U.S. DEPARTMENT OF TRANSPORTATION,
FEDERAL AVIATION ADMINISTRATION, AND
U.S. DEPARTMENT OF INTERIOR, NATIONAL PARK SERVICE

RECORD OF DECISION

Air Tour Management Plan for Bryce Canyon National Park

INTRODUCTION

This Record of Decision (ROD) provides the Federal Aviation Administration's (FAA's) and the National Park Service's (NPS's) (together, the agencies) final determination to implement the Air Tour Management Plan (ATMP) for Bryce Canyon National Park (Park), in accordance with the National Parks Air Tour Management Act (NPATMA), as amended, its implementing regulations (14 CFR Part 136), and all other applicable laws and policies. This ROD includes a summary of the applicable background, the objective of the action taken, a description of the action taken, a summary of consultation/compliance processes for the ATMP, an identification of substantive changes from the draft ATMP to the final ATMP, and an explanation of the basis and justification for measures taken in the ATMP.

BACKGROUND

The ATMP, Appendix A to this ROD, provides background information regarding the Park and its resources, as well as relevant Park management objectives.

The National Parks Air Tour Management Act

NPATMA requires that all commercial air tour operators conducting or intending to conduct a commercial air tour operation over a unit of the National Park System apply to the FAA for authority to undertake such activity. 49 U.S.C. § 40128(a)(2)(A). NPATMA, as amended, further requires the FAA, in cooperation with the NPS, to establish an ATMP or voluntary agreement for each park that did not have such a plan or agreement in place at the time the applications were made, unless a park has been otherwise exempted from this requirement. *Id.* § 40128(b)(1)(A). The objective of an ATMP is 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." *Id.* § 40128(b)(1)(B). An ATMP "may prohibit" commercial air tour operations over a park in whole or in part, or "may establish" conditions for the conduct of commercial air tour operations over a park. *Id.* § 40128(b)(3)(A)-(B). The need for implementation of any measures taken in an ATMP must be justified and documented in the ATMP and within a record of decision. *Id.* § 40128(b)(3)(F).

As a threshold matter, the agencies needed to define what constitutes a commercial air tour so that they could implement NPATMA's requirements. As relevant here, FAA regulations define a commercial air tour as:

> [A]ny flight, conducted for compensation or hire in a powered aircraft where a purpose of the flight is sightseeing over a national park, within ½ mile outside the boundary of any national park, or over tribal lands during which the aircraft flies:
>
> (i) Below 5,000 feet above ground level (except for the purpose of takeoff or landing, or as necessary for the safe operation of an aircraft as determined under the rules and regulations of the Federal Aviation Administration requiring the pilot-in-command to take action to ensure the safe operation of the aircraft); [or]
>
> (ii) Less than 1 mile laterally from any geographic feature within the park (unless more than ½ mile outside the boundary)…

14 CFR § 136.33(d).

Because Congress understood that developing ATMPs that meet NPATMA's requirements could take some time, NPATMA provided that prior to the establishment of an ATMP, the FAA "shall grant interim operating authority" to existing air tour operators that apply for prospective operating authority. 49 U.S.C. § 40128(c)(1); H.R. Rep. No. 106-167, at 96. The interim operating authority (IOA) issued was required to be the greater of the number of commercial air tour flights over the park during the 12-month period prior to the enactment of NPATMA or the average number of commercial air tour flights within the 36-month period prior to the enactment of NPATMA. 49 U.S.C. § 40128(c)(2).

NPATMA was substantively amended in 2012. In addition to authorizing the agencies to enter into voluntary agreements with air tour operators in lieu of developing ATMPs, 49 U.S.C. § 40128(b)(7)(A), the 2012 amendments added reporting requirements for operators conducting commercial air tour operations over National Park System units. *Id.* § 40128(d). In addition, the amendments exempted parks with 50 or fewer commercial air tours from the requirement to prepare an ATMP or voluntary agreement, unless this exemption was withdrawn by the NPS. *Id.* § 40128(a)(5).

