishing a geographical context for oral histories as well as healing ceremonies.

ATTACHMENT D

Summary of Noise Technical Analysis from NEPA Review

There are numerous ways to measure the potential impacts from commercial air tours on the acoustic environment of a park, including intensity, duration, and spatial footprint of the noise. The metrics and acoustical terminology used for the ATMPs are shown in the table below.

Metric	Relevance and citation
Equivalent sound level, $L_{Aeq, 12\text{ hr}}$	The logarithmic average of commercial air tour sound levels, in dBA, over a 12-hour day. The selected 12-hour period is selected to represent typical daytime commercial air tour operating hours.
Day-night average sound level, L_{dn} (or DNL)	<p>The logarithmic average of sound levels, in dBA, over a 24-hour day, DNL takes into account the increased sensitivity to noise at night by including a 10 dB penalty between 10 PM and 7 AM local time.</p> <p>Note: Both $L_{Aeq, 12\text{ hr}}$ and DNL characterize:</p> <ul style="list-style-type: none"> • Increases in both the loudness and duration of noise events • The number of noise events during specific time period (12 hours for $L_{Aeq, 12\text{ hr}}$ and 24-hours for DNL) <p>If there are no nighttime events, then $L_{Aeq, 12\text{ hr}}$ is arithmetically three dBA higher than DNL.</p>
Time Above 35 dBA	<p>The amount of time (in minutes) that aircraft sound levels are above a given threshold (i.e., 35 dBA).</p> <p>In quiet settings, outdoor sound levels exceeding 35 dBA degrade experience in outdoor performance venues (American National Standards Institute (ANSI), 2007). This level is also shown to cause blood pressure increases in sleeping humans (Haralabidis et al., 2008); as well as exceeding recommended maximum background noise level inside classrooms (ANSI S12.60/Part 1-2010).</p>
Time Above 52 dBA	<p>The amount of time (in minutes) that aircraft sound levels are above a given threshold (i.e., 52 dBA).</p> <p>This metric represents the level at which one may reasonably expect interference with Park interpretive programs. At this background sound level (52 dBA), normal voice communication at five meters (two people five meters apart), or a raised voice to an audience at ten meters would result in 95% sentence intelligibility (United States Environmental Protection Agency, Office of Noise Abatement and Control, 1974).</p>
Maximum sound level, L_{max}	The loudest sound level, in dBA, generated by the loudest event; it is event-based and is independent of the number of operations. L_{max} does not provide any context of frequency, duration, or timing of exposure.

The analysis for the No Action Alternative is based on a peak month, average day⁶ (PMAD) of commercial air tour activity – identified as one operation. For the three-year average of commercial air tour activity from 2017-2019, the PMAD was identified in terms of number of operations, and then further assessed for the type of aircraft and route flown to determine if it is a reasonable representation of the commercial air tour activity over the Park. The existing commercial air tour operator provided route information for three general route options and reports flying a Cessna 182 and a Cessna 207 – which results in six potential aircraft/route combinations for analysis. Because the PMAD is identified as one operation using a Cessna 182 aircraft, for purposes of the noise analysis, the No Action Alternative modeled the CDC-E/W route using a Cessna 182 aircraft. 1 shows the modeled route. This route and aircraft combination was most frequently utilized by the operator and thus chosen as a representation of existing activity. Aircraft altitude of 1,000 feet above ground level was modeled based on information provided by the operator.

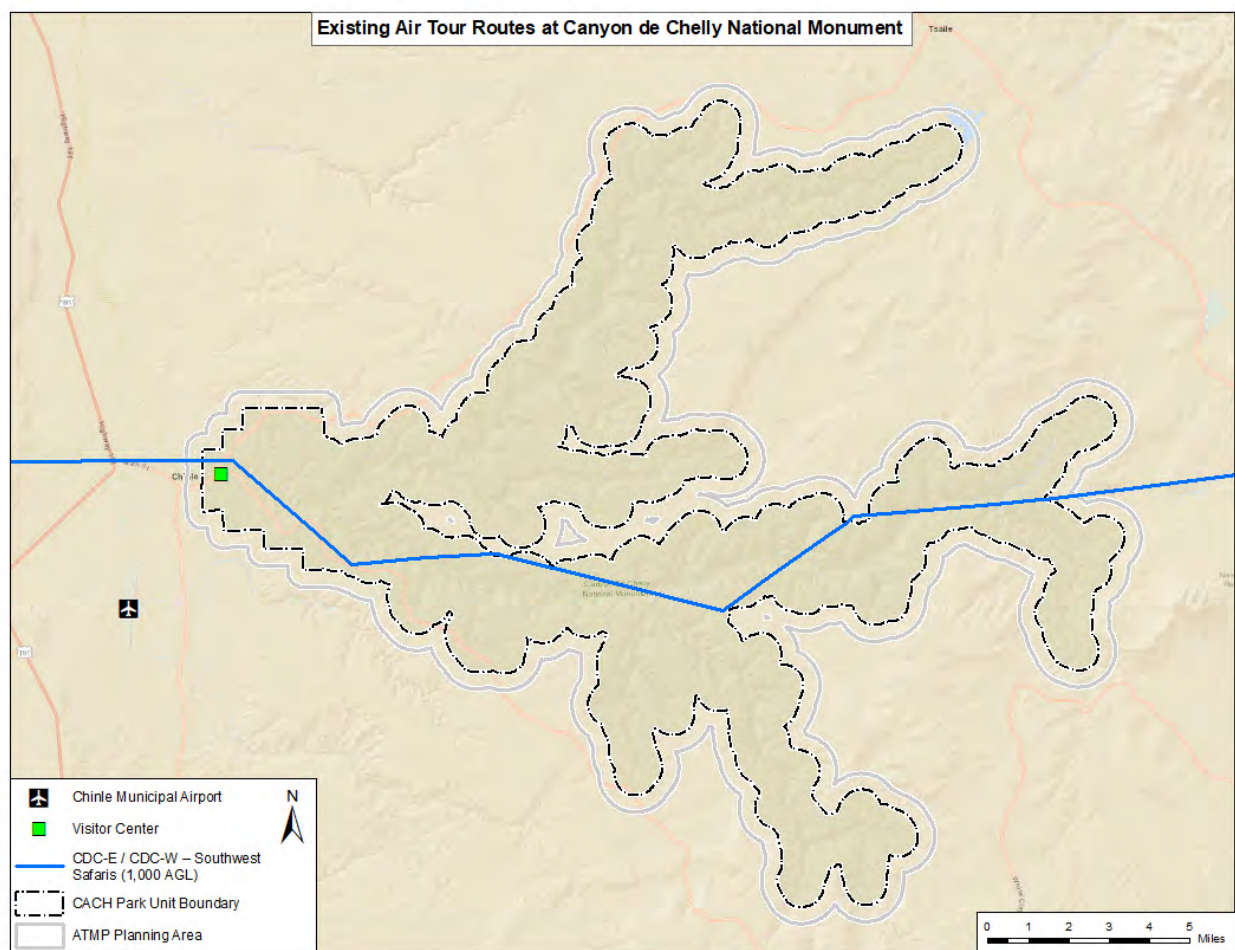


Figure 1. Modeled flight route

⁶As required by FAA policy, the FAA typically represents yearly conditions as the Average Annual Day (AAD). However, it was determined that a peak month, average day (PMAD) representation of the operations would more adequately allow for disclosure of any potential impacts. PMAD has therefore been used as a conservative representation of assessment of AAD conditions.

Noise Model Results

Noise contours for acoustic indicators Time Above 35, Time Above 52, and Maximum Sound Level under the No Action Alternative were developed using the FAA's AEDT version 3e and are provided below (Figure 2, Figure 3, and Figure 4, respectively). A noise contour presents a graphical illustration or "footprint" of the area potentially affected by the noise. The noise contour map legends indicate the cumulative percentage of the total ATMP planning area covered by each contour level. Note: Noise contour results are not presented for the $L_{Aeq,12hr}$ metric, as levels would not exceed 35 dBA for this metric for any of the alternatives.

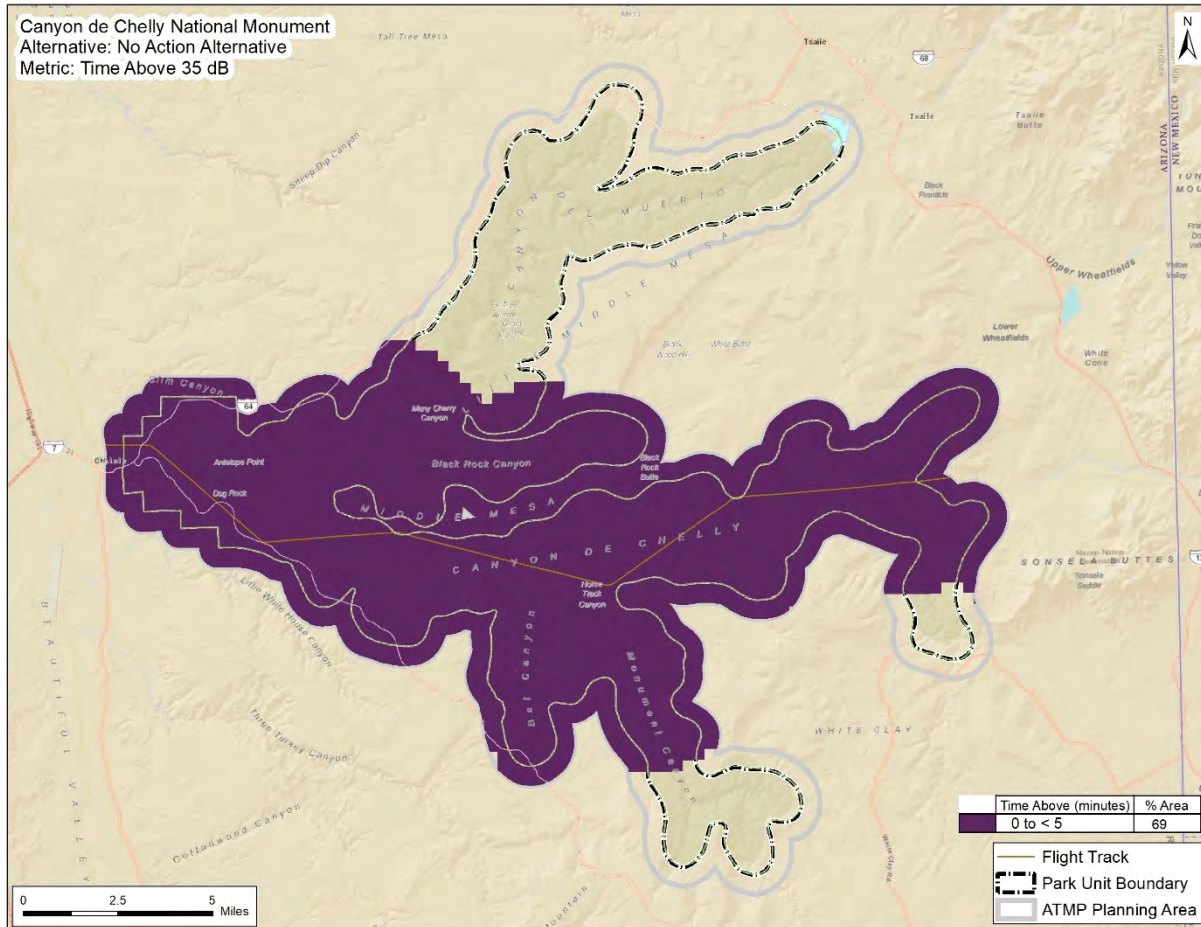


Figure 2. Time Above 35 dBA contour map for the No Action Alternative

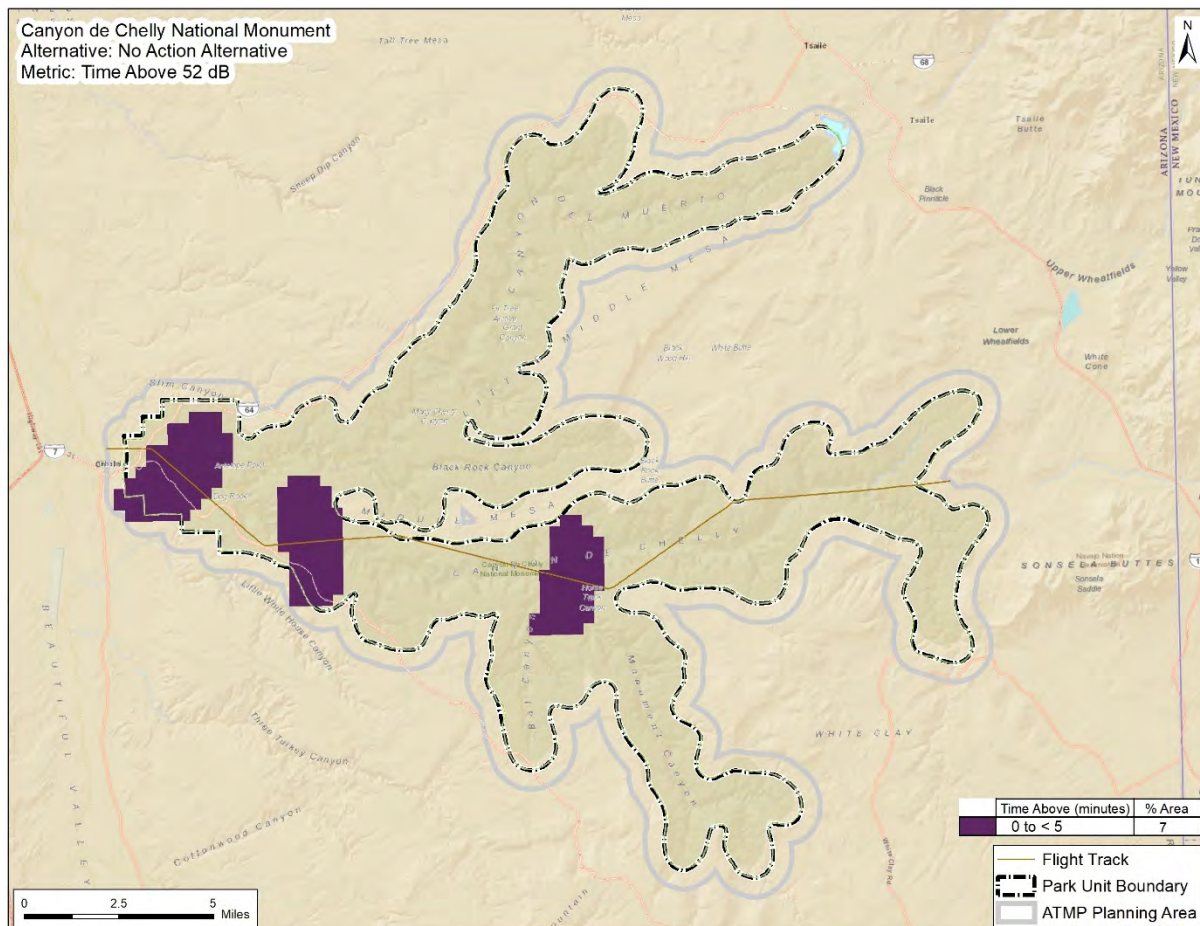


Figure 3. Time Above 52 dBA contour map for the No Action Alternative

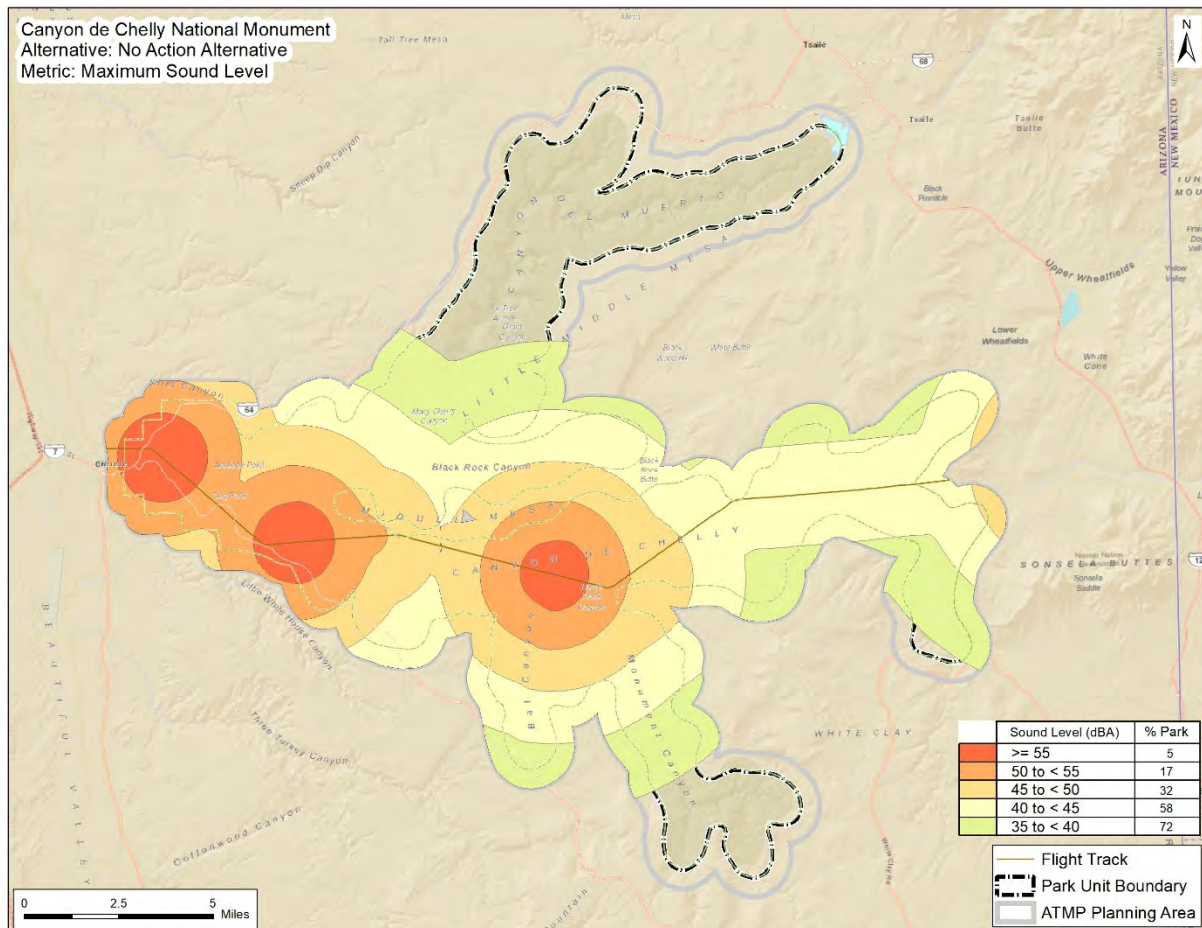


Figure 4. Maximum Sound Level contour map for the No Action Alternative



January 23, 2024

Judith Walker and ATMP Team
Environmental Policy Division
Federal Aviation Administration
Judith.Walker@faa.gov
CC: ATMPTeam@dot.gov

Re: Continuing Consultation and Finding of No Adverse Effect under Section 106 of the National Historic Preservation Act for the development of an Air Tour Management Plan for Canyon de Chelly National Monument

Dear FAA Air Tour Management Planning Team,

I write to comment on the proposed finding under Section 106 of the National Historic Preservation Act (NHPA) for the development of an Air Tour Management Plan (ATMP) for Canyon de Chelly National Monument. Since 1919, the National Parks Conservation Association (NPCA) has been the leading voice in protecting our National Park System. On behalf of our nearly 1.6 million members and supporters nationwide, we agree with your proposed finding under Section 106 and encourage the continued prioritization of the voices of the associated Native American Tribes and Pueblos.

Under the proposed undertaking, commercial air tour operations would be prohibited within the ATMP planning area. We agree with the Federal Aviation Administration (FAA) that this proposed undertaking would have no adverse effect on historic properties in accordance with 36 CFR 800.5(c). This proposed undertaking would allow for the protection of important and culturally-sensitive sites.

The analysis does include data-specific information to judge adverse effects on resources and Tribal lands, including an assessment of noise effects. We agree with the FAA's finding that "the elimination of air tours within the ATMP planning area will also reduce the likelihood that an air tour would interrupt traditional practices such as ceremonies, as compared to existing conditions. Therefore, the undertaking would not diminish the integrity of any historic property's significant historic features" (Section 106 Finding Page 7). The proposed undertaking appears to adequately consider the information assessing the noise, visual, and indirect effects on the ATMP planning area. The Finding of No Adverse Effect allows for the protection of the resources affected by air tours in Canyon de Chelly and protects them from harm as well as disruptions to Tribal and visitor experiences.

National Historic Preservation Act

In the NHPA (16 U.S.C. §§ 470a et seq.), Section 106 is the portion that addresses federal undertakings which include a project, activity, or program either funded, permitted, licensed, or approved by a federal agency including the FAA and the National Park Service (NPS). Undertakings may take place either on or off federally controlled property and include new and continuing projects, activities, or programs and any of their elements not previously considered under Section 106. This provision

Arizona Field Office

requires the FAA and NPS to take into account the effects of their undertakings on historic properties and to provide the Advisory Council on Historic Preservation (ACHP) with a reasonable opportunity to comment. In addition, FAA and NPS are required to consult on the Section 106 process with State Historic Preservation Offices (SHPO), Tribal Historic Preservation Offices (THPO), Indian Tribes (to include Alaska Natives) [Tribes], and Native Hawaiian Organizations (NHO).

Historic properties are any prehistoric or historic districts, sites, buildings, structures, or objects that are eligible for or already listed in the National Register of Historic Places. Also included are any artifacts, records, and remains (surface or subsurface) that are related to and located within historic properties and any properties of traditional religious and cultural importance to Tribes or NHOs. The Section 106 regulations (36 CFR 800) place particular emphasis on consultation with THPOs, Tribes, and NHOs.

Federal agencies must consult THPOs, Tribes, and NHOs about undertakings when they may affect historic properties to which a Tribe or NHO attaches religious or cultural significance. This requirement applies regardless of the location of the historic property. The finding from the FAA that the proposed undertaking would not have any physical impact on historic properties or change the character of any property's use is accurate, as the best way to ensure the protection of the ATMP planning area is to ensure that no commercial air tours are permitted to disrupt or disturb historic sites and traditional activities in Canyon de Chelly.

Justification for Prohibiting Air Tours

In this proposed finding, the FAA provides enough justification to prohibit air tours in Canyon de Chelly National Monument. This demonstrates a prioritization of Canyon de Chelly's natural and cultural resources. With the monument's limited resources in terms of staff and funding that are already dedicated to a variety of important projects and programs, the time and cost of managing an air tour program which has the potential to harm the park unit's resources is not worth it. With over 350,000 recreation visitors to Canyon de Chelly in 2022, it is important that the FAA and NPS consider how air tours fit in with the overall visitor experience and resource protection efforts.

Conclusion

NPCA has determined that the Finding of No Adverse Effect under the Section 106 Consultation process is correct and properly considers the historic properties in Canyon de Chelly National Monument. This finding supports the proposed ATMP that would prohibit commercial air tours in the planning area. This plan is key to protecting the natural soundscape in Canyon de Chelly and indicates that the FAA and NPS have considered the acoustics, evaluated the impact on historic properties, and conducted Tribal consultation.

Thank you for the opportunity to comment on this important issue. Please contact me if you have questions or if I can provide any additional information.

Sincerely,

A handwritten signature in black ink, appearing to read "Sanobar Mirza", written in a cursive style.

Sanobar Mirza
Arizona Program Manager

SOUTHWEST SAFARIS

PO Box 945
Santa Fe, NM 87504
505-988-4246

Ms. Judith Walker
Senior Environmental Policy Analysts
Environmental Policy Division (AEE-400)
Federal Aviation Administration
Washington, DC

January 29, 2024

CACH Section 106 – FAA ‘s Request for Concurrence
Southwest Safaris’ Statement of Disagreement

Dear Ms. Walker:

This is Southwest Safaris (SWS) fifth response to the FAA’s request for concurrence with the agency’s proposed finding of “no adverse effects” from the Canyon de Chelly National Monument (CACH, or “the Park”) draft Air Tour Management Plan (ATMP) in compliance with the National Parks Air Tour Management Plan of 2000 (NPATMA, or “the Act”).

Other letters were dated June 9, June 12, June 30, and November 14, 2023. All of these letters should be included in SWS’ record of response to the FAA’s *Request for Concurrence* to the agency’s Finding of “no adverse effects.”

Southwest Safaris does not concur with the FAA’s proposed finding (the Finding) that there will be “no adverse effects” from denying SWS continued air tour overflight rights at Canyon de Chelly National Monument. SWS argues that reason based on facts is sufficient to discredit the FAA’s Finding. Moreover, SWS argues that the FAA’s methods of assessment for arriving at the finding of “no adverse effects” lacks procedural and substantive legality.

I The FAA's Finding of "no adverse effects" is incorrect; banning air tours increases noise.**a. The FAA's finding is wrong based on physics.**

In the FAA's Request for Concurrence of "no adverse effects" from banning air tours over CACH, the FAA makes the following remark at the bottom of page 7:

The elimination of air tours within the ATMP planning area will reduce maximum noise levels at sites directly below commercial air tour routes compared to existing conditions. All historic properties within the APE would experience a reduction in noise from air tours.

Southwest Safaris takes particular exception to the FAA's conclusion.¹ It is not true that elimination of air tours within the ATMP planning area will reduce noise effects to historic properties either directly below the current route of flight or for the Park in general. Eliminating all air tours over the Park will actually increase the number of air tours flying immediately around the Park and will, therefore, increase the associated noise bleeding over into the Park.