The Compliance Plan

On February 2019, a petition for a writ of mandamus was filed in the U.S. Court of Appeals for the District of Columbia in which the petitioners requested an order directing the agencies to establish an ATMP or voluntary agreements under NPATMA for seven specified National Park System units within two years of such order. *In Re: Public Employees for Environmental Responsibility*, 957 F.3d 267, 271 (D.C. Cir. 2020). On May 1, 2020, the Court granted the petition, holding that the agencies had a mandatory duty to establish ATMPs or voluntary agreements for eligible parks under NPATMA and that mandamus relief was warranted based on delay in performance of this duty and consideration of the relevant factors. *Id.* at 273; Per Curiam Order, May 1, 2020 (Mandamus Order). The Mandamus Order directed the agencies to submit, by August 31, 2020, a proposed plan for bringing all 23 eligible parks

within the National Park System into compliance with NPATMA, by completing an ATMP or voluntary agreement for those parks, within two years—or to offer "specific, concrete reasons" why it will take longer than two years. *Id.* The Court retained jurisdiction to approve the agencies' plan and monitor their progress, and directed the agencies to submit quarterly progress updates.

Consistent with the Court's order, agencies submitted a proposed plan and schedule (Compliance Plan). In general, the Compliance Plan contemplated initiating and moving forward with a process to implement ATMPs for all eligible parks concurrently as part of a coordinated, omnibus effort. Because Bryce Canyon National Park was one of the 23 parks identified as requiring an ATMP or voluntary agreement under NPATMA, it was included in the Compliance Plan which was subsequently approved by the D.C. Circuit.

The Planning Process and Public Engagement

As no ATMP had previously been implemented for any park at the time the agencies submitted the Compliance Plan to the Court, as an initial step in this process, the agencies worked collaboratively to determine the contents of and process for completing an ATMP that would be consistent with NPATMA. Together, they developed a template which could then be modified and tailored to meet the specific needs and address the unique circumstances of each park included in the planning process. Further, because air tours have been occurring over parks for decades, the agencies had institutional experience and data to draw upon in developing the ATMP template and in determining how to regulate commercial air tours over the Park.

The agencies also worked to identify the existing condition of commercial air tours over the Park and outside the Park but within ½ mile of its boundary by identifying the number of commercial air tours conducted per year and the general operating parameters of those tours. The agencies decided to use a three-year average of operator-reported air tours to identify the existing condition, rather than reports from a single year. In order to identify the three-year average, the agencies decided to use reported air tours from 2017, 2018 and 2019. These years were selected because they reflected relatively current air tour conditions, represented reliable operator reporting of air tours, accounted for variations across multiple years, and excluded 2020 which was atypical due to the COVID-19 pandemic. The agencies also decided against using 2021 data due to continued abnormalities associated with the COVID-19 pandemic and the unavailability of reporting data for 2021 during most of the planning effort.

Currently nine commercial air tour operators hold IOA to conduct a combined total of 3,131 commercial air tours over the Park each year. 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 route(s), time-of-day, altitude(s), or other conditions for such tours. Three of these operators have not reported conducting any commercial air tours over the Park since the reporting requirement was implemented in 2013. Six operators reported conducting commercial air tours over the Park from 2017 to 2019. The chart below depicts available reporting information regarding the commercial air tours conducted over the Park on an annual basis.

	2013	2014	2015	2016	2017	2018	2019	2020[1]
Aero-Copters of Arizona, Inc.	349	429	409	428	433	501	452	168
Southwest Safaris	2	1	2	0	0	1	1	3
American Aviation, Inc.	18	1	0	1	5	2	2	6
Grand Canyon Airlines, Inc.	13	0	0	26	33	17	65	76
Maverick Helicopters, Inc	0	0	0	0	0	1	1	0
Papillon Airways, Inc.	3	9	7	2	9	10	11	10

In order to identify the general operating parameters of the air tours conducted, the FAA reached out to the six operators that currently conduct air tours over the Park to identify their air tour routes and other operating conditions.