Southwest Safaris does not fly helicopters. Helicopters would fly directly over the canyons of the Park. Fixed-wing airplanes fly at an offset distance from the objects of view, the perspective from an airplane being oblique, not vertical. Therefore, the above remarks of the FAA are irrelevant to Canyon de Chelly. Southwest Safaris routes are already offset from the canyons and away from parking/view areas. Flying outside the Park will mean flying at lower altitudes, so the ever-so-slight reduction in noise from relatively minor increases in horizontal displacement will be more than offset by major increases in noise generated from significantly lower vertical heights. The air tour operator (ATO) already flies near the southern border of the Park (new routes) where there are no historic properties or tourists and flies at relatively high altitudes and low power settings, the ideal solution to reducing noise and visual presence. On the west side of the Park, the ATO has also modified its routes so as to fly on the east side of the upper (northern) end of Canyon del Muerto and then west of that canyon on the lower (southern) end before exiting the Park west of the Visitors Center. So, the noise directly beneath the new routes of SWS' planes is currently of no consequence for fixed-wing aircraft, the routes having already been modified to achieve measurable reduction in noise and visual presence compared to past existing conditions. Offsetting SWS' tracks eliminates one of the FAA's main objections to flying current routes.

Moreover, eliminating direct flights across the major diameter of the Park (i.e., eliminating the route paralleling Canyon de Chelly) would actually increase the noise impact on all historic properties within the APE by a factor of 260%. The issue is a question of math and geometry. The physics of the problem demonstrates that there will be a marked increase in noise created by circling CACH as opposed to flying along the length of the longest canyon in a straight line.

¹ See my letters of August 11, 2023, "4th Response to Request for Concurrence on Sec 106," page 5, and of August 14, "5th Response to Request for Concurrence on Sec 106, page 2.

The formula for the circumference of a circle is $C = \pi D$, where D is the diameter, represented in the present instance by Canyon de Chelly, itself. SWS calculates that the distance for flying half way around the circle to circumnavigate the Park, would be $\pi D/2$. By this computation, it will require almost 60% more flying time to circumnavigate the Park instead of flying across the Park on a straight line. Moreover, instead of gradually descending, using minimal power to fly the shortest distance across the Park, tour aircraft will use full power, generating twice as much noise at much lower altitudes to circle the park as fast as possible to make up for the greater distance. That means at least twice the noise for 60% longer, or 260% more noise and visual presence in total. That figure is significant and directly confirms the FAA's statement in the middle of page 7, that "aircraft are transitory elements in a scene and visual impacts tend to be relatively short" ... as long as aircraft are allowed to fly in a straight line. The least impactful route in and around the Park is straight across it, in a glide, which is the manner in which SWS already flies outside "the cone of annoyance." Flying the shortest route with the least amount of power eliminates the second reason the FAA might have for objecting to Southwest Safaris continuing to fly its current routes.

Finally, eliminating straight flights across the southern end of Canyon de Chelly will force SWS' flights to be conducted around the north end of the Park on the way out to Chinle and around the southern flank of Canyon de Chelly on the return route, increasing by a factor of 2 the impactful noise from all directions instead of just one. That will increase the total new noise by a factor of approximately 5.0. Two low flights per tour will be required around the Park instead of just one over it. More people and historic sites will be adversely affected from more directions more often than before, which eliminates the FAA's third and final objection to flying existing routes.

The most logical overall pronouncement, therefore, should be a Finding of "significant adverse impact" from eliminating air tours over the Park. This would support a decision, under NEPA, for "Alternative 1" of the draft ATMP, meaning a ruling in favor of "no change" in the way air tours at CACH are conducted in the future.

b. The FAA's Finding is wrong based on operations.

On the bottom of page 7 (*Indirect Effects*) of the FAA's Request for Concurrence, the FAA makes the statement that:

It is unlikely that the operator would continue to conduct commercial air tours of the Park by flying along the perimeter of the ATMP planning area because it is difficult to see the predominant features of the Park from outside the ATMP planning area. Flights at or above 5,000 ft. AGL are unlikely due to the Park's elevation and safety requirements for unpressurized aircraft flying over 10,000 ft. MSL for more than 30 minutes. If air tours are conducted at or above 5,000 ft. AGL over the ATMP planning area, the increase in altitude would likely decrease impacts on ground level resources as compared to current conditions because the noise would be dispersed over a larger geographical area. Noise from air tours conducted at or above 5,000 ft. AGL would be audible for a longer period, but at lower intensity. Similarly, aircraft are transitory elements in a scene and visual impacts tend to be relatively short, especially at higher altitudes.

In rejoinder, Southwest Safaris claims that every Section 106-related assumption the FAA makes here is wrong. In interest of brevity, SWS will only briefly comment on each of the errors.

First, if denied access to the Park, Southwest Safaris will definitely fly the circumference of the circle defined by the ends of the canyons. SWS needs to cross the Park from east to west to get to the Chinle, AZ airstrip, where ground tours commence. Flying around the Park means that the minimal aircraft noise that otherwise would have been generated over the southern and least sensitive areas of the Park (flying on the south side of Canyon de Chelly just inside the Park boundary), will be intensified (see math computations above) and transferred to the Navajo communities on the northeast and north ends of the canyons, instead, which will inflict adverse impacts on Tribal lands SWS has ardently tried to avoid. Second, flying the circumference will highlight the views of the Park from the north and west, including all of Canyon del Muerto (on the outbound leg) as well as Canyon de Chelly (viewed on the return flight), so the new routes will have great advantages (marketing value) leading to selling more air tours than before, producing ever more alleged “adverse impacts” on the Park. Third, there is no need to fly 5,000 feet above the Park if flying outside the Park; flying 500-feet AGL around the Park will yield even better views of the canyons, be just as legal as flying 5,000-feet over the Park, and require no use of oxygen. Fourth, flying around the Park to the west will increase the noise blown over the Park by the prevailing westerly winds, not decrease the noise. Fifth, noise generated from low-flying air tours circling the Park at full power will be audible for a longer period and at a higher intensity than higher flights traversing the Park at 4,000 AGL initial altitude using minimum power while descending for landing at Chinle. Sixth, the walls of the canyons, themselves, tend to block aircraft noise projected at a slant angle. The FAA calls this “terrain shielding.” Fixed-wing airplanes fly obliquely to canyons, not over them (as opposed to helicopters), so Southwest Safaris’ air tours generate almost no measurable noise at the bottom of the Park as it is. By flying just outside the boundaries of the Park (1/2 mile) to the north and west, SWS will adjust its “magic altitude” to about 800 feet AGL to allow views of the bottom of the canyons for a longer time at high power settings, so noise exposure directed at the bottom of the canyons will be unavoidably maximized by flying at the lower elevations AGL. The FAA’s proposals will be counterproductive.

The FAA has performed no sound studies in Canyon de Chelly. The agency has no actual figures with which to document its allegations of adverse sound and visual impacts. So, the FAA has no proof, upon which it can reasonably rely, to back up its theorem that eliminating all air tours over the Park will actually have “no adverse effects” on CACH. The FAA Finding, based on NHPA contrivances, is just an untested hypothesis that does not stand the test of real-world analysis. Multiple factual analyses of Southwest Safaris’ actual air tours serve to eliminate any remaining FAA objections to Southwest Safaris continued flights along existing routes.

Southwest Safaris has been conducting air tours across CACH for 49 years. During that time, the ATO has received no complaints of noise or aircraft presence from the FAA, the NPS, or from the Navajo Nation, even along its old routes. Neither the FAA, the NPS, nor the Tribe has any record of complaints against Southwest Safaris for any reason.

This observation leads to two general conclusions. First, the lack of complaints alone testifies that the FAA's grounds for pursuing Section 106 (also "S106" or "106") process are without merit. The FAA is trying to provide a fix for a problem that does not exist.

According to FAA figures, operationally speaking, SWS flies less than 50 air tours over the Park per year. So, there is no regulatory requirement for an ATMP for the Park at all, 49 USC §40128(a)(5)(A), unless an extraordinary circumstance exists ... "making it necessary to protect park resources and values or park visitor use and enjoyment" ... that requires the NPS to withdraw the exception for Parks with 50 or less air tours. The FAA has never said that the NPS has declared the existence of an exceptional circumstances at CACH, has never justified a decision to withdraw the "exception" for parks with 50 or less air tours per year, and has never conducted any science-based sound studies under Section 808 of the Act that are required to validate any such "justification" of withdrawal of exception. See Attachment 2. See also 49 USC §40128(b)(3)(F).

Air tours over CACH do not have a significant effect on the human environment any more than they do at ARCH, CANY, RABR, NABR, or BRCA. All these parks were "categorically excluded" from the requirement for an environmental assessment. All of them were determined worthy of having air tour operations. The FAA and NPS (the agencies) must provide substantial documentation to justify their decision to make a regulatory distinction for CACH, which they have failed to do anywhere in the Section 106 process.

The FAA has created a "catch 22." It claims that the "justification" the ATO seeks properly belongs under the NEPA process, and that process can not commence till after the S106 process has been completed. Therefore, the FAA will argue, the "justification" does not have to be provided in time for the ATO to argue against it to critique the agencies abuse of Section 106 procedures. The FAA's rejoinder is convenient, but illegal on grounds of denial of due process.

Second, Southwest Safaris has an amazing record for "doing no harm," probably unique in all of the National Park Service's history with air tours. SWS is mystified as to why the NPS would want to throw out the research and methodology developed by the company when the results of prohibiting air tours over the Park are going to produce no net gain for anyone. The FAA appears not to care, being more concerned with arriving at an extremist political solution for a non-existent problem than rational operational remedies that would avoid "potential" adverse impacts in the first place.

Therefore, Southwest Safaris alleges that the FAA has violated NHPA's 36 CFR §800.5, *Assessment of Adverse Effects*, by knowingly and deliberately arriving at an improper Section 106 finding of "no adverse effects" from eliminating all air tours over CACH contrary to fact, operational analysis, and law. A more thorough analysis of violation of regulation and law follows.

II The FAA's finding is wrong, based on reason and law.

a. The FAA's Finding is wrong based on logic.

The FAA's Statement of Effects Letter is logically incoherent. The FAA asks Southwest Safaris to disprove a double negative and concur that "no flights over the Park cause no adverse effects thereon." It is impossible to argue against a double-negative syllogism with formal logic. The proof of FAA error can only be demonstrated with real-world illustrations to the contrary of allegation. Southwest Safaris has already performed this duty.

SWS has demonstrated above, with reference to physics and real-world operations, that existing air tours over the Park cause no adverse impact on persons and cultural properties in the Area of Potential Effect (APE). There have been no complaints to the FAA or NPS against SWS' air tours in 49 years. SWS also demonstrated mathematically and operationally how being forced to fly around the Park would actually increase the noise impact on the overall Park. Moreover, SWS argued that the FAA has no legal basis for taking away the exception for CACH and creating an ATMP.

In further rejoinder to the FAA's Finding, Southwest Safaris alleges that the Section 106 process has been deliberately abused by the FAA so as to make constructive comment and consultation under NHPA impossible. The FAA's construction of its double-negative Finding is designed to block any attempt to arrive at any alternative method ... other than banning all air tours ... for reducing alleged adverse impacts on historic properties in the APE. The FAA's methods defeat the whole purpose of trying to arrive at reasonable compromise under Section 106's consulting process. Therefore, the FAA's Finding must be withdrawn, because it violates both Section 106 and NPATMA and serves no constructive purpose of remediation.

b. The FAA's finding is wrong, based on reasonable interpretation of regulation.

The FAA says on page 8 under *Finding of No Adverse Effect Criteria*:

To support a Finding of No Adverse Effect, an undertaking must not meet any of the criteria set forth in the Advisory Council on Historic Preservation's Section 106 regulations at 36 CFR 800.5(a). This section demonstrates [that] the undertaking does not meet those criteria [and therefore is valid].

The truth is just the opposite. As Southwest Safaris has demonstrated above, the FAA's finding of "no adverse effects" from eliminating all air tours over the Park is contrary both to physics and operational reality. The FAA's undertaking does meet the criteria set forth in 36 CFR 800.5(a)(2)(v), because of "introduction of visual, atmospheric or audible elements that diminish the integrity of the property's significant historic features." In regulatory language, the FAA's undertaking would definitely introduce both auditory and visual elements that would "diminish the integrity of the significant historical features of any historic properties in the APE." So, the FAA's finding under Section 106 "flies" against its own regulations upon which the agency relies. The FAA cannot justify a Finding of "no adverse effect" as a matter of both fact and regulation.

If the FAA wishes to contest the assertions of Southwest Safaris, the FAA has the responsibility to produce reasonable evidence to the contrary. This can only be done by generating real evidence from real sound studies, not imaginary noise modeling estimates based on hypothetical conditions where the variables are controlled by parties who have a vested interest in the outcome. The FAA's noise modeling results have no credibility in this situation. Besides, the above arguments notwithstanding, the FAA's Section 106 process at CACH is without legal authority, because the findings are contrary to the purpose and methods of NPATMA. The Act is the controlling legal authority for ATMPs, not NHPA. More on this later.

The FAA's finding of "no adverse effects" is predicated on the "potential" elimination of all air tours over the Park. The actuality of the removal has never been tested. So, strictly considered, there is no proof of the accuracy of the FAA's finding that prohibiting all air tours over the Park will have no adverse effects. Deductive reasoning is not enough, according to NPATMA. Therefore, the agency's finding of "no adverse effects" is pure speculation, not being based on science, which requires testing (see Section 808 of NPATMA) and which is the basis for decision. A definite finding cannot be based on "potential" assumptions.

Thus, the FAA's finding under Section 106 is incompatible, on the basis of regulatory analysis, not only with NHPA, but with NPATMA, as well, and must be rejected. This because NPATMA demands science-based determinations and because the Act is the controlling legal authority.

The FAA's artful demand that Southwest Safaris concur with a double-negative syllogism contained in the FAA's *Request for Concurrence (Letter of Effect)* is not enough to get to a logically infallible conclusion. The FAA's errant finding is based on the premise that the only way to absolutely eliminate all potential adverse effects from air tours is to eliminate all air tours. The test must be based on science, not untested deductive reasoning. Deductive reasoning ... based in this case on the NEPA Theory of Mere Presence and the NHPA Theory of Mere Allegations,² whereby noise studies are not required at all ... has its own set of errors, as already demonstrated.

² The Theory of Mere Allegation is a uniquely NHPA concept. It holds that real adverse effects do not have to exist to be objectionable. They only have to be "potential." This means that hard evidence (based on "reasonable scientific methods") required by NPATMA to support allegations of "significant adverse impacts," are not required under terms of NHPA. The Council considers allegations by themselves to be credible evidence.

The FAA tries to use Section 106 to end run NPATMA, there being no requirement under NHPA to conduct sound studies to prove the validity of claims for adverse impacts of air tours on historic properties which are defined by the National Register. Under Section 106, a mere claim of the potential for adverse effect is considered evidentiary proof of legitimacy of allegation. Therefore, NHPA, considering the "if any" phrase in NPATMA and Section 808 methodology of compliance, is inconsistent with NPATMA. The Act requires, through sound studies, performance of the "if any" conditional test. The FAA failed to conduct the test. Thus, the FAA's Finding must be set aside under the twin Theories of Primacy of Law and Consistency of Law until NPATMA conditionally allows NHPA to come into effect. Sound studies are mandatory under NPATMA, the Act being the controlling legal authority for ATMPs. At CACH, Section 106 only comes into partial force and effect if and when NPATMA passes qualified authority to it ... by controlling NHPA's timing, language, and methods ... which happens only when a legal undertaking is commenced, not before.

Southwest alleges that the FAA's S106 finding of "no adverse effects" has additionally, and most significantly, violated NPATMA, the controlling legal authority for NHPA, by not complying with NPATMA's Section 808 (49 USC §40128.808). Southwest Safaris argues that the FAA has no latitude of discretion re. sound studies required by NPATMA. In the present instance, the Act controls implementation of Section 106. The Act is explicitly clear with respect to mandatory application of Section 808. The FAA tries to use NHPA to undermine NPATMA's authority, claiming that NPATMA language does not apply to NHPA procedure. On the other hand, the FAA appears to believe that NHPA language does control NEPA's and NPATMA's methods. Violation of regulatory language and process is immediately obvious. FAA interpretation of the three sets of regulations results in legal chaos.

By way of sidebar, Southwest Safaris alleges that the reason for the FAA's intractable argument against complying with Section 808 is that the FAA is afraid that sound studies would reveal the agency has no case against SWS that the FAA can justify and document (see 49 USC §40128(b)(3)(F)). The FAA's alleged intent is to deprive the ATO at CACH of due process, preventing SWS from bringing "sound" evidence to the attention of a court that would discredit the agency's Finding and undermine the agency's justification for action. The wrongfulness of the FAA's methods is transparent.

c. The FAA's Finding is wrong, based on misinterpretation of law.

The FAA says on page 6 under *Statement of Effects*:

The FAA, in coordination with the NPS, focused the assessment of effects on the **potential** for adverse effects from the introduction of audible or visual elements that **could** diminish the integrity of the property's significant historic features. (Emphasis added.)

This statement is antithetical to the purpose and methods of the entire ATMP undertaking. It demonstrates, by use of the words, "potential" and "could," the FAA's fundamental misunderstanding of applicable law in relation to complying with the provisions of NPATMA, NHPA (Section 106), and NEPA, combined.

Southwest Safaris has repeatedly argued, in relation to the creation of Air Tour Management Plans (ATMPs), that (1) NPATMA is the controlling legal authority; that (2) the Act, itself, triggers the activation of NHPA and NEPA at the appropriate time; and that (3) the Act controls, with respect to sound studies, the way those other statutes are to be implemented. The application of NHPA and NEPA is "directed and controlled" by NPATMA to the degree that these other laws must found their decisions on science-based sound studies incorporating "pertinent data,"³ because of the presence of the "shall clause" imbedded in Section 808 of the Act mandating same. The FAA's confusion as to the proper role and timing of each of the three

³ In Southwest Safaris' letter to Volpe of August 7, 2023, on page 17, SWS defined "pertinent" sound-study data to mean "current, comprehensive, relevant, accurate, and science-based."

statutes has led the agency to make major errors in the process of creating ATMPs. In the present instance, the agency's errors and omissions began with the errant creation of the CACH undertaking, progressed to wrongful application of Section 106 initiatives, and then ultimately undermined the CACH ATMP project by now arriving at a flawed Finding of "no adverse effects"... this conclusion permitting a determination of "no air tours." The FAA's multiple errors stem from basing its findings of "no adverse effects" and decision for "no air tours" on use of NHPA terms such as "potential" and "could" instead of on NPTMA precepts of "actual" and "measurable," which allows the vague and uncertain to control the defined and definite, contrary to Congressional intent for ATMPs.

d. The FAA's Finding is wrong, based on misapplication of law.

On November 7, 2023, the FAA wrote Southwest Safaris and discussed the definition of an "undertaking" and the interaction between NAPA and NPATMA. On page 3, under *The Applicable Law*, the FAA said:

With respect to the NHPA, **any** federal action that meets the definition of an undertaking under the NHPA and Section 106 regulations trigger compliance with Section 106 of the NHPA. **The development and implementation of an ATMP [necessarily] meets the definition of an undertaking triggering the Section 106 process.** Thus, under Section 106 of the NHPA, federal agencies must consider the impact of their actions on historic properties. So, while NPATMA governs how the FAA and NPS develop and implement ATMPs, if the development and implementation of an ATMP meets the definition of an undertaking, the FAA and the NPS must also comply with the Section 106 process under the NHPA and consider the effect of the undertaking on historic properties. Compliance with NPATMA does not preclude compliance with other federal statutes and regulations. Put differently, the agencies must comply with both NPATMA and Section 106 of the NHPA. **Compliance with other applicable statutes and regulations does not mean that the agencies are not fully complying with NPATMA.** (Emphasis added.)

The first sentence of the FAA's statement⁴ of position is only half-true. It is true that federal actions which meet the definition of a legal undertaking require compliance with Section 106 of NHPA. However, the agency incorrectly adds the use of the word, "any."

It is not true that "*any* federal action" that might appear on the basis of agency initiatives to be an "undertaking" is, in fact, an "undertaking" in the eyes of the Law. A Federal action can appear to be an "undertaking," but not meet the requirements thereof. A Federal action that does not meet both the definition of and the requirements for an "undertaking," is not a *legitimate* "undertaking." This is the case with the FAA's application of NHPA with respect to the CACH ATMP. SWS argues that the CACH "undertaking" the FAA supposedly relies upon to justify the creation of an ATMP has not yet been *legally* triggered by meeting the requirements of NPATMA, which authority of Act is required by Congress.

Southwest Safaris offers three different amplified explanations for the illegality of the FAA's BAND ATMP "undertaking."

⁴ The FAA's remark comes from its November 7, 2023 letter to Southwest Safaris, page 3, *The Applicable Law*.

Explanation 1: At CACH, the FAA has never performed the “if any” test⁵ required by NPATMA to check for significant, actual, present, adverse impacts on historic properties in the APE using science-based sound studies employing pertinent data. Therefore, a legal “undertaking” at CACH has never existed. Consequently, actions under NHPA and NEPA cannot *legally* proceed at CACH until the noise tests required by Section 808 of NPATMA are conducted to satisfy the “if any” condition in compliance with Section 808 of the Act. This is the short version of SWS’ allegation.

The long version of the allegation requires some flushing out.

The principle of Primacy of Law⁶ makes the National Parks Air Tour Management Act of 2000 the controlling legal authority in the creation of ATMPs. The FAA errs by acting preemptively to initiate the Section 106 investigation of CACH without having first acted on Section 808 of NPATMA in order to test the “if any” condition contained in the “Objective” paragraph of the Act, 49 USC §(b)(1)(B). Moreover, the Principle of Continuity of Law⁷ means that Section 106 cannot be called upon by the FAA to negate the effect of NPATMA. Otherwise, the agency would be able to declare, by means of Section 106, that sound studies at selected Parks are irrelevant to determination of adverse impact of air tours on TCPs. Without the Principle of Continuity of Law, the FAA could base its objections to air tours at CACH on the Theory of Mere Presence⁸ and simple allegations of noise intrusion, ignoring the requirement for noise

⁵ See Attachment 2: NPATMA’s Primary & Secondary Objectives: The “if any” test and Section 808 compliance; how NPATMA, NHPA, and NEPA interact.

⁶ The Principle of Primacy of Law directs the order of application of laws in a vertical manner. Where multiple laws affect a result, course of action, or determination, the laws must be satisfied in accordance with the most controlling to the least. See my letters to the FAA dated September 25 and October 1, 2023, wherein SWS gives a detailed discussion on the Principle of Primacy of Law as it applies to NPATMA, NEPA, and NHPA working together.

⁷ The Principle of Continuity of Law means that one law cannot horizontally contradict another where they overlap.

⁸ The Theory of Mere Presence is brought forward by parties opposed to the conduct of air tours in any form or manner over units of the National Park Service. The Theory of Mere Presence states that air tours, by definition, impose adverse impacts on persons and property on the ground, including religious and cultural sites and events, and that there is no way to lessen the impact of same, invasion of privacy in particular. According to this theory, all Air Tour Management Plans must completely ban all air tours of all types to eliminate any possibility for adverse effects in the future. This extremist theory asserts that any Plan that does not ban all air tours does not address “the problem” of air tours at all. In the case of Hawaii Volcano National Park (HAVO), the FAA flatly states that it will not consider the theory. For unstated reasons, the FAA appears to have reversed its opinion at BAND. The suddenly but conveniently “revised” opinion held by the FAA ... that the mere presence of air tours in the Park is objectionable, in contrast to HAVO ... lacks explanation and, therefore, credibility. The FAA everywhere else claims that the standard for determination of adverse impact of air tours under NPATMA is “existing conditions,” not “no air tours.”

studies altogether.⁹ However, the power of the two principles working together means that Section 106 cannot be used to bypass Section 808. Furthermore, it means that Section 106 is only then called into conditional effect ... meaning that NHPA decisions must be based on comprehensive, relevant, and current sound studies ... after NPATMA passes authority to it by means of satisfying the all determining “if any” phraseology of the Act. Therefore, the FAA is currently exceeding its authority by prematurely asking for comment on historic properties within the APE before the subject of air tour noise has even been addressed by NPATMA. The FAA has failed to comply with Section 808 and standards of due diligence contained therein.

For these reasons, the FAA’s comment, “The development and implementation of an ATMP [necessarily] meets the definition of an undertaking triggering the Section 106 process,” is entirely untrue. That being the case, everything that follows is also mostly untrue. For instance, the FAA says, “If the development and implementation of an ATMP meets the definition of an undertaking, the FAA and the NPS must also comply with the Section 106 process under the NHPA and consider the effect of the undertaking on historic properties.” This statement is only true providing that the “if” conditional is true. In the case of CACH, the “if” conditional is not true. The CACH ATMP only has the appearance of legality, not the actuality of it. So, it is not true in the case of CACH that “the FAA and the NPS must also comply with the Section 106 process under the NHPA and consider the effect of the undertaking on historic properties.” In fact, the agencies have no authority to do so at all, without first complying with NPATMA. For this very reason, the FAA’s conclusion is not true in the case of BAND, either. AT BAND, the FAA also never complied with the “if any” condition and Section 808 process. The FAA erroneously says in grand summary, “Compliance with other applicable statutes and regulations does not mean that the agencies are not fully complying with NPATMA.” As a point of law, to date the agencies have not complied with NPATMA at all. Therefore, the FAA’s Section 106 initiatives at CACH and BAND are not in compliance with law and must be withdrawn, the Act being the controlling legal authority.

Explanation #2: The FAA has not determined by means of NPATMA’s Section 808 that there is any need to proceed with changes to existing conditions based on the alleged impact of aircraft noise on Traditional Cultural Properties. All parks do not require ATMPs. ATMPs only apply to certain units of the NPS. Until certain conditions and exceptions are met for individual parks, the requirement for an ATMP does not exist. That is, the triggering requirement for an ATMP (and, therefore, for an “undertaking”) does not exist just because the Act exists. In the case of CACH, if all legal procedures had been followed, the initiation of the ATMP process would indeed be an “undertaking,” 36 CFR §800.16(y). Southwest Safaris agrees with the FAA,

⁹ The FAA tries to use Section 106 to end run NPATMA, there being no requirement under NHPA to conduct sound studies to prove the validity of claims for adverse effect of air tours on historic properties as defined by the NR. Under Section 106, a mere claim of the potential for adverse effect is considered evidentiary proof of legitimacy of allegation. Therefore, NHPA, considering the “if any” phrase in NPATMA and Section 808 methodology of compliance, is inconsistent with NPATMA ... that Act requiring, thorough sound studies, the satisfying of the “if any” conditional test ... and must, at least at first, be set aside under the twin Theories of Primacy of Law and Consistency of Law, until NPATMA conditionally allows it by making sound studies mandator as a condition for NHPA review, the Act being the controlling legal authority for ATMPs. Regardless, at CACH, Section 106 only comes into qualified force and effect if and when NPATMA passes authority to it ... which happens only when a **legal** undertaking is commenced, not before.

arguing, as does the NPS, that by law Section 106 cannot be activated without the existence of an “undertaking,” 36 CFR §800.3(a) ... but the undertaking has to be legal. To date, the supposed undertaking at CACH is not legal for lack of compliance with NPATMA’s “if any” test and Section 808’s mandatory sound studies.

Explanation #3: In the case of the ATMP initiative at Canyon de Chelly, Southwest Safaris argues that legal process has not been followed. An “undertaking” in the case of an ATMP cannot commence without the “if any” phrase of NPATMA being satisfied by science-based sound studies using “pertinent data”; or, it cannot begin unless the NPS determines that creating an ATMP is necessary to “protect park resources and values or park visitor use and enjoyment,” 49 USC §40128(a)(5)(B). The NPS, nonetheless, has to prove the necessity for bypassing normal categorical exclusion rulemaking in *extraordinary* circumstances, 40 CFR §1501.4. Either way, the “if any” test and Section 808 sound-study requirements of NPATMA must be fully satisfied by law to comply with the Act’s requirement for justification and documentation per 49 USC §40128(b)(3)(F). Section 808 cannot be bypassed, because inclusion of its “shall clause” makes it mandatory in all circumstances. In any case, the FAA has not performed the “if any” test, so the FAA’s actions to proceed with its *Request for Concurrence* (i.e., Finding of “no adverse effects”) as well as the whole CACH ATMP are illegal, at this time.

The FAA will certainly argue that Southwest Safaris’ legal theories, though interesting, are irrelevant with respect to ATMPs. According to the Principle of Parallel Laws,¹⁰ the FAA will assert, NHPA can act independently of NPATMA. Southwest disagrees, reaffirming that NPATMA creates a vertical stacking of statutes, in so far as the creation of ATMPs is concerned. SWS argues it is the FAA’s position that is actually irrelevant in the current instance. Even if a court were to decide against SWS’ theory of jurisprudence based on the Principle of Primacy of Law, affirming the FAA’s Principle of Parallel Laws, the FAA’s “undertaking” would still be illegal. The FAA’s “undertaking” lacks initiation of a legal process (the “if any” test) and Section 808 sound studies under NPATMA before it can arrive at a final determination for “no air tours.” Under the FAA’s errant theory of jurisprudence, NPATMA may be postponed. Southwest Safaris rejoins that NPATMA acts first, then NHPA, thereby controlling NYPA at all times.

NPATMA cannot be avoided. In the case of CACH, “pertinent” sound studies have not been conducted at all. Without sound studies, the NPS cannot demonstrate, outside of claiming Theory of Mere Presence ... which argument is not allowed by the FAA elsewhere ... that critical “park resources and values” or “visitor use and enjoyment” have been adversely affected by air tours under existing conditions. The FAA has no other mechanisms of avoidance at its disposal. The FAA cannot rely on 49 USC 40128(a)(5)(B) to withdraw an exception, nor can the FAA justify using extreme corrective measures outside of an exception. No “extraordinary

¹⁰ The Principle of Parallel Laws states that all laws run equal and parallel to one another. No one law is superior to another. All laws run concurrently, each triggered by its own enabling language. Under this theory, the FAA claims that NHPA has equal authority with that of NPATMA and is in no manner controlled by that Act. SWS argues to the contrary, that NPATMA creates a vertical column of laws, each triggered in sequence and controlled, in some degree, by higher law. This is a point of jurisprudence that the FAA, being a party to the dispute, cannot resolve administratively, without the help of the courts. Resolution of the disputed interpretation of law will have a major effect on the implementation of both Section 106 process and of the ATMP “undertaking.”

circumstances” per 40 CFR §1501.4(b)(1) exist at CACH, the FAA’s arguable Theory of Mere Presence notwithstanding.

The relevant undisputed fact is that Southwest Safaris has been conducting air tours over CACH for 49 years, without a single documentable complaint. Until the present ATMP process was initiated, the Navajo chapter houses surrounding CACH were unaware that fixed-wing air tours were even being conducted over the Park. Any alleged “potential” impacts of air tours on the few TCPs within the park that are protected by Section 106 are purely theoretical, imaginary, and conjectural, based on deductive assertions (NHPA), not inductive research (NPATMA).¹¹ Existing conditions at Canyon de Chelly, regarding sound levels of air tours, are well below noise levels that are objectionable to persons in the Park. This reality makes the de minimis presence of infrequent air tours (currently averaging 1.4 tours per week, but frequently averaging less than 50 flights per year) under Section 106 immaterial for argument. CACH should never have been selected for ATMP status in the first place; the decision is obviously being driven by politics, not operations. This explains why the Section 106 process has been so corrupted and why the FAA is loathed to comply with NPATMA, the Act standing in the way of unrestrained application of NHPA.

The FAA’s Section 106 request for concurrence on a finding of “no adverse effects” at CACH at this time, lacks justification and authority, both under NPATMA and NHPA, for lack of initiation of a *legitimate* CACH “undertaking.” The safeguards of NPATMA for air tour operators have been purposefully ignored by agency¹² to achieve a political objective beyond the reach of due process.

To return to an earlier point, the FAA errs in assuming that Section 106 process can begin just because the agency has declared that an ATMP “undertaking” has commenced, even if the “undertaking” is being federally financed. In the first place, under NPATMA the FAA has wrongly begun the ATMP process at CACH without going through Congressionally-directed process necessary to activate the “undertaking.” In other words, the FAA, SWS alleges, is

¹¹ The conflict between NHPA and NPATMA over deductive versus inductive determination can only be resolved by acknowledging that NPATMA is the controlling legal authority, the Principle of Continuity of Law being, once again, of critical effect. Guided additionally by the Principle of Primacy of Law and Intent of Congress, all assessments of air tour noise under Section 106 re. ATMPs must be based on “reasonable scientific methods” and “pertinent data,” per Section 808 of the Act. By refusing to comply, under Section 106 the FAA fails to act/decide according to law.

¹² Congress never intended that NPATMA would be used to destroy the air tour industry. In order to ensure the rights of air tour operators (ATOs), including due process of hearing, Congress insisted that all ATMP initiatives under NPATMA would have to pass the test of reasonableness, the standard of determination being that of “existing conditions,” not “no air tours.” To safeguard these rights, Section 808 was added to the Act, the purpose of which was to create measures of decision that could be tested against science-based observations and allow for judicial review. By failing to conduct timely science-based noise studies using “pertinent data” (Footnote #3), the FAA has knowingly deprived ATOs of the ability to defend their right of operation by means of hard sound data and, thus, deprived them of constructive administrative and judicial hearing. Had timely, science-based, sound studies been conducted early in the ATMP process, most of the ATMPs the FAA has since created would have been proven to be without cause. Air tour operators cry “foul!” The FAA’s lack of regard for Section 808 serves to negate operators’ right of judicial review under 49 US §40128(b)(5), it being impossible under both NPATMA and Section 106 to provide credible evidence without authoritative sound studies.

illegally funding an “undertaking” which has no authorization. The FAA’s action leads to accusation of abuse of process and misappropriation of Federal funds.¹³

In the second place, there is a question regarding the financial legality under Section 106 of the FAA’s timing for the CACH ATMP relevant to NHPA. In 36 CFR 800.1(c) the ACHP (the Council) says:

The agency official must complete the section 106 process *prior to* the approval of the expenditure of *any* Federal funds on the undertaking or prior to the issuance of any license. (Emphasis added.)

It appears that the FAA is in violation of NHPA’s regulation. The FAA currently is well on its way to completing the CACH ATMP before consultation under Section 106 has been finished, and before fundamental legal questions ... which have been outlined in this letter ... have been resolved.¹⁴ SWS submits that significant Federal funds (e.g., salaries and other administrative costs) have already been expended on the CACH ATMP without the FAA having even *legally* commenced an “undertaking” for same, let alone having completed the Section 106 process. For this reason alone, the FAA’s Finding is in violation of NHPA regulation. The FAA’s misinterpretation of law pervades the entire ATMP “undertaking.”

In summation of argument, returning to the greater issue, the point in the case of CACH is that a legal Federal “undertaking” does not exist just because the FAA and NPS have inappropriately expended Federal funds to initiate a “process.” Southwest Safaris’ allegation keeps coming back to the same declaration of principle; implementation of an “undertaking” does not cleanse the method of bringing the action into being. An “undertaking” must first be *legally* triggered and legally financed. SWS alleges that the FAA errs by having commenced the ATMP-related Section 106 process at CACH without first initiating a *legal* “undertaking,” as defined by the language of Congressional statute, NPATMA. By so doing, the FAA is in violation of NPATMA,

¹³ After NPATMA was passed by Congress, it would have been appropriate for the FAA to expend funds to test for conditions that would trigger the creation of ATMPs. Prior to that determination, predicated on Section 808 science-based studies, no further federal money was authorized by Congress to be spent. In no case was an “undertaking” meant to arbitrarily and capriciously put air tour operators out of business. The FAA and NPS (the agencies), SWS alleges, have together conspired to misuse Federal funds to achieve a political agenda, involving the radical curtailment of the air tour industry, never contemplated by Congress. In the process, SWS contends, the agencies have defrauded the U.S. Court of Appeals for the District of Columbia Circuit by deliberately withholding relevant information so as to deceive the court to “compel” the agencies to prematurely initiate “undertakings” that had, as of then and now, no legal basis for coming into existence, the requirements for same not being satisfied. The results are all too obvious for all to see: abuse of law and tragic/unnecessary destruction of the air tour industry.

¹⁴ As of this date, the FAA has all but completed the ATMP for Canyon de Chelly. The FAA long ago gave copies of the draft CACH ATMP and EA to “cooperating agencies” but not to SWS.

NEPA¹⁵, and NHPA, all three, the Court order¹⁶ for the FAA to expedite ATMP process notwithstanding.

A court cannot compel an unlawful act. An order to expedite process is not an order to break Congressional law. Under NHPA, the FAA may begin investigative initiatives prior to activation of an “undertaking” under certain conditions, but the Agency cannot implement decision-making actions (e.g., requests for input and/or concurrence) prior to actual existence of a legal “undertaking,” 36 CFR §800.1(c). Under NEPA, the FAA also has no latitude to commence work on a draft EA without “authorization” from the NPATMA process, meaning conduct of the “if any” test. The FAA’s alleged disregard for NPATMA’s controlling legal authority, using Court order as cover for action, has already led to grave injury of the general air tour industry, to the detriment of the economy of rural America.¹⁷

Moreover, SWS argues that the FAA’s failure to establish a legal undertaking before beginning an ATMP initiative has precipitated violation of fundamental clauses of the Constitution. SWS refers to the Fifth and Fourteenth Amendments, both guaranteeing due process.

The Fifth Amendment protects persons from being forced to testify against themselves. The FAA’s Request for Concurrence under Section 106, “allowed” by the illegal undertaking, requires the ATO to admit that depriving him of his right to fly over the Park will have “no adverse effects” on the Park, itself. The FAA thereby compels the ATO to agree that any counter-arguments submitted by the operator, though meritorious by themselves, have neither validity with respect to the purpose of the ATMP nor relevance to the process of Section 106 objection. Thus, the agency deprives him of his right to both argument and hearing.

By means of the Section 106 Request for Concurrence, the FAA has artfully contrived a means by which the ATO is forced to testify against himself, no matter how he frames his objections, grossly prejudicing a decision of the agencies (FAA and NPS) against his right of operation.

If the ATO agrees that imposition of Alternative d2 (no air tours allowed over the Park) of the pending draft CACH ATMP would have “no adverse effect,” he loses his defense claiming right of operation. If the ATO declines to engage in pointless argument against a flawed and self-fulfilling double-negative syllogism leading to a conclusion favoring a decision of “no adverse effect,” the FAA will decide against him, the ATO having made no argument to the contrary. If the ATO argues against the finding of “no adverse effects,” his arguments are thrown out for not

¹⁵ NEPA is equally impacted by the Controlling legal authority of NPATMA. The requirement for satisfying the “if any” phrase and Section 808 sound studies under NPATMA are mandatory prior to the justification for, and commencement of, a NEPA Environmental Assessment. After the former is accomplished, NPATMA permits the latter to commence, in that order, if the creation of an ATMP is justified by the Objectives of the Act.

¹⁶ *Order of U.S. Court of Appeals, District of Columbia Circuit, supra* Footnote #35

¹⁷ For these reasons, SWS submits that it would be much better to stop the ATMP process at CACH now, correct the situation (there and at other units of the NPS, Bandelier National Monument, Badlands, and Mount Rushmore in particular), and then proceed, rather than force the issue of ATMP management back before the U.S. Court of Appeals, the outcome of which would be far from certain for all parties.

being relevant to Section 106 objection, but to NEPA concerns. That is, if the ATO engages in argument, he is told that his arguments are irrelevant under S106 and too late for NEPA objection. The comment period for the ATMP (as in the case of BAND) will have already closed before the S106 process was completed. That was the actual case at BAND. The same forces are aligning themselves at CACH, the FAA having initiated the ATMP process long before the S106 process can be finalized.

Under both the 5th and the 14th Amendments, ATOs are guaranteed the right to fair trial and/or administrative hearing. By failing to honor the language of the 5th and 14th Amendments pertaining to self-incrimination, and the requirement of Section 808 of NPATMA at CACH for science-based sound studies, the FAA makes it impossible for the ATO to bring his grievances under NHPA and NPATMA before a body of hearing. The ATO has been denied not only the right to constructive argument under NHPA ... the ATO having to contend with double-negative syllogisms... but also the ability to present current objective evidence under NPATMA ... the ATO being deprived of access to sound studies that SWS could otherwise offer in its own defense. Therefore, the FAA violates, under Section 106, both the Constitution and the judicial review clause of NPATMA, 49 US §40128(b)(5).

The 5th and 14th Amendments were both drafted to ensure a review process of executive actions that would guarantee fundamental fairness, both procedurally and substantively considered. The FAA's application of NHPA and lack of application of NPATMA to the CACH ATMP defies both. The FAA disallows substantive argument under rules of logic (violating the intent of Section 106) and makes presentation of credible facts (i.e., sound studies) under rules of evidence impossible, in the meanwhile forcing ATOs, by means of the FAA's *Request for Concurrence*, to testify against themselves and their own interests. The entire Section 106 process is so flawed and so aligned against fair and impartial hearing of ATOs' grievances that it must be halted pending judicial review of the ATMP process.

e. The FAA's Finding is wrong, because it attempts to override controlling law.

NHPA and NPATMA war against one another.

Under NHPA there is no requirement for sound studies. Under NPATMA, sound studies must be performed. Under NHPA, mere allegations suffice as convicting evidence; under NPATMA there has to be hard evidence based on reasonable scientific methods. Under NHPA, the standard for decision is "potential" adverse effects; under NPATMA, the adverse impacts have to be "existing." Under NHPA, "feelings" and "cultural setting" can be the basis of complaint; under NPATMA, complaints have to be moored to measurable effects. NHPA is predicated on deductive speculation; NPATMA, on inductive methodology. NHPA means are the extremes; NPATMA seeks reasonable compromise based on common-sense solutions. The two statutes are completely incompatible. Without there being a priority of authority, the war between the two will destroy the principle of controlling jurisprudence.

Clearly, one of these laws has to control the other in the matter of ATMP creation. Congress wrote NHPA back in 1966. It was drafted as a general law to preserve historic properties. NPATMA was meant to be an aviation law. It was passed in 2000. Under the Principle of Primacy of Law, the specific law controls the general; the later law controls the earlier; the law that activates the other, is the controlling law; the law that contains the purpose and intent of Congress for a specific “undertaking” is the controlling law. In the case of ATMPs, where NPATMA, NEPA, and NHPA all must work together, NPAMA is the managing regulating statute, residing in a vertical manner on top of the other two.

Contrary to FAA theory, NHPA does not stand on its own with respect to the creation of ATMPs. In the present instance, NHPA only has power to the extent that it is called into effect by NPATMA. It is NPATMA which creates the existence of a NHPA undertaking, so NPATMA determines the timing of NHPA’s calling and the methods and vocabulary that NHPA can employ. In short, NPATMA contains the “genetic code” written by Congress for the creation of ATMPs. NPATMA, therefore, is the controlling legal authority for managing the ATMP process.

The FAA’s *Letter of Effects* endeavors to use NHPA methodology to override NPATMA law ... but to no avail.

NPATMA specifically demands a three-step process for an ATMP undertaking to be called into being. First, at any given park, possible adverse effects from air tour operations must be tested for an “if any” condition (49 CFR §40128(b)(1)(B)). Second, the test for the “if any” condition must be performed in compliance with Section 808 of the Act, which requires sound studies using “reasonable scientific methods” based on pertinent data. Third, a reasonable solution for remedying adverse solutions must be chosen that is both “acceptable and effective.” “Acceptable” means agreeable to all parties. “Effective” includes the application of reasonable compromise by all parties to achieve a common goal. Without compromise, no solution will hold together, destroying its “effectiveness.”

The FAA’s *Letter of Effect/Request for Concurrence* (the Letter) attempts to use Section 106 language and methods to undermine NPATMA’s authority. The Letter makes not a single mention of NPATMA, fails to perform the “if any” test mandated by NPATMA (see Attachment 2), completely ignores the Section 808 requirement to perform sound studies (see Attachment 2), imposes unreasonable assumptions meant to predetermine the outcome of the Finding (see Section 2a), is based on hearsay evidence (see section 4), and offers not even the pretense of compromise. In fact, its Finding of “no adverse effects” is, indeed, extremist (see Section 4).

Contrary to FAA and ACHP opinion, there is nothing in NHPA that requires the FAA to take the most radical approach to quelling alleged adverse impacts from air tours (see Section 4). The FAA resorts to extremist measures by eliminating air tours altogether. The agency falsely claims that doing so will have no consequential effect (see Section 1b).

The FAA’s Finding is based on deductive noise assessments derived from noise modeling. The FAA AEDT methodology consists of sophisticated technology, not science. In fact, it is based on very elaborate spreadsheet algorithms. It is not suitable for weighty environmental analysis, according to Congress (Section 808 of the Act) (see Section 6).

Moreover, the methods and goals of Section 106, as used by the FAA, are diametrically opposed to the Will of Congress, as documented many times by SWS (see Attachment 1).

Therefore, the FAA's Finding of "no adverse effects" must be rejected because its illogic rips at the fabric of American law. The FAA's theory of jurisprudence is predicated on the assumption of guilt until proven innocent. Innocence is impossible to prove under the tenants of S106 double-negative syllogisms.

The FAA's Finding, in fact, violates NPATMA entirely. It is a mere untested hypothesis masquerading as a proof, presented as an axiom, that makes constructive "consultation" impossible, because the axiom arrives at a predetermined decision of "no air tours." Without conducting sound studies, the agencies have made it impossible to break the axiom. This makes a mockery of due process. The agencies need to go back to the Court and get an interpretation of the order of law. Administrative discretion cannot be substituted for Constitutional interpretation. The power of legal interpretation properly resides with the courts.

At the top of page 4 of the ACHP's December 21, 2023 Opinion re. the FAA's Finding of "no adverse effects," at BAND, the ACHP says:

NPATMA does not exempt or waive responsibility for compliance with Section 106 of the NHPA; therefore, the FAA must also comply with Section 106's requirements prior to making a final decision under NPATMA.

The ACHP's statement of Dec. 21 agrees with the FAA's statement of November 7:

So, while NPATMA governs how the FAA and NPS develop and implement ATMPs, if the development and implementation of an ATMP meets the definition of an undertaking, the FAA and the NPS must also comply with the Section 106 process under the NHPA and consider the effect of the undertaking on historic properties. Compliance with NPATMA does not preclude compliance with other federal statutes and regulations.

Both the ACHP and the FAA err by hitting a bullseye on the wrong target. The point is not that the FAA has to comply with Section 106, SWS acknowledges that. The issue is that NPATMA controls the target that Section 106 must hit, both the when and the how, i.e., the timing, vocabulary, and method of NHPA analysis.

The ACHP's statement of December 21, however, is incorrect. To paraphrase, the ACHP says that because NPATMA does not expressly exempt the FAA from responsibility for compliance with Section 106 of NHPA, the FAA must fully comply with Section 106 without regard for the purpose and methods dictated by NPATMA. This could not be further from the truth, but explains the refrain that the ATO keeps saying. The statutes naturally war against one another, so Congress gave control to NPATMA.

In the present instance of the ACHP's misstatement, SWS rejoins by clarifying that NPATMA does not have to incorporate specific language that would "exempt or waive ... compliance with Section 106 of the NHPA." The very Act, itself, controls the overall process and keeps NHPA from warring with NPATMA in such a manner as would destroy the purpose of the entire ATMP process. NPATMA requires that certain parts of NHPA be implemented to assess significant adverse effects on historic properties, but also requires NHPA to make the assessments utilizing science-based sound studies and verifiable evidence grounded on existing, not hypothetical or "potential," conditions. In the case of the FAA, its Finding is flawed at Canyon de Chelly, because the "if any" conditional is not tested for positive results. The FAA has not verified that adverse conditions even exist, as previously discussed.

The ACHP and FAA abuse Section 106 process by ignoring the overriding goal of the ATMP initiative. This was to implement a reasonable and common-sense approach to mitigating provable existing significant adverse impacts on historic properties. Only NPATMA can accomplish this. Both NHPA and NEPA innately have propensity to work towards the extremes, not the means. In defiance of Will of Congress, the ACHP boldly states, and the FAA agrees, that the FAA is not compelled by that governing body to consider NPATMA at all for purpose of Section 106 implementation, that NHPA regulations stand on their own. Southwest Safaris rejoins that this is why the ATMP process has gotten out of control, doing untold damage to ATOs, rural communities, and regional economies and that this approach, as demonstrated, represents an unreasonable analysis of the proper interaction of the laws at hand, sending a wrecking ball through the rural air transportation system.

III The FAA's Finding is wrong, because the agency's list of historic properties in the APE is based on hearsay.

SWS alleges that the FAA's list of 37 cultural resources in the APE of the BAND ATMP is based on hearsay. None of the corroborating testimony in support of the list has been gathered or verified by the FAA, itself.

To verify the authenticity of the historic properties at CACH, the FAA had a legal responsibility to "walk the park" to validate the NPS' claims for legitimacy of National Registry (NR) eligibility. The FAA failed to perform this duty. The FAA would have realized the legitimacy of SWS' objections to the agency's selection of historic properties if the agency had complied with 36 CFR §800.4(b)(2). This regulation requires, under heading of "Identification of Historic Properties," the FAA to "conduct an appropriate level of field investigation, taking into account the number of alternatives under consideration, the magnitude of the undertaking and its likely effects" Under regulation, this obligation cannot be delegated to another agency, particularly the NPS, which has an obvious self-interest in the outcome of the ATMP process. The FAA has no authority, SWS claims, to ask for comments from the public/ATO relating to itemized historic properties till the agency has personally conducted field investigation to verify the accuracy of the list of properties. Without the verification, the public comments would be irrelevant. As it is, the FAA relies 100% on other people's/agencies' untested memories and unchallenged records.

Until the FAA reveals the location of each of the FAA's claimed "cultural resources," the FAA list of historic properties has no credibility. Each site needs to be verified. Otherwise, the evidence the FAA relies on merely consists of a general aggregate of testimony involving unidentified third parties (tribes, consultants, and archaeologists) presented as unsubstantiated facts by second parties (the NPS and State Historic Offices) that have little firsthand expertise with the field research behind this specific data. Such testimony, both verbal and written, with a few exceptions, is inadmissible in either court or hearing body, without field confirmation by the FAA.

Incredibly, the FAA counterclaims that hearsay, under the rules of NHPA, is admissible for Sec.106 purposes. The FAA claims that it is not bound by rules of evidence applied by courts.

SWS rejoins that the FAA can cite no source that allows the agency to use hearsay.

The FAA counters by reliance on the fact that NHPA (under Section 106) generally considers all testimony, especially that of Indians, to be appropriate evidence, without any verification.

In turn, Southwest Safaris responds: (1) the FAA's opinion allows unsubstantiated evidence to "poison" objective analysis; and (2) the courts have long recognized that contamination of evidence with hearsay must be arduously avoided in order to ensure due process.