- Aero-Copters of Arizona, Inc., reports conducting commercial air tours using BHT-206-B (helicopter) or fixed-wing CE-206-206 on five different routes over the Park, at altitude ranging from 1,000 to 3,000 feet (ft.) AGL. Four of those routes are flown using helicopters at altitudes from 1,000 ft. AGL to 2,700 ft. AGL. One route is flown using fixed wing aircraft at altitudes from 2,000 ft. AGL to 3,000 ft. AGL.
- Bruce M. Adams (d/b/a/ Southwest Safaris) reports conducting commercial air tours using CE-182-R and CE-207-T207A fixed wing aircraft on a single route over the Park at an altitude of 1,000 ft. AGL.
- American Aviation, Inc., reports conducting commercial air tours using the following fixed-wing aircraft: CE-172-N, CE-207-207, CE-207-T207A on a single route over the Park at an altitude of 2,000 ft. AGL.
- Grand Canyon Airlines, Inc., reports conducting commercial air tours using the following fixed-wing aircraft: CE-208-B, DHC-6-300 on three routes over the Park and at altitudes from 2,000 ft. AGL to 2,700 ft. AGL.
- Maverick Helicopters, Inc., reports conducting commercial air tours using EC-130-B4 and EC-130-T2 helicopters on two routes over the Park at an altitude of 1,000 ft. AGL.
- Papillon Airways, Inc., reports conducting commercial air tours using the following helicopters AS-350-B3, BHT-206-L1, BHT-206-L3, EC-130-B4, EC-130-T2, MD-900 on four routes over the Park at a minimum of 300 ft. AGL.

Based on the three-year average of reporting data from 2017 to 2019, Aero-Copters of Arizona, Inc., conducts an average of 462 air tours each year, Southwest Safaris conducts an average of 1 air tour each year, American Aviation, Inc., conducts an average of 3 air tours each year, Grand Canyon Airlines, Inc., conducts an average of 38 air tours each year, Maverick Helicopters, Inc., conducts an average of 1 air tour each year, and Papillon Airways, Inc., conducts an average of 10 air tours each year. Commercial air tours are typically conducted

[1] Based on unpublished reporting data.

between one hour after sunrise until three hours before sunset, occur year-round, and may occur any day of the week.

Based on the information provided by the operators (e.g., routes, altitudes, type of aircraft), modeling was conducted to predict noise effects using the FAA's Aviation Environmental Design Tool, a software system that models aircraft performance in space and time to estimate fuel consumption, emissions, noise, and air quality. This information was then considered, in addition to acoustic monitoring information, and analyzed by subject matter experts from the NPS's Natural Sounds and Night Skies Division, the NPS's Environmental Quality Division, the NPS Intermountain Regional Office, and the Park. The NPS interdisciplinary team, which included biologists, the Park's Superintendent, the Park's Chief of Integrated Resources Management, and regional planning and National Environmental Policy Act (NEPA) specialists, conducted a series of biweekly meetings to identify a proposed action. In these meetings the subject matter experts considered routes, altitudes, and type of aircraft that operators reported, the Park's noise sensitive resources, the Park's existing and natural acoustic environment, visitor experience, and potential mitigation or protective measures that could be included in an ATMP.

The proposed action identified by the NPS and justifications for restrictions on air tours were further reviewed by the FAA, including the FAA's local Flight Standards District Office, for any aviation safety concerns. During this time, the agencies conducted preliminary environmental analysis to identify the appropriate NEPA pathway for a draft ATMP implementing the proposed action; initiated consultation pursuant to Section 106 of the National Historic Preservation Act, including tribal consultation; and began preliminary analysis for potential effects on listed species and critical habitat consistent with Section 7 of the Endangered Species Act.

NPATMA requires that the agencies publish notification of the availability of a draft ATMP in the Federal Register for public comment and hold at least one public meeting for each draft ATMP. The FAA published a notice of availability of the draft ATMP for Bryce Canyon National Park in the Federal Register on September 3, 2021. Public Meeting/Notice of Availability for Proposed Air Tour Management Plans at Bandelier National Monument; Great Smoky Mountains National Park; Arches National Park; Glacier National Park; Canyonlands National Park; Natural Bridges National Monument; and Bryce Canyon National Park, 86 Fed. Reg. 49,593 (Sept. 3, 2021). The agencies held the public meeting for the draft ATMP for Bryce Canyon National Park on September 27, 2021 and accepted public comments between September 3 and October 3, 2021. The agencies received 448 comment letters on the draft ATMP, which included one form letter with 367 signatories. The agencies' review and analysis of the public comments, including comments regarding draft ATMPs for other parks that were generally applicable to the ATMP for Bryce Canyon National Park, were used to inform this ROD, the final ATMP, and the attached environmental compliance documentation.

OBJECTIVE

The objective of the ATMP is to implement "acceptable and effective measures to mitigate or prevent the adverse impacts, if any, of commercial air tour operations upon the natural and cultural resources, visitor experiences, and tribal lands." 49 U.S.C. § 40128(b(1)(B).

The ATMP is necessary for the following reasons:

- An ATMP or voluntary agreement for Bryce Canyon National Park is required by NPATMA. The agencies have chosen to satisfy this requirement by implementing an ATMP.
- Currently, commercial air tours are operating under IOA which does not include mitigation measures that the NPS believes are necessary to protect Park resources and values, consistent with the NPS's obligations under the National Park Service Organic Act and the 2006 NPS Management Policies, and to achieve Park management objectives.

DESCRIPTION OF ACTION

The agencies will implement the ATMP for Bryce Canyon National Park, and the FAA will update the operations specifications (OpSpecs)[2] of all air tour operators with IOA for the Park to incorporate the terms and conditions of the ATMP accordingly. The ATMP authorizes the existing condition of commercial air tour operations for current operators with measures designed to mitigate impacts to Park resources and visitor experience as a result of commercial air tour operations. It also includes additional measures required by NPATMA. In general, the ATMP:

- Authorizes up to 515 commercial air tours per year on designated routes specific to the type of aircraft used to conduct the tour as depicted on an included map (see Figure 2 in the ATMP, which is Appendix A to this ROD).
- Requires commercial air tours to maintain minimum altitudes expressed in mean sea level (MSL),[3] as depicted on an included map, with limited exceptions for takeoff, landing, and emergency situations.
- Authorizes specific types of aircraft to be used and specifies that any new or replacement aircraft must not be noisier than the authorized aircraft.
- Provides that commercial air tours may not operate until one hour after sunrise and must end by three hours before sunset, unless they have been approved by the agencies for the quiet technology incentive, in which case they may operate tours ending one hour before sunset.
- Provides for the establishment of no-fly periods by the NPS for Park management or special events, including tribal events, with advance notice to the operator.
- Provides for operator training and education, as well as annual meetings between the FAA Flight Standards District Office, Park staff, and the operator.

[2] OpSpecs are issued by the FAA to each operator and prescribe the authorizations, limitations, and procedures under which air tour operations must be conducted and require certain other procedures under which each class and size of aircraft is to be operated.

[3] 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.

- Requires operators to install and use flight monitoring technology on all authorized commercial air tours, and to include flight monitoring data in their semi-annual reports to the agencies, along with the number of commercial air tours conducted.
- Includes safety requirements relating to in-flight communications.
- Allows for minor modifications to the ATMP through adaptive management, so long as the impacts of such changes have already been analyzed in previous environmental compliance.
- Includes specific adaptive management measures to protect California condors if they are observed in the Park.
- Outlines a process for amending the ATMP.
- Provides information regarding the process for operators to apply for operating authority as a new entrant.
- Sets forth a general process for conducting competitive bidding for air tour allocations, where appropriate.
- Explains that compliance with terms of the ATMP will be mandatory, and IOA for the Park will be terminated, as of the effective date of the ATMP (the date the revised or updated OpSpecs are issued to implement the ATMP) which will be on or before 90 days from the date the ATMP is signed.

CONSULTATION AND COMPLIANCE

- **National Environmental Policy Act:** The NPS applied a documented categorical exclusion to the ATMP. The categorical exclusion that the NPS applied is set forth in the Department of the Interior, Departmental Manual at 516 DM 12.5 A(1), and is reproduced in the NPS NEPA Handbook at categorical exclusion 3.3.A.1. It applies to "[c]hanges or amendments to an approved action when such changes would cause no or only minimal environmental impacts." Here, the "approved action" is the IOA issued by the FAA consistent with NPATMA, which was a non-discretionary authorization directed by Congress. The agencies used the NPS environmental screening form to document that there are no or minimal impacts from the ATMP. The NPS evaluated the extraordinary circumstances in 43 CFR § 46.215 and determined that no extraordinary circumstances apply and the ATMP will not result in significant impacts. The FAA performed its own extraordinary circumstances analysis and analysis under Section 4(f) of the Department of Transportation Act, codified at 49 U.S.C. § 303(c), and adopted the NPS's categorical exclusion determination pursuant to 40 CFR § 1506.3(d). *See* Appendices B, C, and D.