Because (1) the FAA failed to conduct and/or verify any kind of actual field investigation; and because (2) the agency relied in large part on testimony and records of unidentified "consulting parties," all of whom SWS assumes had a personal/agency interest in the outcome of the eventual S106 finding; and because (3) the NPS and the Navajo Nation (e.g., local Chapter Houses and the Navajo Heritage and Historic Preservation Department, plus members of the Tribal Council¹⁸) have an admitted vested interest in denying Southwest Safaris right to fly over the Park ... which predilection makes objective analysis and presentation of data impossible. SWS asserts that the FAA and the NPA (the agencies) working jointly, in fact made neither "a reasonable and good faith effort to identify historic properties within the APE,"¹⁹ nor did the agencies use reasonable and appropriate means of identifying historic properties consistent with the ACHP's regulations.

It remains, then, for Southwest Safaris to demonstrate that the 1,637 cultural resources that the FAA claims lie within the District of the APE, including 1,600 archaeological sites, are not properly included or eligible for inclusion on the National Register. The reasons have to do with current eligibility. The sites are only eligible for listing on the NR for reason of general historic accommodation. The claims for specific historic importance/and relevance are impossible for the FAA to verify.

¹⁸ See Footnote #38 in reference to testimony of Mr. Carl Slater, member of the Navajo Nation Council, delivered on December 5, 2023 to the House Natural Resources Subcommittee on Oversight and Investigations. See also Footnote #39 for quote from Navajo Council Speaker Crystalyne Curley in Gallup Sun newspaper.

¹⁹ See FAA's *Finding of Effects* letter, December 28, 2023, page 5, *Identification of Historic Properties*.

As it turns out, the FAA, itself, admits that 1,600 of the claimed properties are irrelevant to the “undertaking.” On page 6 of the FAA’s *Letter of Effect*, the FAA says:

1,600 additional inventoried and recorded below-ground archaeological sites [lie] within the APE; however, these below-ground archaeological resources are not further described in this letter because feeling and setting are not characteristics that make these properties eligible for listing on the National Register and there is no potential for the undertaking to affect these resources.²⁰

So, Southwest Safaris has only to refute the listing of the other 37 sites in the APE.

Title 36, Part 60 is concerned with the National Register of Historic Places (National Register, or “NR”). §60.4 lists the “Criteria for Evaluation” that must be used to determine the characteristics of a property that might make it eligible for listing on the National Register. All of the properties referenced by the FAA in the APE are technically considered “sites,” because they have physical presence over and above cultural significance. So, they fall under the eligibility rules of §60.4.

According to 36 CFR §60.4, none of the individual properties included in the “districts” listed in Schedule C of the FAA’s *Letter of Effects* would qualify on their own as Historic Properties (HPs). Sacred space and religious/cultural setting (e.g., “cultural landscapes” and “traditional cultural properties”) are not enough to make a property (i.e., a “site”) eligible for listing on the NR. Nor are properties qualified whose only distinctive characteristics are “setting and feeling.”²¹ The NR does not include “outdoor spaces designed for meditation or contemplation,”²² either.

The NR regulation concerning qualification of properties reads as follows:

§60.4 *National Register criteria for evaluation.* The quality of significance in American history, architecture, archeology, engineering, and culture is present in districts, *sites*, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, *feeling*, and association and (a) that are associated with events that have made a significant contribution to the broad patterns of our history; **or** (b) that are associated with the lives of persons significant in our past; **or** (c) that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; **or** (d) that have yielded, or may be likely to yield, information important in prehistory or history. (Emphasis added.)

²⁰ Southwest Safaris points out that this line of reasoning is diametrically opposed to that used by the FAA for the BAND ATMP. At BAND, the FAA argues that all 3,000 some ancestral cultural sites of the local Tribes are still sacred and have to be protected by the ATMP for reasons of “settings and feelings.” The FAA argues inconsistently from park to park, undermining the agency’s credibility.

²¹ Non-listing of TCPs. See FAA’s Finding of Effects Letter, December 28, 2012, page 5, Identification of Historic Properties.

²² Ibid

There is an “and” coordinating conjunction involved in the regulation, followed by a long line of “or” conditionals. The regulation is a logic statement consisting of “and/or” construction. In order to be eligible for listing on the National Register for religious/spiritual/cultural reasons, property categories of the classes the FAA mentions would need to have “setting/feeling” qualities *plus* meet at least one of the “criteria considerations” listed in the above regulation stipulation.

All but one of the TCP properties listed in the FAA’s Attachment C fail to meet the standards of the “or” clauses/ subparagraphs (a) through (d) above. With the exception of White House Ruin, none of the individual TCP properties are even generally associated with identifiable historic events of significant record, (a); none are associated with specific persons, (b); none but White House Ruin are associated with works of construction or creative design, (c); and none but White House Ruin “yield information important in prehistory or history,” (d). In the case of Spider Rock, Spider Woman is a figure of current reality to the Navajo people; she is a living figure whose importance is primarily in the present. Attachment C lists no identifiable connection of Spider Woman with historic events, citing no specific commemorative aspects of Spider Woman’s actuality, only general reference to her as a teacher of timeless spiritual values. A towering rock monolith is not an architectural achievement; it is a landmark, not a structure. No historic battles occurred at Spider Rock. Moreover, the NR makes no mention of anthropomorphic qualities passing from spiritual persons to physical properties (rocks) so that the identity of a natural object would become that of the spiritual, allowing the property to take on timeless historic significance. Spider Rock is a popular tourist attraction, lacking privacy and silence viewed from the overlooking parking lot.

Beyond two listed NPS buildings plus White House Ruin and Spider Rock, other possible historic properties in the Park are only identified in Attachment C by number. With the exception of White House Ruin, nothing substantive is said about the individual identities, histories, or integral importance of these numbered properties to the overall historic characteristics of the Park, only that several of the sites have “setting and feeling” attributes that are “significant,” whatever that means.²³ By concealing the majority of the sites’ identities, the FAA has deliberately made the sites impossible to critique for veil of secrecy. The FAA denies ATOs due process by withholding from ATOs constructive opportunity to comment on the numbered properties. SWS challenges the numbered properties authenticity. SWS further argues that the 33 numbered TCPs within and outside the Park boundary should be eliminated from eligibility on the National Register for lack of qualifying criteria (specificity and relevance)

²³ The FAA makes reference to the National Register Bulletin 36, pointing out that “A contributing resource has the following characteristics: it was present during the period of time that the property achieved its significance; it relates to the documented significance of the property; and it possesses historical integrity or is capable of yielding important information relevant to the significance of the property.” SWS counters by observing that this reference is far too general, too abstract, does not apply to specific physical sites, and is too vague with respect to application. Moreover, the information contained in the contested “contributing resources” is not of *significance* or *importance* with reference to each individual site.

and eliminated from consideration in the proposed CACH ATMP for lack of connection with any particular route (lack of definition and location).²⁴

Attachment C lists only 37 individual historic sites. Only two “building properties” are included in the Park HQ inventory, and neither one of them counts²⁵; none of the sites lie along or directly under the routes flown by SWS. Within the districts, the FAA claims that there exist 35 “cultural resources,” but none of them are actually listed on the NR. For 33 of the sites, the FAA gives no proof of even their actual existence by any sort of geographic reference that either the agency or the ATO can verify. This is a point of important contention; the sites are “faceless,” having no individual characteristics.

The FAA says that the “information provided by consulting parties, including tribes, is reasonable and an appropriate means of identifying historic properties and is also consistent with the ACHP’s regulations.” Southwest Safaris disagrees.

In the first place, the information garnered from consulting parties relating to historic properties dating back far beyond collective memory can only have been derived from historic hearsay passed down from one consulting “expert” to the next. Consulting with Indian tribes, as required by NHPA regulation per PL 102-575, does not change the type of reliance (hearsay) that the FAA is depending on.

PL 102-575 states:

In carrying out its responsibilities under section 106, a Federal agency shall consult with any Indian tribe or Native Hawaiian organization that attaches religious and cultural significance to properties described in subparagraph (A).

²⁴ It is interesting to note that none of the “cultural resources” claimed by the FAA for inclusion on the National Register have been listed in the registration for the historic property. The registration form has not been updated since 1970.

²⁵ One of the properties listed is the “Custodian’s Residence.” This property is ineligible for inclusion in the FAA list of historic properties in the APE because it properly belongs to the Thunderbird Lodge historic district. This district was not listed as one of the included “Districts” in the APE because the cluster of buildings has been specifically delisted from the National Register. Moreover, the Lodge is a working partner with Southwest Safaris, providing numerous ground services for the ATO. By standing agreement, SWS signals the Lodge of the ATO’s arrival by flying over the Lodge at a low enough altitude to be heard in the office, to confirm need for pickup at the local airstrip. Noise and physical presence of air tours at CACH is obviously not an issue with Thunderbird Lodge, the FAA’s obsession with “settings and feelings” notwithstanding. The Lodge is a major employer of Navajos in Chinle, who, upon inquiry, appear to share the opinions of management. The other building serves as the HQ for the Park. It, too, is not listed as a site on the NR, because its construction is neither unique nor commemorative. It sits immediately adjacent to the main visitor parking lot. It is one of the noisiest parking sites in the Park, so the applicability of “setting and feelings” as a characteristic of the property that would qualify it for inclusion in the APE is completely inappropriate.

Complying with this law does not mean that the FAA necessarily has to incorporate the statements and figures of the Tribes. To do so without verification of data would still imply reliance on hearsay. The FAA has provided no evidence of fact-checking, relying only of the highly biased testimony of the NPS and Tribal Historic Office for concurrence.

In the second place, listing on the NR is not determined by NHPA, but by a different set of regulations. In the present instance, eligibility of the properties is solely determined by the “Criteria for Evaluation” enumerated under 36 CFR §60.4. Very few of the tests of qualifying criteria would successfully apply to the individual “sites” in question. Southwest Safaris claims, therefore, that the supposed “cultural resources” listed by the FAA likely represent grossly exaggerated claims by the NPS and Tribes. These are highly prejudiced parties to the ATMP undertaking, whose word, therefore, cannot be taken at face value, 36 CFR §800.4(c)(1) notwithstanding. Of the 37 TCP properties listed in Attachment C, all but White House Ruin fail to meet the standards of the “or” clauses/subparagraphs (a) through (d) above.

All of the sites, including the buildings,²⁶ fail the eligibility test for reason of itemized “criteria considerations.” These §60.4 stipulations follow in the regulation immediately after the “National Register Criteria for Evaluation” paragraph referenced above. Cemeteries and graves of historical figures and properties primarily commemorative in nature, characteristics obviously alluded to with reference to the 35 cultural and archaeological sites, are not considered eligible for the NR. §60.4 states that “Ordinarily properties . . . used for religious [including prayerful, meditative, and ceremonial] purposes . . . shall not be considered eligible for the National Register.” None of the listed extenuating exceptions to this rule apply under §60.4, with the possible allowance for (f) White House Ruin.²⁷ However, none of the other properties in question are “primarily commemorative in intent,” nor do they have “*exceptional* significance.” None of the other properties listed were originally created by man for celebratory purposes, and natural properties do not “inherit” man-made “traditional significance” over time unless an extraordinary historic event is directly associated therewith. The FAA makes no claim that any of the listed TCPs have commemorative association attached to identifiable events. Therefore, all of the unnamed TCPs lack overall “integrity” of presentation with respect to the NR.

The criteria for eligibility of listing on the NR do not include landscape locations “that have been continuously used for contemplation and prayer.” Nor do the criteria for eligibility allow listing “because of association with cultural practices or beliefs.” The concept of “cultural landscape” including “outdoor spaces designed for meditation or contemplation” is completely foreign to the wording of the NR’s Criteria for Evaluation and to the qualities of stipulated exception/eligibility that follow. The FAA has artfully crafted the misleading and prejudicial terminology. The NR considers such sweeping categories to be much too broad. On the other hand, individual TCPs are not automatically and separately included in the NR just because they have cultural importance for current time. Their eligibility for listing comes solely from being part of the Park.

²⁶ *Ibid.*

²⁷ With regards to exceptions for governing listing on the NR, §60.4 says: “However, such properties will qualify if they are integral parts of districts that do meet the criteria of if they fall within the following categories: (f) A property primarily commemorative in intent if design, age, tradition, or symbolic value has invested it with its own exceptional significance; or . . .”

The main justification for all of the TCPs but White House Ruin being included in the APE as historic sites is that they fall within the boundaries of CACH. This is a “district” that does meet the criteria for listing on the NR. However, the majority of the properties, considered by themselves, would not meet the criteria.²⁸ Moreover, the exception for reason of district inclusion is nullified by the fact that the individual properties are not “integral parts of districts,” meaning that they cannot be cognitively recognized as such by laymen and cannot readily be observed as historic sites by normal visual means. The sites lack unique physical characteristics (being “faceless”). Their presence is not essential to the identity of the Park. They are cultural locations of importance to local residents, not material or objective sites that contain specific historic importance/relevance to the Park. The sites have only general “setting and feeling” of note.

Southwest Safaris acknowledges the existence of special wording in PUBLIC LAW 102-575—OCT. 30, 1992 106 STAT. 4757 which says that “Properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization may be determined to be eligible for inclusion on the National Register.” SWS notes, however, that the wording does not include, “without further consideration” at the end of the statutory language. SWS alleges that the FAA errs in two ways. First, the agency misinterprets the “may be determined” clause to mean “shall be determined.” This clause carries vastly different meaning than the alternative interpretation, which would mean, instead: “is allowed to be considered for” Under the alternative interpretation, the properties would be given favorable consideration, but would still have to abide by 36 CFR §60.4. Southwest Safaris argues in favor of the alternative interpretation, contending that inclusion of the properties on the NR is not automatic.

Second, the FAA does not recognize the full meaning of 36 CFR §800.4(c)(1). With reference to the current instance, the relevant portion of the NCHP regulation states:

The passage of time, changing perceptions of significance, or incomplete prior evaluations may require the agency official to reevaluate properties previously determined eligible or ineligible.

Certainly, the passage of time has affected the qualities of the 35 sites that the FAA is claiming as cultural properties for inclusion in the NR. Many of these sites are over 1,000 years old. They have been buried by sand at the rate of one shovel of time per year and deteriorated to the point where they are unrecognizable to the untrained eye. They have been ravaged by fire, wind, storm, flood, sun, and vandalism. Their relevance to the NR by current standards has become sadly irrelevant except in the most historic context. Most of the 1,600 “cultural resources” at CACH supposedly listed on the NR no longer constructively exist anymore and, for the sake of accuracy and credibility, should not be considered eligible for listing on the NR, their “potential presence” undermining the integrity of the Register. Currently, except for the well-meaning but unverified testimony of tribal members, there is no way to know which of the listed cultural properties are “real” for purposes of NR listing and which are not anymore.

²⁸ *Non-listing of TCPs, supra* Footnote #21.

SWS points out that creation of Prohibited Airspace in the CACH ATMP above TCPs cannot be based on undefinable “cultural landscapes” of vague social and religious significance from bygone times. Moreover, considerations of airspace surrounding historic properties is not relevant to the National Registry’s *Criteria for Evaluation*. §60.4 makes no mention of “viewsheds” being a part of a historic property’s intrinsic value. “Diminishment of viewshed” is a concept foreign to the *Criteria for Evaluation* and not a factor of relevance under NPATMA when determining adverse impact of aircraft presence. This discounts most of the FAA’s criticism of air tours over the Park.

Additionally, the *Criteria for Evaluation* attaches no vertical column of airspace to any historic property. Therefore, cultural and ceremonial sites have no claim to trespass or intrusion of presence by persons or machines passing overhead either by foot or wing. This largely discounts the rest of the FAA’s objections to air tours over the Park.

The FAA’s attempt to rely on hearsay was erroneously reinforced by the ACHP when the ACHP responded to the FAA’s request for opinion regarding a pending ATMP for Bandelier National Monument (BAND). In the ACHP’s letter to the FAA of December 21, 2023, the ACHP said on page 4, *ACHP’s Review of Finding*:

Based on the information provided by Tribes, noise and visual elements from air tours [at Bandelier National Monument] have the potential to alter characteristics of historic properties significant to them by diminishing integrity of setting and feeling, among other aspects of integrity. The ACHP has developed policy statements and other guidance that affirm the validity of Indigenous Knowledge in identifying historic properties of religious and cultural significance. Therefore, the information provided by Tribes is sufficient for the FAA to determine that properties of significance to Tribes are historic properties without further archaeological evaluation, and the characteristics that make the properties significant could be adversely affected by continued air tours above and around them.

Relying on the arguments and regulatory language cited earlier, Southwest Safaris strenuously refutes the ACHP’s statement. The Council claims that information provided by Tribes is sufficient unto itself as qualifying evidence of historic properties without any archaeological evaluation. They further claim that allegations of “potential” adverse effects from air tours have to be accepted without cross-examination or any means of verification. The NHPA regulations, themselves, make it patently clear that this is not the case, which is probably why the ACHP cites no regulations upon which its flawed interpretation rests. Moreover, NPATMA also disagrees with ACHP opinion, the Act requiring performance of the “if any” test by means of Section 808 sound measurements in order to verify any alleged statements of adverse impacts from air tour overflights. SWS says yet gain, in refrain, that NPTMA, not NHPA and not NEPA acting by themselves, is the controlling legal authority re. all matters relating to the creation of ATMPs.

SWS concludes this section by stating, with reference to the APE for Canyon de Chelly, that the FAA is asking for the impossible. It is not fair under Section 106 for the FAA to ask an ATO to comment on boundaries of the APE based on TCPs that the FAA will not identify as to location. All claimed historic properties at CACH should be identified on a map, the argument for privacy notwithstanding. The FAA is wrongly withholding the locations of historic sites that would be essential for planning air tour routes.

IV The FAA's Finding is wrong, because it is based on extremist interpretation of law, ignoring NPATMA.

There is nothing in the Federal Code that justifies the FAA's extremist interpretation of law and regulation. The FAA misuses the regulatory body to ban all air tours over Canyon de Chelly and Bandelier.

The ACHP, upon whose opinion the FAA relies, apparently agrees. In the ACHP's Opinion letter of December 21, 2023, in which the Council comments on the FAA's Finding of "no adverse effects" for the BAND ATMP, the ACHP says at the bottom of page 4:

Further, while the **Section 106 process does not mandate a specific outcome**, the regulations implementing Section 106 present an order to the consideration of alternatives with regard to adverse effects, if any. The agency should first consider ways to avoid adverse effects to historic properties; if such options are not available, then the agency would consider ways to minimize or mitigate adverse effects (see 36 CFR §800.6(a)). (Emphasis added.)

The FAA builds a huge untruth around a small truth. While it is true that "Section 106 process does not mandate a specific outcome" ... meaning that NHPA does not require the FAA to choose the most radical remedy for addressing adverse impacts ... the rest of the FAA's sentence is blatantly false. NHPA regulations do not require or even suggest an order of remediation for "potential" adverse effects.

The actual language of the regulation to which the ACHP refers is contained in 36 CFR §800.1(a) (not §800.6(a), which the ACHP erroneously cites). That wording says:

§800.1 Purposes

The goal of consultation is to identify historic properties potentially affected by the undertaking, assess its effects and seek ways to avoid, minimize or mitigate any adverse effects on historic properties.

The ACHP and the FAA base their entire theory of extremist remedy on misinterpretation of this single, informative sentence. The rationale of the statement was simply to give the "purposes" behind the NHPA statute and the general methods of accomplishing them. It serves as introductory text for the NHPA statute. The text gives an explication of goals and the means of attaining them, not instructions for how to achieve them; that comes later in the law. The wording of the sentence does not include any mandatory terminology such as "must" or "shall."

The ACHP incorrectly declares that the first and major priority of Section 106 is to avoid adverse effects on historic properties altogether and, if that option is not available, only then would the FAA, empowered by the ACHP, elect alternative remedies that would either minimize or mitigate adverse effects. The regulation, as quoted, says no such thing.

Textual analysis of the regulation refutes the Council's interpretation. In the first place, Congress presents the words, "avoid, minimize or mitigate," merely in alphabetical order. In the second place, Congressional use of the coordinating conjunction, "or," creates equal standing

between the terms, not priority of order. Congress gave agencies three choices of remedy; they could choose any one of them, providing that the agencies could justify it (49 USC §40128(b)(3)(F)). In the third place, had Congress intended the interpretation adopted by the ACHP/FAA, Congress would have expressly used wording calling attention to that effect, such as adding “in that order” to the end of the sentence. In the fourth place, Congress uses words that do not express a clear difference of degree. By using the words, “minimize or mitigate,” Congress attempts to draw a distinction that does not make a clear difference, the degree of difference being just too subtle for regulatory purposes. If Congress had meant the words to apply in descending order of degree for aviation purposes, where clarity is of utmost importance, it would have employed more useful vocabulary. It might have said, “... seek ways to prevent, accept, or modify any adverse effects on historic properties, in that order.” Evidently, Congress had no obvious order of preference for implementing the three choices for correcting adverse impact. Congress simply directed that the decision would be “reasonable” ... meaning made with the aid of the intentional “if any” test required by NPATMA ... and “justifiable ... meaning consistent with the findings from performing the science-based sound studies required under Section 808 of the Act.

NHPA was never written to be an aviation regulation. NPATMA was. The FAA is relying on language that is not applicable to its endeavor. This is yet another example of why Congress intended NPATMA to be the controlling legal authority re. ATMPs, where the language is specific to the “undertaking.”

The ACHP’s/FAA’s gross misunderstanding of Federal code as it applies to the ATMP process goes to the heart of the FAA’s justification for using extremist remedies for eliminating all “potential” (i.e., currently nonexistent) adverse impacts on historic properties. This policy drives the FAA’s interpretation of NHPA regulations to allow the agency to arrive at an erroneous Finding of “no adverse effects” from banning all air tours over the Park. In this manner, the agency can conclude the ATMP process with a decision of “no air tours” allowed, which contradicts the Will of Congress (see Appendix 1).

It appears that the ACHP has been caught in a misstatement of huge proportions, The Council attempts to grab powers under Section 106 that Congress never granted. Then the Council gives them to the FAA. Of course, one would expect NPATMA to come to the opposite conclusion ... and it does. Ergo, the FAA’s reason for hating NPATMA and trying to skirt, or negate, or violate it.

NPATMA, 49 USC 40128(b)(1)(B), voices just the opposite of the Council’s Opinion, that:

The objective of any air tour management plan shall be to develop acceptable and effective measures to *mitigate or prevent* the *significant* adverse impacts, *if any*, of commercial air tour operations upon the natural and cultural resources, visitor experiences, and tribal lands.

The language of the Act is very clear. There is an “or” between “mitigate” and “prevent.” Under NPATMA, there is no imperative to “avoid” all “potential” adverse impacts, the concept of “avoidance” being foreign to the Act. By incorporation of the word, “or,” NPATMA expressly allows latitude of mitigation methods. The *Objections* section of the Act gives the FAA power only to prevent the defined “*significant*” existing adverse impacts of air tours over

parks, not eliminate all “potential,” unmaterialized, future consequences of same. The ACHP methodology, in contrast, favors avoidance schemes based on the theory of “potential” adverse effects. This is a speculative concept which is unsupported by regulation of either NHPA or NPATMA origin. The policy would deny the ATO at BAND the right to fly over the Park regardless of the results of the “if any” test, even if the test proves “no adverse impacts.” The ACHP attempts to use NHPA as a weapon with which to war against NPATMA, in violation of basic principles of jurisprudence (Primacy of Law and Continuity of Law). However, the Council’s aim falls short of its mark, failing the test of strict scrutiny.

To elaborate in greater textual detail, the word “potential” does not even appear in NPATMA, nor does the Act include the word, “avoid.” “Avoid” carries the inference of “potential,” as in the FAA’s favorite NHPA phrase, “avoid potential effects.” The word, “prevent,” however, used in the *Objective* section of NPATMA, points to “existing conditions,” as in “mitigate or prevent significant [existing] adverse impacts.” So, the Act being the controlling legal authority for ATMP implementation, and the textual meaning of the Act being clear, the ACHP’s “do no possible harm” theory imported from NHPA ... incorrectly interpreted to mean the application of the most restrictive measures for reducing adverse impacts ... is inappropriate and inapplicable in the case of all ATMPs. This is especially true for CACH and BAND, where noise and physical presence of aircraft are not problems in the first place.

A decision in favor of Southwest Safaris’ interpretation of statutory language is logical even if one were to decide that the mitigation language of NHPA and NPATMA is not clear. According to the canon of Chevron deference, in cases where Congress does not specify agency actions, and the law is either ambiguous or silent, a specific textual test of reasonableness is required. Under NPATMA ... the Act being the controlling legal authority re. ATMPs ... the measure of reasonableness is expressly determined by application of the “if any” test for adverse impact, which in turn must be performed against existing conditions by means of science-based sound studies under Section 808. The standard of reasonableness cannot be construed under latitude of statutory interpretation to mean the elimination of all “potential adverse effects.” The Act provides specific language and methods to the contrary.

In the case of NHPA and NPATMA, the general contextual test of reasonableness is whether the agency’s interpretation of the law is consistent with legislative intent. In the present instance, the intent of NPATMA is clearly identified in its *Objectives* section, 49 USC 40128(b)(1)(B). The intent of NHPA is spelled out in 36 CFR 800.1(a). Both sets of regulations make significant use of “or” between the words “mitigate or prevent” in the former case and “avoid, minimize, or mitigate” in the latter. The intent of Congress in both statutes was to allow considerable latitude as to methodology for lessening alleged adverse impacts, if any. Southwest Safaris clarifies that the Opinion of the ACHP fails legal scrutiny thrice over. There is neither specific nor general interpretation of NPATMA and NHPA that would allow extremist interpretation for excessive remedies. Moreover, the “if any” test required by NPATMA was never performed, so the FAA’s methods fail the test of reasonableness, yet again.

The FAA has no problem recognizing the validity of Southwest Safaris’ arguments when it comes to major parks throughout the USA. Take Hawaii, for example. At HAVO, the FAA argues against the ACHP, saying the standard of decision is not “no air tours” based on the

Theory of Mere Presence,²⁹ but rather that of “existing conditions” and historical precedent. At HAVO, the FAA claims that air tours existed *at the time* NPATMA was created, so the noise levels at that time should be the standard of acceptance, and any measures taken to mitigate such noise will be sufficient to accomplish the objective of the Act.³⁰ Moreover, the FAA also argues that air tours over the park existed long *before* HAVO was created as a national park, asserting that air tour noise was, therefore, part of acceptable “existing conditions” even before the park was created³¹.

The FAA’s arguments at HAVO, HALE, ARCH, CANY, BRCA, and NABR are completely contrary to those at CACH and BAND, the difference in reasoning going unexplained. At CACH and BAND, the FAA argues that the basis for decision is “no air tours” predicated on the Theory of Mere Presence, no deference being given to the fact that air tours existed when the Park was created and long before.

The ACHP had a duty to address this glaring inconsistency and to ask the FAA to clarify the FAA’s reasoning. The failure to confront the FAA speaks to the Councils predilection to opine against SWS from the very outset and disqualifies the Council’s Opinion for lack of

²⁹ *Theory of Mere Presence, supra* Footnote #1.

³⁰ See FAA’s letter to ACHP of July 24, 2023, top of Page 3. There, the FAA states:

The standard set out in the ACHP’s regulations for assessing visual and audible effects is whether there is an introduction of visual or audible elements that diminish the integrity of the property’s significant historic features. See 36 CFR § 800.5(a)(2)(v). The FAA’s assessment of the effects of the undertaking is consistent with this standard For these reasons, **the FAA’s use of existing conditions as the baseline against which to measure the impacts of its undertaking is appropriate.** The FAA’s finding that the undertaking would not diminish the characteristics of any historic properties located within the APE but instead would represent a reduction in audible and visual effects on historic properties when compared to existing conditions is supported and consistent with the ACHP’s regulations implementing Section 106 of the NHPA. (Emphasis added.)

See also FAA’s letter to ACHP of September 12, 2023. In the middle of Page 4, the FAA states:

Impacts from the **existing condition** of air tours over the Park **is the appropriate baseline** for determining whether the undertaking (ATMP) will adversely affect historic properties. . . .

And, at the bottom of Page 4, the FAA states:

As the FAA explained in its request to the ACHP for an opinion on this finding, neither the National Parks Air Tour Management Act (NPATMA) nor the National Historic Preservation Act (NHPA) require the effects of the undertaking to be measured against a condition under which no air tours are occurring. (Emphasis added.)

³¹ *Ibid*, Page 9. The FAA states therein:

Furthermore, neither NPATMA nor NHPA require the agency to assess the effects of the undertaking assuming that the existing conditions already have an adverse effect.

objectivity, let alone misinterpretation and misapplication of law and regulation.³² Disqualification of ACHP opinion serves to disqualify the FAA's extremist methodology.

The ACHP's tacit S106 support for the FAA's double-standards for different parks notwithstanding, NPATMA will not tolerate the FAA's order of amelioration of adverse effects. NPATMA disagrees that the agency must first avoid, then minimize, and lastly mitigate "potential" adverse impacts. The basis of decision under the Act is *reasonable* reduction of adverse effects based first on implementing NPATMA's "if any" test by means of Section 808 sound studies and then by using a common-sense approach rather than resort to an extreme remedy that would bar all air tours entirely. Evidence to this effect is presented in Appendix 1, "NPATMA and the Will of Congress," where reasonable compromise and common-sense is touted. Based on these measures, the ACHP's Opinion at BAND and the FAA's application of it at CACH is unreasonable by any measure. Moreover, the Council's Opinion attempts to support the FAA's efforts to interpret existing regulation on an inconsistent park by park basis, as already demonstrated. By denying the Theory of Constructive Remedy³³ and its associated methodologies, the ACHP attempts to fabricate new regulatory interpretation to the effect of "new law," which, according to NPATMA, "will not fly."

Because the ACHP (and thereby the FAA) has no intention of ever concurring with a decision to allow air tours at CACH and BAND, the ACHP does not support any sound studies at the Parks and neither does the Council care how draconian are the measures the FAA uses to destroy all air tours thereover. By eliminating all "potential" adverse consequences of flying over Canyon de Chelly and Bandelier, the ACHP justifies eliminating all air tours over all parks, which is contrary to the intent of NPATMA. Southwest Safaris alleges that this is the real reason the

³² The FAA loves to point out that Southwest Safaris' arguments have little to do with Section 106, saying that S106 is only a "process regulations" that does not arrive at a decision, only an opinion. The fact that the FAA is trying to make a distinction without a difference notwithstanding, SWS' rebuttal has everything to do with Section 106. Moreover, the FAA uses broad NPATMA language under the Objectives section to justify a finding of "no adverse effects," narrowly focusing on the use of the words, "prevent," "cultural resources," and "tribal lands." The FAA claims that it does not have to "justify and document" its finding by NPATMA standards, which sets forth the basis for decisions under ATMP process. The FAA broke with regulations when it prematurely gave draft copies of the CACH ATMP to Navajo "consulting parties" which were not "consulting agencies," but continues to withhold the document from SWS, just as the FAA did when the agency prematurely published the BAND ATMP before completing the S106 process. So, the decision to find for "no air tours" is incorporated into the Section 106 process by direct association therewith. The finding of "no adverse effects" from disallowing air tours over the Park is used as the direct link to arrive at the decision in favor of "no air tours," so the logic and methods used to arrive at a Section 106 finding are very much on the table. SWS has many times pointed out the FAA's techniques for obstruction of argument and the agency's failure to properly order the presentation of documents and the problems it raises in written and oral argument, both to the ACHP and to the FAA, but gets stonewalled every time.

³³ The Theory of Constructive Remedy states that general remedies for adverse effects must be applied starting with the least harmful remedies for all parties impacted and ending with the most harmful remedies for those who most will suffer the pain of corrective action. In other words, apply the least impactful remedies first; the most impactful remedies last. This theory of social justice, promoting "reasonable and common-sense compromise," see Attachment 1, directly contradicts the FAA's methods and remedies for "potential" adverse effects addressed by ATMPs. The FAA's means and methods for ATMPs are unacceptable, according to NPATMA, because they only consider the interests of one end of a fix, not both ends, favoring one party to a dispute and ignoring the other, thereby tending to be "extremist."

Council incorrectly claims that “the agency should first and primarily consider ways to *avoid* adverse effects to historic properties.” The obvious goal of the FAA is to dismantle the air tour industry. NHPA is the primary tool in the FAA’s arsenal for doing so. The FAA’s actions to improperly use the Section 106 tool, encouraged and endorsed by the Council, speak to the effective failings of the majority of the ATMP undertakings.

V The FAA’s Finding is wrong, because it is based on false environmental analysis.

Had the FAA “walked the Park” according to regulation, the agency would have realized how incorrect and pointless the agency’s assessment of Canyon de Chelly’s environment really is. The Navajo Tribe has done everything they can to popularize the Park and encourage motorized access to it, both along the rims and in the bottom of the canyons. There is virtually no privacy in the Park due to commercial vehicles roaring up and down the sandy canyon floors and along the rims. CACH is probably one of the noisiest of all the units of the NPS.

Even the FAA artfully acknowledges this “inconvenient truth.” At the bottom of the FAA’s January 11, 2023 response to the ACHP’s December 21 Opinion regarding the BAND ATMP, the FAA says:

However, the elimination of air tours within the [BAND] ATMP planning area will [only] slightly reduce noise and visual intrusions within the APE and adverse effects are not anticipated as a direct or indirect result of the ATMP. (Emphasis added.)

The only “slight” reduction the FAA is talking about in the case of Bandelier applies equally to Canyon de Chelly. The arguable reduction in aircraft noise and visual intrusions achieved by the proposed CACH ATMP, allowing “no air tours,” assuming that they might prove to be the case, will be immeasurable and statistically insignificant compared with the prevailing noise in the Park all day long. One air tour a week gliding over CACH from 4,000 AGL in preparation for landing at Chinle is hardly a significant impact, no matter how measured. NPATMA is only concerned with the reduction of *significant* adverse impacts. No significant noise impact from air tours exists at Canyon de Chelly.

The agencies really do not seem to care very much; remedy of significant adverse conditions is not the point. The corrupted objective of the CACH ATMP is now the elimination of air tours over the Park altogether, by any means and justification necessary. This is why the FAA seeks a draconian remedy for a non-existent problem. The agency argues that all it has to do is come up with a proposal that will reduce noise by even the slightest degree and then use that method to justify a decision for “no air tours.” The goal is to win a political victory, not seek an operational solution. Southwest Safaris alleges that the FAA misuses authority of Congress by not considering minimizing or mitigating air tour noise before attempting to avoid it altogether. The FAA’s methods are inconsistent with the Theory of Constructive Remedy,³⁴ contrary to the purpose and methods of NPATMA, and work in violation to Will of Congress (see Appendix 1).

³⁴ *Theory of Constructive Remedy, supra* Footnote #33

VI The FAA's Finding is wrong, based on inaccurate data and sloppy noise modeling.

The FAA bases its Finding of “no adverse effects” from banning air tours over CACH on false data and flawed noise analysis.

Figures 2, 3, and 4 of the FAA's *Finding of Effects Letter* depict sound contour maps. Attachment D gives a *Summary of Noise Technical Analysis from NEPA Review*. The summary of noise produced by Southwest Safaris' air tours is misleading and wrong.

In the first place, SWS' current routes have changed since the charts were produced. The FAA never asked the ATO whether its routes have changed from those submitted several years ago, but acknowledges that changes might have occurred. They have, significantly. SWS now flies further away from Canyon de Chelly, staying south of the main road paralleling the canyon as its planes fly west, and north of the canyon as the planes fly east. The current air tour route flies east of Canyon del Muerto as the plane flies south, crosses the canyon between overlook sites, and then flies west of that canyon till exiting the Park. Southwest Safaris has already offset its current routes so that noise and visual presence are almost impossible to detect. Total avoidance of the Park is entirely unnecessary to achieve the purposes of NPATMA.

In any case, the figures 2, 3, and 4 give a false picture of what is actually going on, past and present. The figures are designed to give a worst-case graphical picture, which is entirely misleading. The charts make it appear that the noise and physical presence of air tour planes entirely “soaks” the canyon, the whole canyon being painted black in the case of figure 1. In point of fact, the “noise shadow” follows the aircraft, immediately disappearing after the plane passes out of the local area because of “terrain shielding” due to the plane's offset angle to the canyons ... which tends to block vertical entrance of sound ... and because of the bends in the canyons ... which tend to block horizontal movement of sound. Southwest Safaris has many times asked Navajo ground tour guides if they are aware of Southwest Safaris aircraft in the vicinity of the Canyon. The answer is always the same: “No, we never see you, but wonder if you are going to land to meet us at the airport; we worry that you will cancel ... maybe weather when birds don't fly. Actually, we would like to see you fly overhead; it would be a beautiful sight against a turquoise sky.” This is a uniquely Navajo reply: short, to the point, and creative.

In the second place, the FAA's noise modeling assumptions are total fiction. The FAA has never measured Southwest Safaris actual sounds in the vicinity of the canyon, so its base assumptions are completely incorrect. For instance, the FAA's AEDT assumptions are based on standard noise patterns of a Cessna 182 in cruise configuration. That is not how Southwest Safaris flies CACH. After crossing the Chuska mountains, heading west, SWS' plane is almost 10,500 feet MSL. The plane has to lose almost 5,000 feet of altitude over 30 miles to land at Chinle, just to the west of the Park. As the tour plane flies west along (not over) Canyon de Chelly, the tour aircraft is descending, using minimum power. No one on the ground can hear SWS coming in to land. The actual sound footprint of the plane would be much lower than 32 dB the entire route. The dBs are too low and the “noise shadow” is but a few seconds at any given spot in the Canyon. The FAA's *theoretical* sound *projections* are completely untested and unrealistic.

In the third place, figures 2 & 3 are wrong. There is no reason for the noise at any spot in the canyon to be above 32 dB, let alone above 52 dB, given the facts specified above. However, even if it were true that the plane generated brief exposure to noise above 52 dB, it would not matter. The three locations the FAA picked correspond to Spider Rock, White House Ruin, and the visitor parking area, where noise from ground vehicles and tourist voices are already maximized. No one would hear the plane over existing noise, and no one would see the plane, either, because the plane is on the south side of the canyon, benefiting from “terrain shielding,” and tourists are looking north to view the scenery, where the cliff dwellings are.

In the fourth place, the FAA makes no mention of the fact that Southwest Safaris is not really giving an air tour in the manner the agency is trying to portray. The routes in and out of Chinle are as much for transportation as for scenic viewing. Southwest Safaris is not circling Canyon de Chelly, unless forced to do so by the FAA’s newly proposed Alternative 2, “no air tours.” The FAA’s charts do not convey to the public that the maximum time over the Canyon, flown in either direction, is ten minutes total, flown less than once per week, according to the FAA’s figures. Viewed from the bottom of the canyons, the aircraft’s presence is but a few seconds. The FAA says in the margins of the maps that “the noise contour map legends indicate the cumulative percentage of the total ATMP planning area covered by each contour level.” The map conspicuously does not present the percentage of daily time that the noise levels are audible, which would give an entirely different picture of the alleged “potential” adverse effects of SWS’ air tours over CACH. The actual on-site percent-audible (PA) noise presence from Southwest Safaris’ air tours is so low as to be undetectable.

In the fifth place, the charts fail to disclose the alternative scenarios, so the basis for comparison is totally misleading. If forced to circle the park, Southwest Safaris will fly barely to the west of Canyon del Muerto on the flight out to Chinle, and then fly scarlessly to the south of Canyon de Chelly on the return flight. This will expose the canon to at least 2.6 times the noise as just flying over the canyon once on the inbound flight, as argued earlier. Moreover, the return flight will be conducted at full power in the immediate vicinity of the Park as the plane climbs to get over the Chuska Mountains, so that noise saturation will be at a maximum. The FAA needs to add charts to its presentation to reflect this certainty, along with text to explain the negative consequences of the alternative. The FAA has not revealed the big picture.

The reality, that the FAA tries to conceal, is that air tours over Canyon de Chelly, as actually being conducted today, have virtually no sound or visual impact on the Park.

However, all of this is irrelevant. There is no point in going into any more detail to perform a technical analysis on the flaws of the numbers the FAA presents. None of the FAA’s data is admissible evidence, another “inconvenient truth” that the FAA tries to conceal.

NPATMA is the controlling legal authority for the creation of ATMPs. As stated, many times already, NPATMA controls the timing of NHPA and NEPA and also controls the language and methods that NHPA and NEPA can employ to carry out their tasks.

NPATMA dictates that NHPA is not called into effect until: (1) the “if any” test under NPATMA is conducted; (2) the “if any” test indicates that there exist “significant” adverse effects from air

tours, and (3) all measurements of sounds are science-based using pertinent data. Until all of this is accomplished, there is no legal undertaking at CACH. Without a legal undertaking, no Findings can be launched and no NEPA EAs can be funded. To date, the FAA has ignored all of the above.

The FAA has clearly fully funded two different agency decisions, one each for CACH and BAND ATMPs. The initiatives are already almost completed before the projects have even been “approved” by Congress (by means of the “if any” test). Furthermore, the “undertakings” have already been largely completed well before Section 106 will be finished, two more violations of NHPA on top of the first set. At BAND, the FAA has already held a public meeting and closed a public comment period for the “proposed” ATMP before completing S106 process. At both CACH and BAND, the FAA has compiled the final version of the proposed ATMP, told all the consulting agencies/parties that the agency intends to adopt alternative 2, performed an Environmental Analysis, and distributed the “draft ATMP” to all parties except, in the case of CACH, Southwest Safaris. All of this has been done without the knowledge or consent of SWS, without a public hearing at CACH, and without a public comment period for CACH in violation of NHPA regulation, 36 CFR §800.1(c). The FAA’s juggernaut just keeps on rolling.

Moreover, the FAA bases its sound studies on noise modeling, not “reasonable scientific methods,” as required by Section 808 of NPATMA. There is no allowance for AEDT-based sound studies in the Act, but this does not slow the FAA’s progress to “satisfy the court.”³⁵

³⁵ See USCA Case #19-1044, Document #2001434, Filed 5/31/2023. The U.S. Court of Appeals, District of Columbia Circuit, said, “We fully expect that the agencies will make every effort to produce a plan that will enable them to complete the task [of creating ATMPs for 23 parks] within two years, as Congress directed. If the agencies anticipate that it will take them more than two years, they must offer specific, concrete reasons for why that is so in their proposal.”

Southwest Safaris alleges that the agencies (FAA and NPS, acting jointly) defrauded the court by withholding information that would have revealed that the agencies were required to meet the “if any” test in NPATMA by conducting science-based sound studies using pertinent data under Section 808 of the Act, which they would not be able to accomplish under the timeline of the Court. By knowingly withholding critical information, the agencies deceived the Court to: (1) justify violating NPATMA in order to misuse NHPA; and (2) expedite creation of ATMPs without having to worry about any civil rights violations that ATOs might claim. There would be no checks and balances to “agency discretion,” which would give the FAA a free hand to do as it pleased regardless of the ever-nagging Will of Congress. See Attachment 1.

The agencies argue that the court order prevents the agencies from complying with otherwise required administrative process. This allows the agencies to use one law (NHPA) to break another (NPATMA), circumventing Congressional mandate to perform sound studies required by the Act.

Southwest Safaris alleges that the agencies want to avoid sound studies because the field tests would provide data that ATOs could take to court to argue against the agencies’ decisions. Thus, the agencies have additionally conspired to deprive ATOs, Southwest Safaris in specific, of due process in the cases of CACH and BAND and obstruction of evidence (sound-study data) that could otherwise have been used in court against the agencies.

These reasons alone document incredible agency abuse of due process and complete disregard for regulation and law, requiring cessation of ATMP process until the agencies get clarification from the Court as to how to proceed.

The FAA incorrectly relies on noise modeling technology to make its determinations as to the level of air tour noise at CACH and BAND. This reliance, SWS maintains, adversely impacts the correct assessment of harmful impact of said noise on TCPs and, therefore, incorrectly influences FAA opinion and determinations under Section 106.

Actually, at Canyon de Chelly and Bandelier National Monuments, the FAA is in violation of NPATMA, NEPA, and NHPA, all three, because the use of noise models does not satisfy Section 808, in any case.

NPATMA says that “*any methodology*” used by the FAA to assess air tour noise shall be based on “reasonable scientific methods.” Noise models do not constitute scientific methodology, especially if the studies do not incorporate timely, accurate, thorough, and objective data obtained from vigorous field research ... none of which was provided at CACH. A noise model is just another term for an “Aviation Environmental Design Tool” (AEDT), to use an FAA term. The output from an AEDT is totally dependent on whatever numbers (including formulas) are input. The field-gathered input data the FAA is using at CACH, if it ever even existed, is too old, too few, too isolated, and too infrequently gathered, representing unreliable assumptions of present conditions, this on top of biased formulas. In fact, the FAA’s *Assessment of Effects* letter makes no claim to the FAA’s having ever conducted a sound study at CACH to which the agency is willing to admit ... for reason of withholding evidence that could be used against the agency to disprove its theories. Southwest Safaris alleges that the FAA, under Section 106, is relying on noise modeling at CACH to control the input so as to get a predetermined output that is contrary to the interests of the ATO. Regardless, the FAA appears to have no science-based sound study data with which to refute SWS’ claims of no adverse impact.

Spreadsheets, themselves, are not science. Science is based on acquiring original data gathered by observation in the field. Noise models, in contrast, are based on deductive armchair reasoning. Therefore, SWS argues, principal reliance on AEDT technology is not allowable under NPATMA (and, therefore, NHPA) as the primary or conclusive means of determining “adverse impact” where significant decisions are involved. This is one of the reasons SWS has argued in the body of this letter that NPATMA is the controlling legal authority for ATMPs, not NHPA or NEPA. Under the Principle of Primacy of Law and the Principle of Continuity of Law, NPATMA keeps NHPA and NEPA from warring with the Act. For example, under NPATMA, Section 808, the NEPA §1502.23 arguable allowance for using AEDT technology does not exist, because NEPA regulations are incompatible with NPATMA law, per 40 CFR §1500.3.

Even if NEPA’s §1502.23 did apply, the FAA would still be required to use scientific methodology to control the input with current, comprehensive, relevant, accurate, and science-based (i.e., pertinent) data. SWS argues that the FAA’s input data for CACH, even if one allows use of AEDT noise modeling, falls short of meeting these requirements for any given “test.”

The “warring” problem over noise modeling (NHPA v. NPATMA) is particularly problematic at CACH, where the FAA conducts no actual current noise studies in the field. The FAA instead relies entirely on its Aviation Environmental Design Tool (AEDT), i.e., noise modeling technology, and outdated data upon which to base its calculations of “adverse impact.” This is allowable under NEPA. 40 CFR §1502.23 of NEPA says, “Agencies are not required to

undertake new scientific and technical research to inform their analyses.” However, this statement is directly contrary to NPATMA, which is the controlling legal authority in the present instance.

SWS clarifies that §1502.23 does not apply to NPATMA because of the “shall clause” (Section 808). Moreover, Congress does not refer to §1502.23 in NPATMA’s §40128(b)(4)(C), in order to grant special exception. So, the requirement for noise studies based on “reasonable scientific method” still applies, NHPA and NEPA notwithstanding.

To avoid the “warring personalities” of NHPA and NEPA, NPATMA imposes a clear and unequivocal requirement to conduct pertinent sound studies, using “reasonable scientific methods,” before and during implementation of ATMPs for respective Parks. The FAA has a duty to perform sound studies which cannot be excused. This is a due diligence mandate.

As said many times, the use of noise modeling technology does not satisfy the requirements of Sec. 808 for use of “reasonable scientific methods.” Noise modeling may incorporate sophisticated computer technology, but it is not science, and it is prone to error. In support of this theory, SWS directs the reader’s attention to a FAA Memorandum, dated June 13, 2018, titled “Noise Screening Assessments,”³⁶

In general, the Memorandum is intended to “clarify existing FAA policy and guidance on noise screening assessments and the appropriate use of noise screening tools and methodologies.” The Memorandum makes it abundantly clear that noise screening tools and methodologies afford only approximate analysis of air tour noise impacts, and are not appropriate for detailed EA or EIS analysis presented to the public, nor for Section 106 analysis. Therefore, the FAA has chosen to use AEDT (Version 3e), instead, as that constitutes “approved” analysis technology. The FAA does not say who approved it; apparently, the FAA “approves” its own technologies.

Regardless, the Memorandum also makes it abundantly clear that noise modeling ... irrespective of the technology incorporated, whether noise screening or technical noise analysis (AEDT) ... is not science. The inadequacies of AEDT technology (noise modeling) logically follow the shortcomings of sound-level estimation (noise screening). Had Congress wanted to allow reliance on AEDT analysis of air tour noise, it could have easily specified to that effect in the Act (i.e., done so expressly). This is a noticeable omission, but *not* by oversight. Reliance on AEDT technology is *not* allowed under NPATMA any more than reliance on noise screening. In any case, the data fed into either modeling tool would have to be “pertinent,” defined by reason to mean “current, comprehensive, relevant, accurate, and science-based.” Both noise modeling methodologies used by the FAA (noise screening and AEDT) fail to make use of “pertinent” data at CACH, so the outcome from noise modeling at CACH in any case is flawed from the outset, irrespective of the computer programs used for analysis.

For all of the above reasons, SWS argues that the FAA’s efforts to gather input on TCPs for CACH are misplaced for lack of appropriate sound data upon which to base decision.

³⁶ See http://www.faa.gov/sites/faa.gov/files/air_traffic/environmental_issues/environmental_tetam/screening-memo.pdf.

VII The FAA's Finding is wrong, because it misrepresents the Navajo Nation's attitude towards air tours.

The FAA knowingly misrepresents the attitude of the Navajo Nation towards air tours. At the top of page 2 of the FAA's Letter of Effects, the agency says:

The agencies invited public involvement for this undertaking through a Federal Register Notice and NPS's Planning, Environment and Public Comment System (PEPC) website. Through these platforms, the public was invited to participate in Section 106 activities, specifically reviewing and providing comments on the Section 106 process and the FAA's efforts to identify consulting parties, determine the APE, identify historic properties, and assess the effects of the undertaking on historic properties within the APE. In total, five comments were received during the thirty-day comment period. Of the five, two of the comments opposed air tours over the Park generally. One commenter stated, "I feel that our canyon is [sacred] to us and should be preserved as long as we can plus the noise from the aircrafts will disturb historic ruins and animal life not to mention the pollution it will cause in the air from the aircrafts." Another commenter mentioned that "ancestors' ancient homes, rock art panels, burial sites, historic fortresses, peach orchards, trails, pole ladders, ceremonial chambers still stand and are intact to this day... As Dine' children we were taught to never enter or bother archaeological sites." A fifth commentator expressed that air tours over ancestral land block spiritual connections during sacred ways of ceremonies, which require quietness and privacy.

Southwest Safaris takes great exception to the FAA's negative characterization of Navajo sentiment towards air tours. At best, the FAA's representation is a half-truth. At worst, it constitutes fraudulent misrepresentation and withholding of evidence.