- **Endangered Species Act:** The agencies reviewed existing information on threatened and endangered species within the Park and evaluated the impacts of the ATMP on those species. The ATMP implements designated routes, required minimum altitudes, imposes annual limits on commercial air tours, and implements the avoidance measures recommended for listed avian species per U.S. Fish and Wildlife Service guidance and recovery documents. The agencies determined that there would be *no effec*t from the ATMP on three federally listed threatened or endangered species (1 species of wildlife and 2 species of flowering plants). The agencies determined that the ATMP *may affect, but is not likely to adversely affect* the California condor, Mexican spotted owl, southwestern willow flycatcher, and the yellow-billed cuckoo. The agencies completed

informal consultation with the U.S. Fish and Wildlife Service via a July 12, 2022 letter .[4] The U.S. Fish and Wildlife Service concurred with the agencies' determination on August 4, 2022. *See* Appendix E.

- **National Historic Preservation Act:** The agencies complied with Section 106 of the National Historic Preservation Act and completed the Section 106 consultation process with respect to this undertaking—implementing an ATMP for Bryce Canyon National Park. The FAA, acting as lead agency for the Section 106 process, initiated consultation under Section 106 with twenty federally recognized tribes via letter (Chemehuevi Indian Tribe of the Chemehuevi Reservation, Confederated Tribes of the Goshute, Hopi Tribe of Arizona, Indian Peaks Band of Paiute Indians, Kaibab Band of Paiute Indians, Kanosh Band of Paiute Indians, Koosharem Band of Paiute Indians, Las Vegas Tribe of Paiute Indians, Moapa Band of Paiute Indians, Navajo Nation, Northwestern Band of Shoshone Nation, Paiute Indian Tribe of Utah, San Juan Southern Paiute Tribe of Arizona, Shivwits Band of Paiute Indians, Skull Valley Band of Goshute Indians of Utah, Southern Ute Indian Tribe of the Southern Ute Reservation, Ute Indian Tribe of the Uintah & Ouray Reservation, Ute Mountain Tribe of the Ute Mountain Reservation, White Mesa Ute Community, and Zuni Tribe of the Zuni Reservation). In the same letter, the agencies also invited these tribes to engage in government-to-government consultation under Executive Order 13175.[5] The FAA also initiated consultation via letter with the six active operators (four on March 26 and two on August 6, 2021), with the Utah State Historic Preservation Officer (SHPO) on March 29, 2021, with a local government (Bryce Canyon City) on April 16, 2021, and with most other identified Section 106 consulting parties on August 6, 2021.

  Via the same and/or subsequent letters the FAA identified the area potentially affected by the undertaking, requested information regarding historic properties within the area of potential effects and proposed a finding of no adverse effect to historic properties as a result of the undertaking. The undertaking was defined consistent with the proposed action in the Categorical Exclusion Documentation Form, Appendix C, and is discussed above. Unless a tribe affirmatively opted out of consultation (as have the Indian Band of Paiute Indians, Kaibab Band of Paiute Indians, Kanosh Band of Paiute Indians, and Koosharem Band of Paiute Indians) the identified tribes received correspondence regarding Section 106 consultation.

  During the consultation process, the agencies conducted additional outreach to consulting parties for this undertaking and for other ATMPs included in the current planning process via webinar. The agencies conducted webinars on April 28, May 4, and May 6, 2021, for SHPOs, tribes, and other identified consulting parties to introduce key agency participants and the air tour management planning process, and to discuss next steps in the Section 106 process. The FAA also held a webinar for commercial air tour operators currently conducting air tours over any of the parks included in the planning process on

[4] The letter was dated July 8, but was not fully signed until July 12.
[5] None of the tribes indicated an interest to consult on a government-to-government level so tribal consultation for the undertaking occurred under the Section 106 framework.

November 19, 2021, to introduce them to the Section 106 consultation process. In addition, the FAA conducted further outreach efforts to the tribes identified as consulting parties for this ATMP, which is detailed in Appendix F, as are comments received from tribes in the Section 106 consultation process.

Public involvement for this undertaking was integrated with the public involvement required under NPATMA, discussed *above*. During the public comment period for the draft ATMP, the agencies received public comments about potential noise effects from commercial air tours, tribal concerns, and about potential effects on historic properties from commercial air tours. *See* Appendix H.

Via letter dated August 5, 2022, the FAA proposed a finding of no adverse effect to the SHPO. *See* Appendix F. On August 10, 2022, the SHPO concurred with the FAA's proposed finding. The FAA did not receive any objections to its finding.