In the first place, only five written comments were received. Of these, only three were opposed to air tours over Canyon de Chelly. There are approximately 400,000 Navajos, half of whom live on the Navajo reservation. The percentage of negative letters compared with the total population is a mere 0.0000075. Compared to the Navajo population living on the reservation, the number is still only 0.000015. The FAA's claim of negative Navajo reaction to air tours at CACH has no statistical value. The FAA has no grounds to make a significant Finding in support of a decision for "no air tours" based on such de minimis feedback. One is led to believe that the other two comments were either strongly in favor of air tours or were neutral, which information the FAA fails to disclose.

Moreover, the statement of the FAA is mostly false. The official position of the Navajo Tribe is just the opposite of that represented by the FAA. The Tribal leadership actually favors air tours over the reservation; the tribe just wants to appropriate the air tour industry for itself. If the Tribe cannot get a significant portion of the revenues from air tours, only then does it have qualified reservations about air tours in general. The local business at Chinle, AZ that are making money off Southwest Safaris love the fact that SWS is bringing business to the local community while flying respectfully over the Park. Competitive ground services that are not doing business with the sole ATO serving the Park, of course, will have a different point of view ... until air tour business starts to flow their way.

On December 5, 2023, the House Natural Resources Subcommittee on Oversight and Investigations held a special hearing on the subject of “Limiting Access and Damaging Gateway Economies: Examining the National Parks Air tour Management Program.” A representative from the Navajo Nation testified at length. Mr. Carl Slater is a member of the 25th Navajo Nation Council, representing the communities of Tsailé/Wheatfields, Lukachukai, Round Rock, Tséché’izhí, and Rock Point. He is also is the Vice Chair of the Navajo Budget and Finance Committee. Mr. Slater presented oral³⁷ and written³⁸ testimony.

On page 5 of his written testimony, Mr. Slater states:

Management Plan with Tribal Consent

Despite all of the risks associated with expanding air tourism in and around the Navajo Nation, I want to be clear that we [the Navajo tribal Council] do not oppose air tourism across the board. This is why tribal consultation is so important. **The Navajo Nation would happily endorse additional air tours in the surrounding national parks** under the condition that a comprehensive management plan is developed in collaboration and with the consent of the affected tribal communities, ensuring that their perspectives, concerns, and cultural considerations are incorporated into those plans. (Emphasis added.)

SWS notes that this is the official statement from a representative of the Navajo Nation delivered to an official investigative body of U.S. Congress. These words carry enormous weight.

Mr. Slater verbally stated that the Tribe is not against air tours. In fact, the Tribes welcomes the contribution of air tours to the Tribe’s regional and local economies; the tribe just wants to see that a portion of the revenues therefrom goes to local Navajos. Mr. Slater orally testified that the Tribe, itself, wants to get into the business of conducting air tours, and stated that he would like to see existing air tour operators provide the training!

On page 6 of his written testimony, Mr. Slater said:

Even assuming consultation is adequate, an essential aspect of securing the Navajo Nation's support for air tours is the firm belief that tribal members should have the opportunity to benefit economically from such activities.

On page 7, Slater went on to say:

Engaging local Navajo residents in the economic aspects of air tours could also remedy some of the potential risks of air tours as well as enhance the experience for the tourist.

³⁷ The link to the Hearing is: <https://naturalresources.house.gov/calendar/eventsingle.aspx?EventID=415213>

³⁸ The link to printed testimony of Carl Slater is:
<https://www.congress.gov/118/meeting/house/116617/witnesses/HHRG-118-II15-Wstate-SlaterC-20231205.pdf>

Then he added:

But to enjoy the greatest economic benefit, it would be ideal if more tour companies were established on the Navajo Nation and owned by local Navajo entrepreneurs. For this reason, air tour management plans should include incentives for existing tour operators to mentor Navajo entrepreneurs, and a certain percentage of available flights should be reserved for Navajo-owned businesses to ensure local residents benefit from the existence of tours.

Slader concluded his remarks on *Economic Opportunities for Tribal Members* by testifying that:

If done right, the air tourism industry has the potential to spur economic development across the Navajo Nation. Economic opportunities generated by air tours can act as catalysts for community development within the Navajo Nation by improving our airports and related infrastructure. This will not only support the tours directly, but increase transportation options for all tribal members, making it easier for tribal members to access essential services and connect with other communities.

Other Navajo leaders have come forward with much the same testimony. Navajo Council Speaker Crystalyne Curley agreed that the federal government needs to consult with the tribes when it comes to air tours. Southwest Safaris found her testimony in the Gallup Sun newspaper, dated Friday, January 19, 2023:³⁹

Air Tour Management Plans can be devised responsibly through tribal consultation. The federal government has the responsibility for consultation at every step,” Curley said. “The federal government needs to meet tribes at their level of capacity and let tribes set the pace of consultation. We need to ensure that tribes benefit from economic development and revenue generation related to air tourism.

It is perfectly clear that the leadership of the Navajo Nation want to keep the window open to air tours, hoping to capture some of the economic benefits for the Tribe. The two testimonies offered here are in direct opposition to those presented by the agencies. In fairness, that might be because one set of testimonies represents the long-term vision of the Tribal Council, whereas the FAA is only measuring the short-term interests of local chapter houses. However, it really does not matter.

The FAA and NPS, acting jointly, have presented a knowingly false and misleading *Request for Concurrence*. The FAA’s Finding serves as a prototype of administrative weaponry intended to destroy the air tour industry at large, Southwest Safaris in specific. At the same time, the Finding undermines the interests and aspirations of the very People, the Dine, that the agencies purport to represent in consultation, i.e., the Navajos. The Finding represents abuse of public trust. The agencies had a due-diligence obligation to get input from all levels of Navajo government and grassroots groups, which clearly the agency did not seek. Both comments by members of the Council reflect the validity of SWS allegations.

³⁹ The link to the testimony of Crystalyne Curley is:
https://gallupsun.com/index.php?option=com_content&view=article&id=18024:staff-reports-&catid=186:politics&Itemid=616

It also appears that the FAA has not made it clear to the Navajo Nation that the proposed ATMP for CACH will not make any meaningful decrease in overall noise but will actually increase it in and around the Park; will not meaningfully increase privacy for residents in the canyons; and will actually hurt the community of Chinle economically by cutting off significant tourist revenues. It appears that the agencies have misrepresented the CACH ATMP “undertaking” to the Navajo People.

It is evident that the Navajos are looking for “reasonable” mitigation of “potential adverse effects” on historic properties, not radical elimination of all air tours at CACH, from which the Navajos greatly benefit already. The Navajos seem to want the same as Southwest Safaris, the lone air tour operator at the Park. The FAA would pit the parties against each other, when they actually appear to see things eye to eye.⁴⁰ Therefore, the disparity in public perception over the intent of the ATMP calls for immediate withdrawal of the *Request for Concurrence* and suspension of the ATMP process. The “undertakings,” at CACH, BAND, and many other parks, have been misrepresented on many different levels. As demonstrated, the ATMPs at CACH and BAND, for example, will actually increase the “significant” adverse impacts on persons and historic properties in the APEs and the local communities will suffer “significant” adverse economic effects, which the FAA refuses to measure. The agencies have managed to turn the hopes of Congress into a nightmare of administrative mismanagement. The real “undertaking” of the agencies at CACH is administrative fraud and public deception.

VII Conclusion

Southwest Safaris respectfully petitions the FAA to reconsider its proposed Finding of “no adverse effects” from banning all air tours over the Park. There are no mathematical, operational, regulatory, or lawful arguments to support the FAA’s ultimate proposal for “no air tours.” The FAA’s untimely requests for opinion and consent for a Finding of “no adverse effects” are out of order and greatly, unfairly, and intentionally prejudice the outcome of the agency’s eventual ATMP determination. The FAA’s *Letter of Effect* is being implemented under theories contrary to Federal regulation, law, and public interest. The FAA and NPS, acting jointly, wrongly attempt to employ NHPA to negate NPATMA, thus using one law, NHPA (Section 106), to break another, NPATMA, in order to defy the Will of Congress, with which the agencies do not agree. The agencies forever strive to overreach their authority by not recognizing basic principles of jurisprudence, attempting to use an assortment of laws as tools to accomplish the undoing of orderly regulation by devious schemes and conflation of regulations never anticipated by Congress. The consequences will be legal, administrative, and operational chaos for the Navajo People, struggling small communities across the USA, and a rural air

⁴⁰ Southwest Safaris has been conducting air tours over CACH for 49 years. In the nearly five-decade history of the company, SWS has never received a single complaint relating to its flights, either pertaining to noise or physical presence. Few locals even realize that the company flies over CACH. The ATO typically lands at Chinle, contracts with Navajo drivers to be transported into a local Navajo lodge, contracts for Navajo ground tours, procures lunch at a Navajo restaurant, and purchases arts & crafts from a Navajo gift shop. Then, SWS flies back to Santa Fe, NM, the point of origin for the tours, after leaving a lot of money on the table at Chinle, AZ. At least, that is what SWS has been doing for 49 years. That is all about to change, at great potential loss for the Navajo community at Chinle.

transportation system that has taken 100 years and untold investment to develop. By failing to recognize the Principles of Priority of Law and Continuity of Law, and failing to heed the content of law, the FAA has challenged the canons of Separation of Powers, Due Process, and limitations on Federal administrative authority. The FAA attempts to selectively use old laws to make “new law” constituting a national transportation policy outside the intent and reach of Congress and out of effective remedy by the judiciary. The result will be crisis in the courts, in this Great Land, and in the air.

Because the “undertaking” for CACH has not been *legally* triggered, SWS argues, the “undertaking” for CACH to this day does not legitimately exist. Therefore, the development, implementation, and funding of the CACH and BAND ATMPs are out of order. So also are Section 106 processes as well as the Environmental Assessments. Both EAs for the parks were compiled under cloak of the FAA’s Theory of Parallel Laws. SWS’ objections to the FAA’s reliance on its Theory of Parallel Laws have significant implications for NPATMA, NHPA and NEPA, indeed for much of American administrative law. Legal order must precede political expediency

The FAA asserts that it has no duty to consider the adverse economic effects of its actions on the Navajo Nation. Southwest Safaris strongly disagrees, arguing in favor of Navajo interests to agencies who have apparently turned a deaf ear to the long-term needs of the Tribe as well as to the present benefits Southwest Safaris provides for the communities at Canyon de Chelly while “doing no harm.”

The FAA’s efforts fail because the agency has weaponized NHPA, using it as a wrecking ball instead of a constructive tool to rebuild the air tour industry and the economies of small rural communities desperately in need of help after the ravaging impact of the Pandemic.

The FAA’s methods and procedures have been shown to violate the provisions of NHPA, NEPA, and NPATMA, all three. That is because, under FAA theory of jurisprudence, there is no priority of authority, there being no recognition of the Principle of Primacy of Law and Principle of Continuity of Law. The FAA has come up with no method of bringing harmony to the laws so that they work together instead of tearing each other apart, allowing the parts to destroy the whole. The concept of “reasonableness” is everywhere written into the wording of NPATMA, which Act the FAA, through Section 106 process, knowingly attempts to override and/or ignore. In contrast, Southwest Safaris’ arguments bring unity and rationality to the table, achieving the Will of Congress.

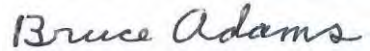
The FAA’s theories and methods do not satisfy NPATMA. Harmony between laws and operations is the ultimate test of conformity with legislative intent for ATMPs. The agency’s tactical approach has produced neither “acceptable” nor “effective” strategic results, no predictability or continuity of decision, and failure to logically and legally identify, “mitigate” or “prevent” significant and existing adverse impacts. The FAA’s and NPS’ misguided coordination of NPATMA, NHPA, and NEPA will throw the implementation of ATMPs back on the courts with an admission that politics has destroyed the ability of the agencies to work together. It is the hope of Southwest Safaris that reason can prevail between the parties of contention, allowing

the ATO to openly negotiate at the ATMP table after the CACH and BAND ATMP “undertakings” have begun anew.

Southwest Safaris, one more time, respectfully petitions the FAA that the agency withdraw its notice for comment on Section 106 historic properties at CACH and BAND and withdraw the FAA’s *Requests for Concurrence* thereof.

Thank you for your consideration.

Sincerely yours,

A handwritten signature in dark ink that reads "Bruce Adams". The signature is written in a cursive, slightly slanted style.

Bruce Adams

Appendix 1

NPATMA and the Will of Congress

In 1997, the issue of the presence of aircraft over lands managed by the NPS became so contentious that Congress became involved. The House and the Senate both held hearings, during which the pros and cons of air tours over National Parks and Monuments were aired.

When Congress finally drafted the National Parks Air Tour Management Act of 2000 (hereafter, NPATMA, or “the Act”), the Intent of Congress was clearly spelled out.

On November 17, 1997, in Dixie College, St. George, Utah, the House of Representatives’ Subcommittee on National Parks and Public Lands (Committee on Natural Resources) joint with the Subcommittee on Aviation (Committee on Transportation and Infrastructure) held a public meeting to discuss the pending regulation of air tours over units of the National Park Service. Congressman John Duncan went on record with a prepared statement, which summed up most of the Congressional testimonies that day. His prepared statement is particularly relevant because, at the time, Rep. Duncan headed the House Transportation and Infrastructure Committee. On 2/11/1999, Rep. Duncan introduced *H.R. 717 - National Parks Air Tour Management Act of 1999* to the 106th Congress (1999-2000). That bill eventually became the final *National Parks Air Tour Management Act of 2000*.

STATEMENT OF HON. JOHN J. DUNCAN, JR., A REPRESENTATIVE IN CONGRESS FROM THE STATE OF TENNESSEE

Chairman Hansen, Congressman Ensign, it is a pleasure to be here today in this wonderful community and in the State of Utah.

I am fortunate to have the opportunity to serve both on the Parks Subcommittee and as Chair of the Aviation Subcommittee in the Congress, which enables me to have a unique perspective on all sides of this issue.

Let me make clear at the outset that I strongly support the goal of protecting our National Parks from unnecessary aircraft noise.

There are many legitimate methods for management of aircraft over Parks which will achieve the appropriate balance between aircraft use and protection of the visitor experience, including but not limited to: limitation on time, place and number of aircraft, quiet aircraft technology and management of visitor use patterns.

These management actions are not dissimilar to actions taken to address other resource use allocation issues or management of other uses of park areas.

I also believe that sightseeing by aircraft is a legitimate manner in which to experience the Grand Canyon National Park and other Park areas.

With the efforts put forth by the Aviation Working Group, which consists of Federal, private, environmental, and other organizations, ***I believe that we can develop a [viable] solution which will permit continuation of aircraft overflights*** while enhancing opportunities for Park visitors to experience natural quiet.

If we ***work together to develop consensus on a reasonable and common-sense approach***, then I think we will be very successful on this and many other issues.

Mr. Chairman, I look forward to hearing from the expert witnesses we have before us today. [Emphasis added]

Congressman Duncan used the phrase, “reasonable and common-sense approach,” as synonym language for that of “acceptable and effective” which appears in 49 USC §40128(b)(1)(B) of the Act. Reason and common sense were meant to rule the application of NPATMA, not extremism.

Congress had two purposes in mind when it drafted NPATMA. The first, as stated by the Chairman, was to “support the goal of protecting our National Parks from unnecessary aircraft noise.”

The second unambiguous purpose of the Act was to protect and preserve the right of air tour operators to provide air tours over the National Park System. That is why the Honorable Chairman John Duncan said for the record in writing, speaking for Congress and for future generations: “*I also believe that sightseeing by aircraft is a legitimate manner in which to experience the Grand Canyon National Park and other Park areas.*” This is a statement by a congressman who sat on both the House Subcommittee on National Parks & Public Lands and chaired the House Subcommittee on Aviation. There can be no clearer enunciation of the Will

Attachment 2

NPATMA's Primary & Secondary Objectives: the "if any" test and Section 808 compliance. How NPATMA, NHPA, and NEPA interact.

NPATMA has a prime directive and a secondary directive, both derived from the stated *Objective* section of the Act. The relevant language, 49 USC §40128(b)(1)(B), stipulates:

Objective. The objective of any air tour management plan shall be to develop acceptable and effective measures to mitigate or prevent the significant adverse impacts, **if any**, of commercial air tour operations upon the natural and cultural resources, visitor experiences, and tribal lands. (Emphasis added.)

The first objective of NPATMA, one that *must* be fulfilled, is to determine if any impacts from air tours at a particular park significantly adversely affect persons and property on the ground. The interjection of the "if any" wording into the Act is not a casual remark by Congress. The "if any" question must be satisfied before the Act can be employed to affect a determination as to the type of ATMP that will be employed for any particular park, if any. Only after the "if any" question is resolved can NPATMA make such a determination and empower NEPA and NHPA to act accordingly. If there are no significant adverse impacts from air tours at a given park, then NPATMA (and, therefore, NEPA and NHPA) has no power to direct an ATMP to curtail or eliminate air tours over that park, there being no reason to do so. In this case, the ATMP for the respective park must make a determination of "No Change" in the way current air tours are being conducted. Unless "extraordinary circumstances" exist, if the park has 50 or less flights per year, the ATO would be allowed by NPATMA to continue operations under existing IOA.

The secondary objective of NPATMA (there being more) is to stipulate the type and manner of methodology that *must* be used to assess the "if any" question. To this end, NPATMA calls into effect Section 808 of the Act.

Section 808 of the Act stipulates that:

Any methodology adopted by a Federal agency to assess air tour noise in any unit of the national park system (including the Grand Canyon and Alaska) shall be based on reasonable scientific methods. [Emphasis added.]

Section 808 of the Act *must* be employed in order to satisfy the "if any" question. Without answering the "if any" question, the Act cannot go forward... meaning that an ATMP cannot be introduced for lack of cause (program decision). In this case, the "if" component of the "if ... then ... else" syllogism would not have been positively satisfied, causing the Act to freeze like a computer program. Without first applying the "if any" test by means of science-based noise studies using pertinent data, the Act prohibits flights over a given park if more than 50 air tours are conducted per year but allows continued flights under IAO if the authorized flights are 50 or less (unless extraordinary circumstances exist). In either case, without performing the "if any" test, NEPA and NHPA would not yet be activated.

If the “if any” test is performed for a park that has more than 50 air tours per year, then NPATMA would authorize the creation of an ATMP “undertaking,” requiring “reasonable and common-sense” methods of avoiding (which does not necessarily mean preventing), accepting, or lessening *significant* adverse effects from air tours. The degree of “significance” present, if any, is to be determined solely by the “if any” test. Unless extraordinary circumstances exist, the “if any” test would not normally be performed for parks that have less than 50 air tours per year. If extraordinary circumstances to exist, then the “if any” test would be required to prove the circumstances.

NPATMA makes it mandatory to use “reasonable scientific methods” for investigation of noise impacts on units of the National Park Service (NPS). No other methodology will suffice. The “*shall*” clause of Section 808 controls both NHPA and NEPA, because NHPA is concerned with the operational conduct and NEPA is focused on the environmental analysis of any “undertaking.” Section 808 negates the power of NEPA’s §§1502.21, .23, which would otherwise exonerate the FAA from performing any disciplined current sound studies at all.⁴¹ Under NPATMA, science-based sound studies must provide the measure of need for corrective action to mitigate or prevent alleged adverse impacts of air tours. Because NPATMA controls the timing, vocabulary, and methodology of NHPA and NEPA, and because NHPA is silent on the subject of sound studies and NEPA is not exempted from the requirement for sound studies, the “*shall*” demand of Section 808 is the controlling legal authority for noise studies for all three statutes (NPATMA, NHPA, and NEPA).

⁴¹ See my letter dated September 25, 2023, page 3, top, 6th *Response to Request for Concurrence on Sec.106*. In that letter, I argue that “Section 808 negates any authority of NEPA’s 43 CFR §1502.21 ... wherein NEPA excuses incomplete or unavailable information and allows theoretical approaches or research methods instead of science-based studies; and §1502.23, wherein NEPA allows agencies to make use of existing data and resources instead of pertinent, scientifically-researched data. NPATMA makes it mandatory to conduct sound studies, based on ‘reasonable scientific methods.’ This agency-specific power of Act by itself asserts the authority of NPATMA over NEPA.

APPENDIX H

Section 7 No Effect Memo



United States Department of the Interior
NATIONAL PARK SERVICE
Natural Resource Stewardship & Science
Natural Sounds and Night Skies Division



United States Department of Transportation
FEDERAL AVIATION ADMINISTRATION
Office of Policy, International Affairs & Environment
Office of Environment and Energy

NATIONAL PARKS AIR TOUR MANAGEMENT PROGRAM

May 8, 2023

Re: Section 7 Endangered Species Act No Effect Determination for Canyon de Chelly National Monument Air Tour Management Plan

The Federal Aviation Administration (FAA), in cooperation with the National Park Service (NPS) (collectively, the agencies), is developing an Air Tour Management Plan (ATMP) for Canyon de Chelly National Monument (Park). The agencies are preparing documentation for the draft ATMP in accordance with the National Parks Air Tour Management Act of 2000 (Act) and other applicable laws. This memorandum documents the agencies' *No Effect* determination associated with the proposed action for the purpose of compliance with Section 7 of the Endangered Species Act (ESA). In addition, this memorandum documents the analysis for birds protected under the Migratory Bird Treaty Act (MBTA).

Action Area

The action area is the area that includes all direct and indirect effects within the action area, which includes the Park and the land within a ½-mile boundary from the Park depicted in Figure 1. The draft ATMP applies to all commercial air tours within the action area. A commercial air tour subject to the ATMP is any flight, conducted for compensation or hire in a powered aircraft where a purpose of the flight is sightseeing over the Park, during which the aircraft flies:

- (1) Below 5,000 feet (ft.) above ground level (AGL) (except solely for the purposes of takeoff or landing, or necessary for safe operation of an aircraft as determined under the rules and regulations of the FAA requiring the pilot-in-command to take action to ensure the safe operation of the aircraft); or
- (2) Less than one mile laterally from any geographic feature within the Park (unless more than ½-mile outside the Park boundary).

As air tours outside of the action area are outside the jurisdiction of the ATMP, there would be no limitations on the annual number of air tours that could occur, and no designated routes could be set outside of the action area.

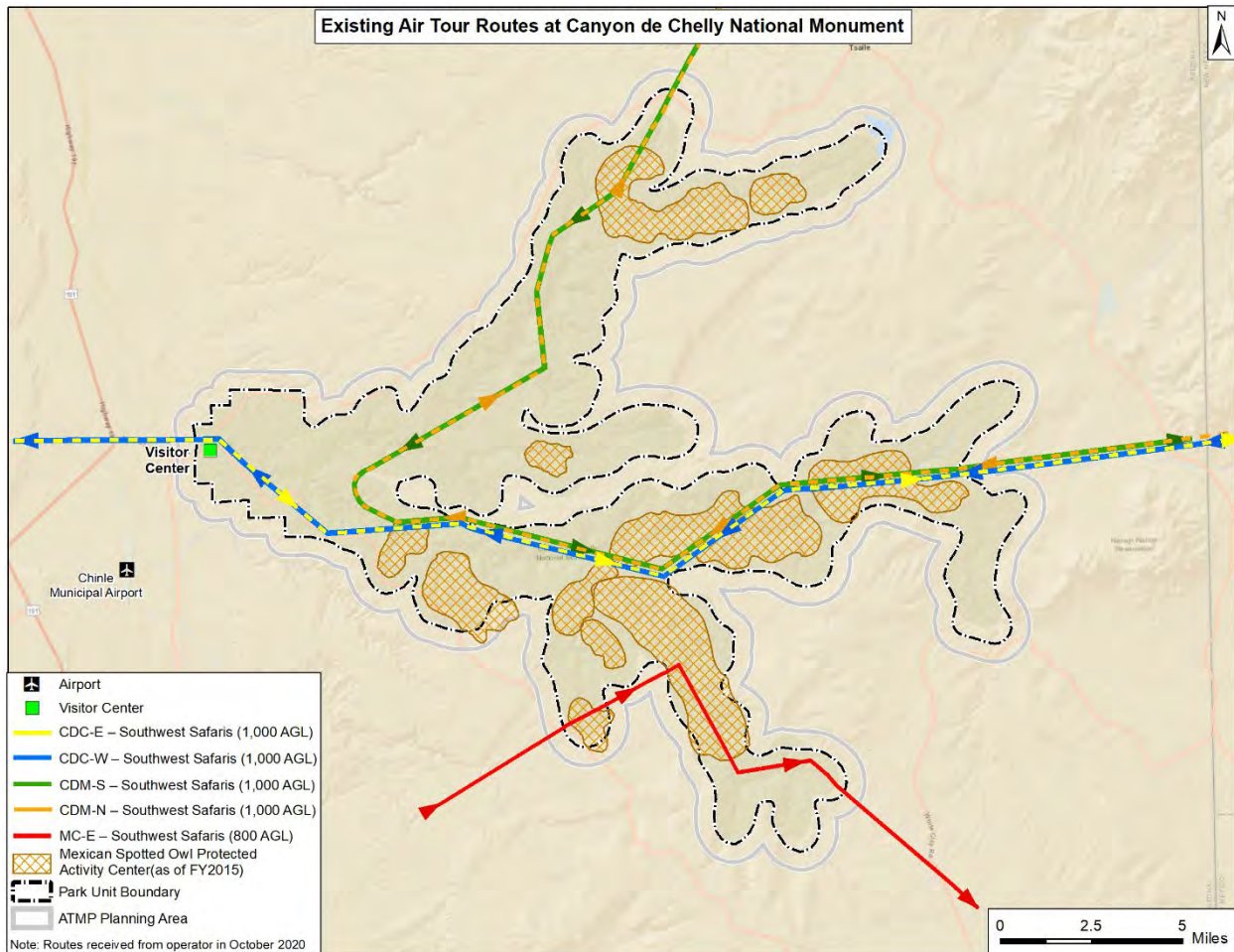


Figure 1. Species Habitat and Commercial Air Tour Routes Under Existing Conditions at Canyon de Chelly National Monument

Description of the Proposed Action

The proposed action is implementation of an ATMP for the Park which establishes conditions for the management of commercial air tour operations. The ATMP will remain in effect until amended, at which time the agencies would reinstitute consultation pursuant to 50 § CFR 402.16. The relevant operating parameters of the ATMP are discussed in detail below.

The proposed action prohibits commercial air tours within the action area (i.e., below 5,000 ft. AGL over the Park and outside the Park but within ½-mile of its boundary). Air tours outside of the action area would not be regulated under the ATMP. An unknown number of air tours may continue to fly more than ½-mile outside of the Park's boundary, or over the action area at or above 5,000 ft. AGL. There would be no limitations on the number of such air tours that could occur.

Aircraft monitoring and enforcement would occur under the proposed action to ensure that the commercial air tour operator is complying with the terms and conditions of the ATMP by not conducting tours below 5,000 ft. AGL over the action area. The NPS and the FAA would both be responsible for the monitoring and oversight of ATMP implementation.

Listed Species and Critical Habitat Evaluated for Effects

The U.S. Fish and Wildlife Service's (USFWS) Information for Planning and Consultation tool and the NPS species list was used to assess the potential for any federally listed species or designated critical habitat that may occur within the action area. Based on this review, the agencies identified the following species and/or critical habitats that have the potential to occur within this area (see Table 1).

The agencies analyzed potential impacts for all federally listed species with suitable habitat within the action area with a focus on several federally listed species, some of which are noise sensitive species that occur within the action area (see Table 1).

Because the proposed action would prohibit commercial air tours within the action area, it is reasonably foreseeable that current air tour operators could offer air tours outside of the action area, as the areas beyond the action area would not be regulated by the draft ATMP. This type of shift in air tour activity is referred to as "air tour displacement," and could consist of air tour operators shifting routes or altitudes to just outside the action area, some of which could result in impacts to wildlife to the extent that they are present near the locations where the displaced air tours would occur. It is difficult to predict with specificity if, where, and to what extent any air tours would be displaced to areas outside the action area, including at altitudes above 5,000 ft. AGL. It is reasonably foreseeable that the operator would continue to fly to points of interest outside of the action area.

Table 1. Listed Species Potentially Occurring in the Action Area with No Effect Determination

Scientific Name	Common Name	Status (Federal)	Critical Habitat (Y/N)	Occurrence in the Park
Birds				
<i>Coccyzus americanus</i>	Yellow-billed Cuckoo	Threatened	N	Unconfirmed
<i>Empidonax traillii extimus</i>	Southwestern Willow Flycatcher	Endangered	N	Present
<i>Strix occidentalis lucida</i>	Mexican Spotted Owl	Threatened	N	Present
Mammals				
<i>Canis lupus baileyi</i>	Mexican Wolf	Endangered	N	Not Present
Flowering Plants				
<i>Carex specuicola</i>	Navajo Sedge	Threatened	N	Present
<i>Erigeron rhizomatus</i>	Zuni Fleabane	Threatened	N	Not Present
Fish				
<i>Ptychocheilus lucius</i>	Colorado Pikeminnow	Endangered	N	Not Present
<i>Xyrauchen texanus</i>	Razorback Sucker	Endangered	N	Not Present
Insects				
<i>Danaus plexippus</i>	Monarch Butterfly	Candidate	N	Not Present

Table 1 includes the species identified as potentially occurring in the action area. A Section 7 determination for each species listed as threatened or endangered under the ESA is provided below. The proposed action does not involve ground-disturbing activities or other activities with the potential to impact aquatic or terrestrial habitat. Therefore, the agencies determined the proposed action will have *No Effect* on flowering plants, fish, and insects. The endangered Mexican wolf (*Canis lupus baileyi*) is within the range of the Park but is not known to occur in the Park, nor does the Park contain adequate habitat for this species.

Yellow-Billed Cuckoo

The Federally threatened yellow-billed cuckoo (*Coccyzus americanus*) breeds in large blocks of riparian habitat (particularly woodlands with cottonwoods (*Populus fremontii*) and willows (*Salix spp.*). Vegetation within the Park consists of pinyon-juniper woodlands, and contains suitable habitat for this species (NPS, 2018). Riparian habitat is important for the survival of this species, as yellow-billed cuckoos nest in riparian areas and use river corridors as travel routes during migration. There is no designated critical habitat located inside the action area.

Effect Determination

Under the proposed action, commercial air tours would not be conducted within the action area. The presence of noise from commercial air tours being conducted within the action area would be eliminated. Therefore, the agencies have determined the proposed action would have ***No Effect*** on the yellow-billed cuckoo.

Southwestern Willow Flycatcher

The Federally endangered southwestern willow flycatcher (*Empidonax traillii extimus*) (flycatcher) is one of four subspecies of willow flycatcher. Flycatchers are small insectivores that winter in Central America and southern Mexico. Habitat for this species includes riparian corridors with trees that have complex branching patterns that can support flycatcher nests, and there is potential suitable habitat for this species in the Park. Their breeding season occurs from May to September.

Effect Determination

Under the proposed action, commercial air tours would not be conducted within the action area. The presence of noise from commercial air tours being conducted within the action area would be eliminated. Therefore, the agencies have determined the proposed action would have ***No Effect*** on the southwestern willow flycatcher.

Mexican Spotted Owl

The Federally threatened Mexican spotted owl (*Strix occidentalis lucida*) (MSO) hunt at night and are considered a “perch and pounce” predator that use elevated perches to locate prey by sight and sound.

MSO are an indicator species for old growth habitat, as they consistently avoid managed forests (NPS, 2015). Preferred habitat for breeding includes mixed-conifer forest habitat associated with relatively steep-walled canyons.

This species has protected activity centers (PACs) within the Park, which are areas that encompass a minimum of 600 acres surrounding known MSO nest and roost sites (see Figure 1). There is additional suitable habitat for this species within the action area.

Effect Determination

Under the proposed action, air tours would not be conducted within the action area, which would eliminate this source of noise as a potential impact to MSO behavior. Additionally, no commercial air tours would be conducted to pose a threat to MSO from potential collisions in the action area. Therefore, the agencies have determined the proposed action would have **No Effect** on the Mexican spotted owl.

Summary of Determinations for ESA-Listed Species

A *No Effect* determination under the ESA means that there would be no consequences to listed species or critical habitat that are caused by the proposed action, including the consequences of other connected activities that are caused by the proposed action. A consequence is caused by the proposed action if it is reasonably certain to occur. Effects of the action may occur later in time and may include consequences occurring outside the immediate area involved in the action.

As discussed, the proposed action prohibits air tours within the action area, which provides the greatest protection to threatened and endangered species. Therefore, the ATMP results in no meaningful, measurable, or noticeable impacts on the species listed in Table 1. In accordance with Section 7 of the ESA, the agencies have determined that the proposed action will have **No Effect** on the species potentially present within the action area including the yellow-billed cuckoo (*Coccyzus americanus*), southwestern willow flycatcher (*Empidonax traillii extimus*), and the Mexican spotted owl (*Strix occidentalis lucida*).

Species Protected Under the MBTA

The agencies also analyzed potential impacts to non-ESA listed species that are protected under the MBTA (see Table 2).

Because the proposed action would prohibit commercial air tours within the action area, it is reasonably foreseeable that current air tour operators could offer air tours in unrestricted airspace outside of the action area, as the areas beyond the action area would not be regulated by the ATMP. It is difficult to predict with specificity if, where, and to what extent any air tours would be displaced to unrestricted airspace outside the action area, including at altitudes above 5,000 ft. AGL. However, air tours outside of the action area are outside the jurisdiction of the ATMP.

Based on the analysis below, there would be no impacts from the proposed action on species protected under the MBTA.

Table 2. Species Protected Under the Migratory Bird Treaty Act Potentially Occurring in the Action Area

Scientific Name	Common Name	Occurrence in the Park
<i>Accipiter cooperii</i>	Cooper's Hawk	Present
<i>Aquila chrysaetos</i>	Golden Eagle	Present
<i>Buteo jamaicensis</i>	Red-tailed Hawk	Present
<i>Falco peregrinus</i>	Peregrine Falcon	Present
<i>Falco sparverius</i>	American Kestrel	Present
<i>Haliaeetus leucocephalis</i>	Bald Eagle	Present
<i>Megascops kennicottii</i>	Western Screech Owl	Present

Cooper's Hawk

Cooper's hawk (*Accipiter cooperii*) utilize mature forests and open woodlands, and they nest along forest edges. Nesting occurs in the spring and their clutch size is three to five eggs. Cooper's hawk have been observed in the central and western areas of the Park. This species is protected under the MBTA. Under the proposed action, no impacts to Cooper's hawk would occur.

Golden Eagle

Golden eagles (*Aquila chrysaetos*) utilize grasslands, woodlands, and canyonlands near hills, cliffs, and bluffs. Golden eagles migrate from Canada and the northeastern U.S. to other regions of the U.S. with a milder winter and less snow cover. They migrate during midday along cliff lines and escarpments.

Nesting season occurs from March to August. Nests are large and heavy, and can be up to 8 ft. in diameter and 20 ft. deep (USFWS, 2021). Golden eagles have been observed in the central, western, and northern areas of the Park. Golden eagles are protected under the Bald and Golden Eagle Protection Act and the MBTA, which has helped their populations recover. Under the proposed action, no impacts to golden eagles would occur.

Red-tailed Hawk

The red-tailed hawk (*Buteo jamaicensis*) is the most widespread hawk in North America. Populations are considered to be stable or slightly increasing (Audubon, 2023). Their varied diet consists of small birds, mammals, and reptiles. Nesting occurs from late February to mid-March, where males and females construct stick nests in tall trees, along cliff edges, or in the arms of giant cacti (Audubon, 2023). Preferred habitat for this species is open country, woodlands, mountains, and grasslands, so long as there are open grounds for hunting and high perches. Red-tailed hawk have been observed in the central, western, and southern regions of the Park. Under the proposed action, no impacts to red-tailed hawks would occur.

Peregrine Falcon

The peregrine falcon (*Falco peregrinus*) is a carnivorous bird of prey with a diet that consists primarily of other birds and is augmented by rare intakes of small mammals, reptiles, or insects. This species nests along remote cliffs and ledges in mountainous areas, where their nests, called

scrapes, are just small depressions in gravel. Nesting occurs from mid to late May through early August and their clutch size is two to three eggs. Peregrine falcons have been observed in the central, southern, and northern areas of the Park. Peak migration occurs in May and September through early October.

When peregrine falcons were exposed to helicopters and fixed-wing aircraft overflights from 1,000 meters (3,281 ft.) or less, or at slant distances of 550 meters (1,804 ft.), 2-3% of individuals had in-flight responses; when active nests were approached at the same slant distances, peregrine falcons have been observed attacking these aircraft (Nordmeyer, 1999). Studies suggest that although peregrine falcons have shown reactions to aircraft, they display stronger reactions and are therefore more sensitive to disturbance from humans, other animals, and boats than they are to overflights from helicopters or fixed-wing aircraft (Nordmeyer, 1999; Roby et al., 2002; Palmer et al., 2003). Studies recommend a standoff distance of 2,640 ft. between from active nest for human activities (Richardson and Miller, 1997; Colorado Division of Wildlife, 2020). Under the proposed action, no impacts to peregrine falcons would occur.

American Kestrel

American kestrels (*Falco sparverius*) are the smallest but most widespread falcon in North America. Their preferred habitat includes open country or farmland and they nest in cavities of trees in the spring. Kestrels in the northern regions of the United States migrate south, and migrant counts have suggested that some populations of American kestrels have been declining (Audubon, 2023a). American kestrels are protected under the MBTA and have previously been observed within the Park. Under the proposed action, no impacts to American kestrels would occur.

Bald Eagle

Bald eagles (*Haliaeetus leucocephalis*) inhabit seacoasts, forest valleys, mountain regions, lakes, and rivers, and only occur in the Park as winter migrants. Bald eagles have been observed in the north region of the Park.

In 2007, the USFWS estimated there were 9,789 breeding pairs across the southern U.S., which led to the bald eagle being delisted in those regions from the ESA and later removed from the federal list of endangered species. The population size of this species has increased since 2007, and continues to increase, as bald eagles are provided protection under both the MBTA and the Bald and Golden Eagle Protection Act.

In 2007, the USFWS prepared National Bald Eagle Management Guidelines. These guidelines provide landowners, land managers, and others who share public and private lands with bald eagles with procedures for when and under what circumstances the Bald and Golden Eagle Protection Act applies to project activities. Additionally, the guidelines include standoff distances of 1,000 ft. for aircraft at nests during the breeding season, foraging areas, and communal roost sites. In 2016, the USFWS released the Final Programmatic Environmental Impact Statement for the Eagle Rule Revision, which analyzed the effects of revised incidental take permit regulations. In 2022, USFWS published a proposed rule and draft EA proposing additional changes to the eagle incidental take permitting program. Threats to bald eagles include habitat loss from development in coastal areas, pesticide poisoning, and illegal shooting.

In consideration of the effects of aircraft on bald eagles, when helicopters flew at altitudes of 60 – 120 meters (197 – 394 ft.), bald eagles flushed from perching or nesting about half of the time, with juveniles flushing more often than adults, and eagles feeding or standing on the ground flushing more often than perched eagles (Stalmaster and Kaiser, 1997). Eagles rarely flushed when helicopter overflights were conducted at altitudes greater than 300 meters (984 ft.) (Stalmaster and Kaiser, 1997). Nesting eagles were more likely to flush than non-nesting eagles during helicopter overflights, but nesting eagles rarely responded to fixed-wing aircraft at altitudes of 50 – 150 meters (164 – 492 ft.) (Watson, 1993). Under the proposed action, commercial air tours will not be conducted in the action area and therefore are not expected to be stressors on bald eagles nor inhibit foraging, feeding, breeding or nesting.

Western Screech Owl

The western screech owl (*Megascops kennicottii*) is a small owl that occurs in the western United States. This species has faced population declines due to habitat loss, but is still considered to be abundant. Preferred habitat for this species includes wooded canyons and forest edges, although western screech owls tend to avoid extreme desert environments and high elevations. They are nocturnal and forage at dusk and at night for small mammals or large insects. Western screech owls nest in hollow spaces several feet above ground, such as cavities in trees or cacti, from February to mid-May (Audubon, 2023b). They are protected under the MBTA and have been observed in the central region of the Park. Under the proposed action, no impacts to western screech owls would occur.

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APPENDIX I

Navajo Nation Cooperating Agency Correspondence



United States Department of the Interior

NATIONAL PARK SERVICE
Canyon De Chelly National Monument
P.O. Box 588
Chinle, Arizona 86503



IN REPLY REFER TO:

November 11, 2021

Navajo Nation Office of the President and Vice President
President Jonathan Nez
100 Parkway
Post Office Box 7440
Window Rock, AZ 86515

Dear President Nez,

The National Park Service (NPS) would like to invite the Navajo Nation (the Nation) to help develop alternatives for an Air Tour Management Plan (ATMP) over Canyon de Chelly National Monument (the Park) and ½ mile outside the boundary of the Park.

Under the National Parks Air Tour Management Act of 2000 (NPATMA), the FAA granted Interim Operating Authority (IOA) for initial allocation of air tours per year over the Park. There are four air tour operators with a total of 175 IOA for the Park. Of those operators, only one flew tours between 2017 and 2019 averaging 43 tours per year. The IOA does not provide any operating conditions (e.g., routes, altitudes, time of day, 194 etc.) for air tours other than an annual limit. NPATMA requires NPS and FAA to develop and implement a plan for managing conditions for the conduct of air tour operations, where such a plan may establish operating parameters such as routes, altitudes, and annual and maximum number of air tours. To date, no such plan exists; therefore, theoretically the four operators could fly any route, any time and at any elevation up to 175 tours per year.

We understand the Nation has concerns about this type of commercial use over the Park, which is on Tribal Lands. We also understand the importance of including the Navajo Nation in the ATMP planning process and the need to work together in the crafting of alternatives.

There have been two meetings held with representatives from the NPS, FAA, and the Navajo Nation thus far regarding the Park's ATMP. One meeting was held on June 23, 2021 and the other on August 24, 2021. These meetings were held to get input on a draft proposed action. However, many Navajo Nation participants were not supportive of the proposal and asked for consideration of other options, such as no air tours over the Park. The ATMP boundary per NPATMA is the Park and a ½ mile outside the park.

We respectfully request the Navajo Nation to appoint one or more representatives to work with the NPS and FAA on crafting the ATMP, including a no air tour over the ATMP boundary alternative. We ask that the individual(s) assigned to represent the Nation be able to consistently make the meetings, and if not able to make the meetings if they could provide a backup. Consistency in meeting attendance is important to ensure our meetings are efficient, productive, and to help us move closer to an ATMP.

We look forward to your response and to working with you on this very important issue. If you have any questions, please don't hesitate to reach out me at Lyn_Carranza@nps.gov or 928-266-6641. Also, more information about the ATMPs can be found on both the [Air Tour Management Plan \(faa.gov\)](#) and [Air Tours - Natural Sounds \(U.S. National Park Service\) \(nps.gov\)](#) websites.

Respectfully,

Lyn Carranza

CC: Navajo Nation Department of Fish and Wildlife
Navajo Nation Historic Preservation
Navajo Nation Department of Parks and Recreation
Navajo Nation Department of Transportation



The Navajo Nation **DR. BUU NYGREN** *PRESIDENT*
Yideeskáądi Nitsáhákees **RICHELLE MONTOYA** *VICE PRESIDENT*

April 11, 2023

Eric M. Elmore
Senior Policy Advisor
AEE-6 Office of Environment and Energy
Federal Aviation Administration

Karen Trevino
Chief, Natural Sounds and Night Skies Division
Natural Resource Stewardship and Science
National Park Service

Dear Mr. Elmore and Ms. Trevino,

I am writing to you on behalf of the Navajo Nation regarding the Air Tour Management Plan for Canyon de Chelly National Monument. The monument encompasses approximately 84,000 acres comprised entirely of Navajo Tribal Trust Land that remains home to the canyon community, preserving one of the longest, continually inhabited Native American communities in the United States. Approximately 80 Navajo families live in and around the monument, translating to over six hundred individuals.

The local units of Navajo government that contain and surround the entire Monument have made it known that they do not want air tours over the Monument. Attached you will find resolutions from all the Navajo Nation Chapters that contain and surround the Monument: Tsaile / Wheatfields, Lukachukai, Nazlini, Chinle, and Sawmill.

As such, the purpose of this letter is to inform the Federal Aviation Administration and the National Park Service, that I support the position of the people of the Navajo Nation for an Air Tour Management Plan for Canyon de Chelly National Monument that does not allow any air tours over these sacred lands. Please note however, that this position is based on the understanding that if in the future the community desires to have overflights, it is possible to allow for air flights through collaboration and amendments to the air tour management plan. Please also note that this position is only for Canyon de Chelly and does not extend to other air tour management plans at other national parks. The Navajo people will consider air tour management plans at different national parks on a case-by-case basis.

Sincerely,



Dr. Buu Nygren, *President*
THE NAVAJO NATION

Cc: Kevin Welsh Executive Director Office of Environment & Energy Federal Aviation Administration (Kevin.Welsh@faa.gov)
Raymond M. Sauvajot, Associate Director, Natural Resource Stewardship and Science Directorate, National Park Service
(Ray.Sauvajot@nps.gov)
Lynne Caranza, Superintendent, Canyon de Chelly National



Tsaile/Wheatfields Chapter
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Phone: (928) 724-2220 Fax: (928) 724-2223

Tsééhilí

TóDzis'á

Tsézhine

Devon Begay, President
Charles R. Chee, Grazing Committee

Stanley Kedelty, Vice President

Marinda DeChee, Secretary/Treasurer
Carl Roessel Slater, Council Delegate

TW FY22-098

**RESOLUTION OF THE
TSAILE/WHEATFIELDS CHAPTER #038**

**SUPPORTING BLACKROCK COMMUNITY OPPOSING CANYON DE CHELLY NATIONAL
MONUMENT AIR TOUR MANAGEMENT PLANNING (ATMP) TO ALLOW AIR TOURS.**

WHEREAS:

1. Pursuant to Navajo Nation Council Resolution No. CJ-20-55, dated December 2, 1955, the Tsaile/Wheatfields Chapter is vested with authority and charged with the responsibility to promote, protect and preserve the interest and general welfare, including the health and safety of its community people; and
2. The Indian Self-Determination Act (P.L. 93-638) of the U. S. Congress and Local Governance Initiatives entitles and support us, Navajo Indians, in initiating plans making decisions, recommendation, request, etc., according to our actual needs and desires; and
3. The Tsaile/Wheatfields Chapter recognizes the concerns of Black Rock residents expressing complaints of noise and disturbance from helicopters flying over residential areas; and
4. The Air Tours are disrupting natural wildlife; and
5. The Air Tours are a disturbance to farmers and ranchers near the canyon; and
6. The Tsaile/Wheatfields Chapter supports Black Rock community's opposition for Air Tours to be allowed near and over Canyon De Chelly National Park.

NOW THEREFORE BE IT RESOLVED THAT:

1. The Tsaile/Wheatfields Chapter hereby approves and accepts the resolution opposing the Canyon De Chelly National Monument Air Tour Management Planning (ATMP) to allow Air Tours.

CERTIFICATION

I, hereby certify the foregoing resolution was duly considered by the Tsaile/Wheatfields Chapter at a duly called Special Meeting at Wheatfields, Arizona at which a quorum was present and the same was passed by a vote of 18 in favor, 00 opposed, and 02 abstained on this 27th day of September, 2022.

Motion by: Frank Kedelty

Second by: Carmelita Litson

Devon Begay
Devon Begay, President



LUKACHUKAI CHAPTER
P. O. Box 248 Lukachukai, Arizona 86507
Telephone: (928)787-2500 Fax: (928) 787-2332
Email: lukachukai@navajochapters.org

LUK22-63

Car R. Sater Council Delegate Paula S. Begay President Connette Blair Vice-President Mary Ann Leonard Sec. Treasurer Lillian Nez Grazing Comm.

LUK22-63

RESOLUTION OF THE LUKACHUKAI CHAPTER #036

REQUESTING THE NAVAJO NATION PRESIDENT JONATHON NEZ TO STRONGLY URGE THE FEDERAL AVIATION ADMINISTRATION (FAA) AND THE NATIONAL PARK SERVICE (NPS) TO CONSIDER "NO AIR TOUR ALTERNATIVE" FOR AIR TOUR FLIGHTS OVER CANYON DE CHELLY NATIONAL PARK LOCATED ON SOVEREIGN NAVAJO NATION LAND.

WHEREAS:

1. Pursuant to the Navajo Nation Council Resolution No. CJ-20-55, dated November 14, 1955, the Lukachukai Chapter is vested with authority and charged with the responsibility to promote, protect and preserve the interest and general welfare, including the health and safety of its community people; AND
2. The Indian Self-Determination Act (P.L. 93-638) of the U. S. Congress and Local Governance Initiatives entitles and support us, Navajo Indians, in initiating plan and making decisions, recommendation, request, etc., according to our actual needs and desires; AND
3. Canyon De Chelly National Park borders several Navajo Nation Chapter including Lukachukai Chapter on sovereign Navajo Nation lands and was established in 1931 by President Herbert Hoover to preserve the archaeological and cultural resources, scenic beauty and sacred nature of lands; AND
4. On May 01, 2020 the United States Court of Appeals (USCA Case #19-1044) ordered the Federal Aviation Administration and the national park Service to prepare and submit an Air Tour management Plan by August 31, 2020, for 23 eligible national park including Canyon De Chelly; AND
5. Consultation with Navajo Nation stakeholders found that the majority of stakeholders support a "NO AIR TOUR ALTERNATIVE" over Canyon De Chelly National Park because the disadvantages outweigh the benefits to the Navajo Nation for the following reasons:
 - a. Aircraft noise will have significant negative impact to the serenity, peaceful enjoyment and visitor experience of the natural soundscape of the canyon such as birds chirping and winds rustling plants and trees
 - b. Aircraft noise will adversely affect wildlife such as mule deer, bears, coyotes, mountain lions, bobcats, nesting eagles, hawks and birds, domesticated animals including sheep, cattle and horses and endangered species, including the Red Tail Hawk and Mexican Spotted Owl by starting them to flee from the noise
 - c. Aircraft noise vibration will adversely impact the sensitive cultural artifacts and archaeological sites including adobe ruins, fragile cliffs and sandstone rock formations, creating a potential for rock slides onto residents living in the canyon.

- d. The potential for air tour collisions exists, such as the numerous incidents over the Grand Canyon National Park. On June 19, 1986, 25 people died when two air tours collided mid-air over the Grand Canyon. This incident led to the passage of Public Law 100-91.
 - e. There is no economic benefit of air tours to the Navajo Nation, only a small handful of off-reservation air tour operators will financially benefit by charging outrageous fees to tourists.
 - f. Canyon De Chelly is a "living" park with up to 40 families permanently residing in the canyon to farm and raise livestock. These homes are visible from the canyon rims.
 - g. The Navajo Nation has extremely limited public transportation, public safety and emergency management services. These limited resources will be forced to address safety plans for daily air tours, regulation, compliance and enforcement of air space routes, flight zones and flight altitudes, and communication requirements with ground services.
 - h. There is no data, analysis or noise map simulation model of the overall effects of noise and air pollution that overflights will create if air tours are allowed over Canyon De Chelly National Park.
6. The position of the Navajo Nation for "NO AIR TOUR ALTERNATIVE" requires a cooperative relationship between the FAA and the NPS regarding air-tour management planning on behalf of the Navajo Nation

NOW, THEREFORE BE IT RESOLVED THAT:

1. The Lukachukai Chapter hereby approves the requests of Navajo Nation President Jonathon Nez to strongly urge to the Federal Aviation Administration and the National Park Service that the Navajo Nation supports a "NO AIR TOUR ALTERNATIVE" for proposed air tour flights over Canyon De Chelly National Park located on sovereign Navajo Nation Land.
2. Both residents and visitors have enjoyed the profound beauty, spectacular scenery and sacredness of the more than 84,000 acres that is Canyon De Chelly and desire to maintain the land in its current state of solitude, as it has been for thousands of years.
3. The Lukachukai Chapter hereby approves to include the No Air Tour over the Chuska Mountain and Round Rock Valley.

CERTIFICATION

We, hereby certify, the foregoing resolution was duly considered by the Lukachukai Chapter at a duly called meeting at Lukachukai, Arizona at which a quorum was present and the same was passed by a vote of 12 in favor, 0 opposed, 0 abstained, on this 19th day of August, 2022.

Motion by: Phillip Sandoval Jr.

Second by: Norman Begay

Paula S Begay
Paula S Begay, President

Connette Blair
Connette Blair, Vice-President

Mary Ann Leonard
Mary Ann Leonard, Secretary/Treasurer

**RESOLUTION OF THE
LUKACHUKAI CHAPTER #036**

REQUESTING THE NAVAJO NATION PRESIDENT JONATHAN NEZ TO STRONGLY URGE THE
FEDERAL AVIATION ADMINISTRATION (FAA) AND THE NATIONAL PARK SERVICE (NPS) TO
CONSIDER “NO AIR TOUR ALTERNATIVE” FOR AIR TOUR FLIGHTS OVER CANYON DE CHELLY
NATIONAL PARK LOCATED ON SOVEREIGN NAVAJO NATION LAND.

WHEREAS:

1. Pursuant to the Navajo Nation Council Resolution No. CJ-20-55, dated November 14, 1955, the Lukachukai Chapter is vested with authority and charged with the responsibility to promote, protect and preserve the interest in general welfare, including the health and safety of its community and people; AND
2. The Indian Self-Determination Act (PL 93-638) of the U.S. Congress and Local Governance Initiatives entitles and supports Navajo Indians, in initiating plan and making decisions, recommendation, request, etc., according to our actual needs and desires; AND
3. Canyon de Chelly National Park borders several Navajo Nation Chapters including Lukachukai Chapter on sovereign Navajo Nation lands and was established in 1931 by President Herbert Hoover to preserve the archaeological and cultural resources, scenic beauty and sacred nature of lands; AND
4. On May 01, 2020 the United States Court of Appeals (USCA Case #19-1044) ordered the Federal Aviation Administration and the national park Service to prepare and submit an Air Tour Management Plan by August 31, 2020, for 23 eligible national park including Canyon de Chelly; AND
5. Consultation with Navajo Nation stakeholders found that the majority of stakeholders support a “NO AIR TOUR ALTERNATIVE” over Canyon de Chelly National Park because the disadvantages outweigh the benefits to the Navajo Nation for the following reasons:
 - a. Aircraft noise will have significant negative impact to the serenity, peaceful enjoyment and visitor experience of the natural landscape of the canyon on such as birds chirping and winds rustling plants and trees
 - b. Aircraft noise will adversely affect wildlife such as mule deer, bears, coyotes, mountain lions, bobcats, nesting eagles, hawks and birds, domesticated animals including sheep, cattle and horses an endangered species, including the Red Tail Hawk and Mexican Spotted Owl by starting them to flee from the noise
 - c. Aircraft noise vibration will adversely impact the sensitive cultural artifacts and archaeological sites including adobe ruins, fragile cliffs and sandstone rock formations, creating a potential for rock slides onto residents living in the canyon.
 - d. The potential for air tour collisions exists, such as the numerous incidents over the Grand Canyon National Park. On June 19th, 1986, 25 people died when two air tours collided mid-air over the Grand Canyon. This incident led to the passage of public law 100-91.

- e. There is no economic benefit of air tours to the Navajo Nation. Only a small handful of off reservation air tour operators will financially benefit by charging outrageous fees to tourists.
 - f. Canyon de Chelly is a “living” park with up to 40 families permanently residing in the Canyon to farm and raise livestock. These homes are visible from the canyon rims.
 - g. The Navajo Nation has extremely limited public transportation, public safety and emergency management services. These limited resources will be forced to address safety plans for daily air tours, regulation, compliance and enforcement of airspace routes, flight zones and flight altitudes, and communication requirements with ground services
 - h. There is no data analysis or noise map simulation model of the overall effects of noise and air pollution that overflights will create if air tours are allowed over Canyon de Chelly National Park.
6. The position of the Navajo Nation for “NO AIR TOUR ALTERNATIVE” requires a cooperative relationship between the FAA and the NPS regarding air-tour management planning on behalf of the Navajo Nation

NOW, THEREFORE BE IT RESOLVED THAT:

1. The Lukachukai Chapter hereby approves the requests of Navajo Nation President Jonathan Nez to strongly urge the Federal Aviation Administration and the National Park Service that the Navajo Nation supports a “NO AIR TOUR ALTERNATIVE” for proposed air tour flights over Canyon de Chelly National Park located on sovereign Navajo Nation Land.
2. Both residents and visitors have enjoyed the profound beauty, spectacular scenery and sacredness of the more than 84,000 acres that is Canyon de Chelly and desire to maintain the land in its current state of solitude, as it has been for thousands of years.
3. The Lukachukai Chapter hereby approves to include the No Air Tour over the Chuska Mountain and Round Rock Valley.

CERTIFICATION

We hereby certify the foregoing resolution was duly considered by the Lukachukai Chapter at a duly called meeting at Lukachukai, Arizona at which a quorum was present and the same was passed by a vote of 12 in favor, 0 opposed, 0 abstained, on this 19th day of August, 2022.

Motion by: Phillip Sandoval Jr.

Second by: Norman Begay


Paula S Begay, President


Connette Blair, Vice-President


Mary Ann Leonard, Secretary/Treasurer



NAZLINI CHAPTER GOVERNMENT



LEE V. BIGWATER
CHAPTER PRESIDENT

JOSEPH DEDMAN
CHAPTER VICE-PRESIDENT

JOANN DEDMAN
SECRETARY/TREASURER

KEE ALLEN BEGAY, JR.
COUNCIL DELEGATE

IRVIN SHIRLEY
GRAZING REPRESENTATIVE

NAZLINI CHAPTER RESOLUTION NAZL-AUG-22-073

REQUESTING THE NAVAJO NATION PRESIDENT JONATHAN NEZ TO STRONGLY URGE THE FEDERAL AVIATION ADMINISTRATION (FAA) AND THE NATIONAL PARK SERVICE (NPS) TO CONSIDER "NO AIR TOUR ALTERNATIVE" FOR AIR TOUR FLIGHTS OVER CANYON DE CHELLY NATIONAL PARK LOCATED ON SOVEREIGN NAVAJO NATION LANDS

WHEREAS:

1. Pursuant to N.N.C., Title 26, Section 101, and the Navajo Nation Council Resources and Development Committee Legislation #RDCF-0052-15 dated February 17, 2015, Nazlini Chapter Government was recognized as an LGA Certified Chapter and delegated with the responsibility and authority to make decisions over local chapter matters; AND
2. Canyon De Chelly National Park borders several Navajo Nation chapters including Nazlini Chapter on sovereign Navajo Nation lands and was established in 1931 by President Herbert Hoover to preserve the archaeological and cultural resources, scenic beauty and sacred nature of lands; AND
3. On May 01, 2020 the United States Court of Appeals (USCA Case #19-1044) ordered the Federal Aviation Administration and the National Park Service to prepare and submit an Air Tour Management Plan by August 31, 2020, for 23 eligible national parks including Canyon De Chelly; AND
4. Consultation with Navajo Nation stakeholders found that the majority of stakeholders support a "NO AIR TOUR ALTERNATIVE" over Canyon De Chelly National Park because the disadvantages outweigh the benefits to the Navajo Nation for the following reasons;
 - a) Aircraft noise will have significant negative impact to the serenity, peaceful enjoyment and visitor experience of the natural soundscape of the canyon such as birds chirping and winds rustling plants and trees.
 - b) Aircraft noise will adversely affect wildlife such as mule deer, bears, coyotes, mountain lions, bobcats, nesting eagles, hawks and birds, domesticated animals including sheep, cattle and horses and endangered species including the Red Tail Hawk and Mexican Spotted Owl by startling them to flee from the noise.
 - c) Aircraft noise vibration will adversely impact the sensitive cultural artifacts and archaeological sites including adobe ruins, fragile cliffs and sandstone rock formations, creating a potential for rock slides onto residents living in the canyon.
 - d) The potential for air tour collisions exists, such as the numerous incidents over the Grand Canyon National Park. On June 18, 1986, 25 people died when two air tours collided mid-air over the Grand Canyon. This incident led to the passage of Public Law 100-91.
 - e) There is no economic benefit of air tours to the Navajo Nation, only a small handful of off-reservation air tour operators will financially benefit by charging outrageous fees to tourists.

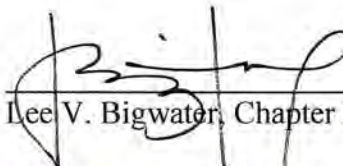
- f) Canyon De Chelly is a "living" park with up to 40 families permanently residing in the canyon to farm and raise livestock. These homes are visible from the canyon rim.
 - g) The Navajo Nation has extremely limited public transportation, public safety and emergency management services. These limited resources will be forced to address safety plans for daily air tours, regulation, compliance and enforcement of air space routes, flight zones and flight altitudes, and communication requirements with ground services.
 - h) There is no data, analysis or noise map simulation model of the overall effects of noise and air pollution that overflights will create if air tours are allowed over Canyon De Chelly National Park.
5. The position of the Navajo Nation for "NO AIR TOUR ALTERNATIVE" requires a cooperative relationship between the FAA and the NPS regarding air-tour management planning on behalf of the Navajo Nation.

NOW THEREFORE BE IT RESOLVED THAT:

1. The Nazlini Chapter hereby requests Navajo Nation President Jonathan Nez to strongly urge to the Federal Aviation Administration and the National Park Service that the Navajo Nation supports a "NO AIR TOUR ALTERNATIVE" for proposed air tour flights over Canyon De Chelly National Park located on sovereign Navajo Nation lands: AND
2. Both residents and visitors have enjoyed the profound beauty, spectacular scenery and sacredness of the more than 84,000 acres that is Canyon De Chelly and desire to maintain the land in its current state of solitude, as it has been for thousands of years.
- 3.

CERTIFICATION


We hereby certify that the foregoing resolution was duly considered and moved for adoption by Irvin R. Shirley, seconded by Andy Mann and passed by a vote of 9 in favor, 0 opposed, 0 abstained, this 11th day of August 2022.



Lee V. Bigwater, Chapter President



Joseph Dedman Jr., Chapter Vice President



JoAnn Dedman, Chapter Secretary/Treasurer



Irvin R. Shirley, Grazing Representative

SCANNED
AUG 11 2022
BY: MSW

Chinle Chapter Government

THE NAVAJO NATION

Dr. Rosanna Jumbo-Fitch
PRESIDENT

Shawna Claw
VICE PRESIDENT

RoAnn Burbank
SECRETARY/TREASURER

Eugene Tso
COUNCIL DELEGATE

Oscar Bia
GRAZING COMMITTEE MEMBER

RESOLUTION OF CHINLE CHAPTER NAVAJO NATION CHIN-AUG-22-052

REQUESTING THE NAVAJO NATION PRESIDENT JONATHAN NEZ TO STRONGLY URGE THE FEDERAL AVIATION ADMINISTRATION (FAA) AND THE NATIONAL PARK SERVICE (NPS) TO CONSIDER "NO AIR TOUR ALTERNATIVE" FOR AIR TOUR FLIGHTS OVER CANYON DE CHELLY NATIONAL PARK LOCATED ON SOVEREIGN NAVAJO NATION LANDS.

WHEREAS:

1. Chinle Chapter, a recognized certified local government of the Navajo Nation, vested with the power and authority to advocate on behalf of its constituents for the improvement of health, education, safety, and general welfare; AND
2. Canyon De Chelly National Park borders several Navajo Nation chapters including Chinle Chapter on sovereign Navajo Nation lands and was established in 1931 by President Herbert Hoover to preserve the archaeological and cultural resources, scenic beauty and sacred nature of lands; AND
3. On May 01, 2020 the United States Court of Appeals (USCA Case #19-1044) ordered the Federal Aviation Administration and the National Park Service to prepare and submit an Air Tour Management Plan by August 31, 2020, for 23 eligible national parks including Canyon De Chelly; AND
4. Consultation with Navajo Nation stakeholders found that the majority of stakeholders support a "NO AIR TOUR ALTERNATIVE" over Canyon De Chelly National Park because the disadvantages outweigh the benefits to the Navajo Nation for the following reasons:
 - a) Aircraft noise will have significant negative impact to the serenity, peaceful enjoyment and visitor experience of the natural soundscape of the canyon such as birds chirping and winds rustling plants and trees.
 - b) Aircraft noise will adversely affect wildlife such as mule deer, bears, coyotes, mountain lions, bobcats, nesting eagles, hawks and birds, domesticated animals including sheep, cattle and horses and endangered species including the Red Tail Hawk and Mexican Spotted Owl by startling them to flee from the noise.
 - c) Aircraft noise vibration will adversely impact the sensitive cultural artifacts and archaeological sites including adobe ruins, fragile cliffs and sandstone rock formations, creating a potential for rock slides onto residents living in the canyon.
 - d) The potential for air tour collisions exists, such as the numerous incidents over the Grand Canyon National Park. On June 18, 1986, 25 people died when two air tours collided mid-air over the Grand Canyon. This incident led to the passage of Public Law 100-91.
 - e) There is no economic benefit of air tours to the Navajo Nation, only a small handful of off-reservation air tour operators will financially benefit by charging outrageous fees to tourists.
 - f) Canyon De Chelly is a "living" park with up to 40 families permanently residing in the canyon to farm and raise livestock. These homes are visible from the canyon rims.
 - g) The Navajo Nation has extremely limited public transportation, public safety and emergency management services. These limited resources will be forced to address safety plans for daily air tours, regulation, compliance and enforcement of air space routes, flight zones and flight altitudes, and communication requirements with ground services.
 - h) There is no data, analysis or noise map simulation model of the overall effects of noise and air pollution that overflights will create if air tours are allowed over Canyon De Chelly National Park.

Chinle Chapter Government

THE NAVAJO NATION

Dr. Rosanna Jumbo-Fitch

PRESIDENT

Eugene Tso

COUNCIL DELEGATE

Shawna Claw

VICE PRESIDENT

Oscar Bia

GRAZING COMMITTEE MEMBER

RoAnn Burbank

SECRETARY/TREASURER

Page 2; CHIN-AUG-22-052

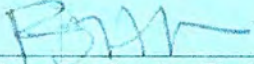
- i) Ceremonies and religious practices performed by traditional practitioners will be interrupted by the sound of aircraft.
5. The position of the Navajo Nation for "NO AIR TOUR ALTERNATIVE" requires a cooperative relationship between the FAA and the NPS regarding air-tour management planning on behalf of the Navajo Nation.


NOW THEREFORE BE IT RESOLVED THAT:


1. The Chinle Chapter hereby requests Navajo Nation President Jonathan Nez to strongly urge to the Federal Aviation Administration and the National Park Service that the Navajo Nation supports a "NO AIR TOUR ALTERNATIVE" for proposed air tour flights over Canyon De Chelly National Park located on sovereign Navajo Nation lands.
2. Both residents and visitors have enjoyed the profound beauty, spectacular scenery and sacredness of the more than 84,000 acres that is Canyon De Chelly and desire to maintain the land in its current state of solitude, as it has been for thousands of years.

CERTIFICATION

We, hereby certify that the foregoing resolution was duly considered and moved for Adoption by David Yazzie, Second by Betty Rose Draper, thoroughly discussed and approved by a vote of 16 in favor, 0 opposed and 1 abstained at a duly called meeting at Chinle Chapter, the NAVAJO NATION, Chinle, Arizona on this 16th day of August 2022.


Dr. Rosanna Jumbo-Fitch, President


Shawna Claw, Vice-President


RoAnn Burbank, Secretary/Treasurer

RESOLUTION OF THE SAWMILL CHAPTER NAVAJO NATION

SAW 09-11-22-11

REQUESTING THE NAVAJO NATION PRESIDENT JONATHAN NEZ TO STRONGLY URGE THE FEDERAL AVIATION ADMINISTRATION (FAA) AND THE NATIONAL PARK SERVICE (NPS) TO CONSIDER "NO AIR TOUR ALTERNATIVE" FOR AIR TOUR FLIGHTS OVER CANYON DE CHELLY NATIONAL PARK LOCATED ON SOVEREIGN NAVAJO NATION LANDS

WHEREAS:

1. The Sawmill Chapter is a local unit of the government recognized to
2. Canyon De Chelly National Park borders several Navajo Nation chapters including Sawmill Chapter on Sovereign Navajo Nation Lands and was established in 1931 by President Herbert Hoover to preserve the archaeological and cultural resources, scenic beauty, and sacred nature of lands; AND
3. On May 01, 2020 the United States Court of Appeals (USCA Case #19-1044) ordered the Federal Aviation Administration and the National Park Service to prepare and submit an Air Tour Management Plan by August 31, 2020, for 23 eligible national parks including Canyon De Chelly; AND,
4. Consultation with Navajo Nation stakeholders found that the majority of stakeholders support a "NO AIR TOUR ALTERNATIVE" over Canyon De Chelly National Park because the disadvantages outweigh the benefits to the Navajo Nation for the following reasons:
 - a). Aircraft noise will have significant negative impact to the serenity, peaceful enjoyment, and visitor experience of the natural soundscape of the canyon such as birds chirping and winds rustling plants and trees.
 - b). Aircraft noise will adversely affect wildlife such as mule deer, bears, coyotes, mountain lions, bobcats, nesting eagles, hawks, and birds, domesticated animals, including sheep, cattle and horses and endangered species including the Red Tail Hawk, and Mexican spotted Owl by startling them to flee from the noise.
 - c). Aircraft noise vibration will adversely impact the sensitive cultural artifacts and archaeological sites including adobe ruins, fragile cliffs, and sandstone rock information's, creating a potential for rock slides on to residents living in the canyon.
 - d). The potential for air tour collisions exists, such as the numerous incidents over the Grand Canyon National Park. On June 18, 1986, 25 people died when two air tours collided mid-air over the Grand Canyon. This incident led to the passage of Public Law 100-91.
 - e). There is no economic benefit of air tours to the Navajo Nation, only a small handful of off-reservation air tour operators will financially benefit by charging outrageous fees to tourists.

Sawmill Chapter

P.O. Box 1786, Ft. Defiance, AZ, 86504
Ph: (928)729-4433 Fax: (928)729-4435

- f). Canyon De Chelly is a "living" park with up to 40 families permanently residing in the canyon to farm and raise livestock. These homes are visible from the canyon rims.
- g). The Navajo Nation has extremely limited public transportation, public safety, and emergency management services. These limited resources will be forced to address safety plans for daily air tours, regulation, compliance and enforcement of air space routes, flight zones and flight altitudes, and communication requirements with ground services.
- h). There is no data, analysis, or noise map simulation model of the overall effects of noise and air pollution that overflights will create if air tours are allowed over Canyon De Chelly National Park.
5. The position of the Navajo Nation for "NO AIR TOUR ALTERNATIVE" requires a cooperative relationship between the FAA and the NPS regarding air -tour management planning on behalf of the Navajo Nation.

NOW THEREFORE BE IT RESOLVES THAT:


1. The Sawmill Chapter hereby requests Navajo Nation President Jonathan Nez to strongly urge to the Federal Aviation Administration and the National Park Service that the Navajo Nation supports a "NO AIR TOUR ALTERNATIVE" for proposed air tour flights over Canyon De Chelly National Park located on sovereign Navajo Nation lands.
2. Both residents and visitors have enjoyed the profound beauty, spectacular scenery, and sacredness of the more than 84,000 acres that is Canyon De Chelly and desire to maintain the land in its current state of solitude, as it has been for thousands of years.

CERTIFICATION

We hereby certify that the foregoing resolution was duly considered by the Sawmill Chapter, at which a quorum was present and that same was passed by a vote of 18 in favor, 0 opposed, and 4 abstained, this 11th day of September 2022.

Motion by: Larry Foster

Second by: Juanita Martinez



Woodie Bennett, Chapter President



United States Department of the Interior
NATIONAL PARK SERVICE
Natural Resource Stewardship & Science
Natural Sounds and Night Skies Division
1201 Oakridge Drive, Suite 100
Fort Collins, Colorado 80525



U.S. Department
of Transportation
**Federal Aviation
Administration**

United States Department of Transportation
FEDERAL AVIATION ADMINISTRATION
Office of Environment and Energy
800 Independence Ave SW
Washington, DC 20591

NATIONAL PARKS AIR TOUR MANAGEMENT PROGRAM

May 17, 2023

Re: Follow up letter

Dr. Buu Nygren, President
Navajo Nation
P.O. Box 7440
Window Rock, AZ 86515

Dear Mr. Nygren:

I am writing to request that you identify a representative who can assist us with planning for overflight management above Canyon de Chelly National Monument (Monument). The Federal Aviation Administration (FAA), in cooperation with the National Park Service (NPS) (collectively, the agencies) is developing an Air Tour Management Plan (ATMP) for the Monument.

On May 21, 2021, the agencies sent a letter inviting the Navajo Nation to be a Cooperating Agency in the National Environmental Policy Act (NEPA) process. Shortly after that, representatives from the Navajo Nation attended meetings regarding early stages of the ATMP planning process. In late 2022, the five Navajo Nation Chapters that contain and surround the Monument passed resolutions recommending an air tour management plan that would prohibit air tours over Canyon de Chelly. As such, on April 11, 2023, the agencies received a letter from yourself supporting the position of the Navajo Nation that would not allow any air tours over the Monument.

Consequently, pursuant to SO-3403 and NPS PM 22-03, we are reaching out to invite the Navajo Nation to work with the FAA and the NPS in the development of the Air Tour Management Plan to regulate air tours over the Monument. The agencies recognize the Monument lies entirely within Navajo Tribal Trust Lands, and therefore, as we begin to develop the ATMP and the associated Environmental Assessment (EA), direct input and active participation from the Navajo Nation will be extremely valuable, especially since the National Historic Preservation Act (NHPA) Section 106 process will be conducted parallel to the NEPA process.

The ATMP will be completed by December 2024 and therefore, we respectfully request that your office identify a representative that can participate with FAA and NPS on the planning team that will be drafting and approving the text used in the ATMP and associated NEPA documents. We appreciate that the Navajo Nation has many other priorities, and that consequently, whoever you identify as a representative may need to have a more narrow role in the process, including just reviewing the final air

tour plan and associated NEPA documents to make sure it accurately reflects the interests and concerns of the Navajo Nation. Therefore, we want to make sure you know that we are willing to accommodate whatever level of participation works best for the Navajo Nation.

Please contact Superintendent Lyn Carranza (lyn_carranza@nps.gov, 928 674-5500 x224) with the name and contact information of the representative you select.

Thank you for your time and we look forward to working together on this project.

Sincerely,

Lyn Carranza, Park Superintendent
Canyon de Chelly National Monument
National Park Service

Eric Elmore, Senior Policy Advisor
AEE-6 Office of Environment and Energy
Federal Aviation Administration

cc: Richard M. Begay, Tribal Historic Preservation Officer
Manager, Navajo Nation Heritage and Historic Preservation Department

APPENDIX J

Air Tour Management Exemption Withdrawl Letter



United States Department of the Interior

NATIONAL PARK SERVICE

1849 C Street, N.W.
Washington, DC 20240

NOV 02 2017

Dennis Roberts
Federal Aviation Administration
Western Pacific Regional Administrator
P.O. Box 92007
Los Angeles, CA 90009-2007

Dear Dennis:

This letter will serve to notify the Federal Aviation Administration (FAA) of the National Park Service (NPS) decision to withdraw Canyon de Chelly National Monument from the exemption for air tour management, pursuant to the National Park Air Tour Management Act, 49 U.S.C. Section 40128 (1) (5) (B) which requires that "the Director shall inform the Administrator, in writing, of each determination to withdraw an exemption under subparagraph (B)".

By Acts on February 14, 1931 and March 1, 1933, Congress authorized the President of the United States to establish Canyon de Chelly (CACH) as a National Monument, with the consent of the Navajo Nation. CACH was formally established by proclamations of President Herbert Hoover on April 1, 1931 and March 3, 1933, to preserve a great number of cliff dwellings, archeological resources and other features of scientific and educational interest.

CACH also preserves one of the longest, continually inhabited Native American communities in the United States, spanning at least 5,000 years. Today, the monument contains five to six hundred Native American community members, within approximately 80 families. The canyon preserves resources of sacred significance and perpetuates lifeways of past and present cultures connected to these landscapes. With its living community, on land owned by the Navajo Tribal Trust, CACH is unique as the only NPS unit owned and cooperatively managed in this manner.

Consequently, in light of the above, please be advised that NPS has determined that an air tour management plan or voluntary agreement is necessary to protect the specific cultural and historic resources and values, as well as visitor use and enjoyment, of this unique park.

Sincerely,

Raymond M. Sauvajot, Ph.D.
Associate Director
Natural Resource Stewardship and Science

cc: Sue E. Masica, Regional Director, Intermountain Region
Lyn Carranza, Superintendent, CACH
Keith Lyons, Chief, Integrated Resource Management, CACH