- **Aviation Safety:** The draft ATMP, in particular the routes and altitudes included in the draft ATMP, was reviewed by the FAA's Flight Standards District Office (FSDO)[6] with jurisdiction, to identify and address any safety concerns associated with the draft ATMP. The FAA's FSDO also reviewed all public comments received on the draft ATMP that raised safety concerns as well as the routes and altitudes included in the final ATMP.

CHANGES FROM THE DRAFT ATMP

In addition to minor, editorial changes made for clarity, the final ATMP includes the following substantive changes from the draft ATMP made in response to public comments on this or other draft ATMPs,[7] or based on further agency review, as follows:

- **Section 3.2 Commercial Air Tour Routes and Altitudes**

The draft ATMP included sixteen different designated routes, with each route assigned to a particular operator, and established required altitudes expressed in MSL that would ensure a minimum altitude of 2,600 ft. AGL for raptor protection consistent with the U.S. Fish & Wildlife Service Utah Field Office Guidelines for Raptor from Human and Land Use Disturbances. Easterly and westerly flights were vertically separated for safety reasons. Due to the Park's high altitude, maintaining the minimum altitude of 2,600 ft. AGL on the designated routes in the draft ATMP would have required commercial air tours to fly at altitudes over 10,000 ft. MSL for a portion of the route. In response to general comments expressing safety concerns regarding time-of-day restrictions, designated routes, and minimum altitudes included in the draft ATMPs for the four Utah parks included in the Compliance Plan (Arches National Park, Bryce Canyon National Park, Canyonlands National Park, and Natural Bridges National Monument), the agencies requested a second review of the operating conditions in the draft ATMP from the FSDO with jurisdiction. Specifically, the comments expressed concerns that the designated

[6] A FSDO is a local FAA field office that deals with various aviation issues including airmen and aircraft certifications, accident investigations, and enforcement and investigation issues.

[7] In August and October of 2021, the agencies released an additional five draft ATMPs covering eight other parks for public review and comment.

routes and required minimum altitudes in the draft ATMPs exceeded 10,000 ft. MSL and would require the passengers and pilot to utilize supplemental oxygen as well as safety concerns regarding the overlapping routes included in the draft ATMP. As a result, the required routes and altitudes were modified in the final ATMP. In order to maintain a spatial buffer for Park resource protection and visitor experience, the routes were consolidated over lower altitude portions of the Park away from high visitor use areas and most wilderness campsites. The sixteen routes included in the draft ATMP were consolidated into two main loops over the Park—one of which is designated for helicopter use and one of which is designated for use by fixed wing aircraft. The two loops have multiple entry and exit pathways that aircraft entering the Park's airspace may use to enter the loops. The helicopter loop has multiple turnarounds that allow for tours of varying length. The final ATMP requires aircraft to maintain a steady altitude in MSL and provides for a 500 ft. vertical separation of helicopters and fixed wing aircraft for safety. These route and altitude modifications are depicted in the map designated as Figure 2 and included in the ATMP, Appendix A.

- **Section 3.4 Day/Time**

The agencies modified the time-of-day restrictions included in the draft ATMP in response to comments expressing safety concerns. The draft ATMP provided that commercial air tours could only operate beginning two hours after sunrise and must end two hours before sunset. Concerns were expressed that these restrictions would force operators to fly during times of the day when the prevailing winds are strongest and that the heat of the day increases chances of less reliable flying conditions. In order to address this comment, the agencies modified the restriction in the final ATMP, which provides that air commercial air tours may only operate beginning one hour after sunrise and must end three hours before sunset. The modification still provides four daytime hours during which no air tours would be permitted to operate over the Park (except for flights that qualify for the quiet technology incentive) and maintains protections in place for the hour before sunrise and after sunset which are important times for wildlife and visitor experience.

- **Section 3.7D Wildlife Avoidance**

This section was edited to more accurately describe the presence of California condors in the Park. The avoidance provisions themselves were not changed.

- **Section 3.7E Non-transferability of Allocations:**

In response to comments questioning the transferability of air tour operations allocated under the ATMP, the agencies included language to make clear that allocations of annual air tour operations are not transferable between operators. But a successor purchaser may assume an operator's allocation of annual air tour operations by acquiring an entity holding allocations under this ATMP in its entirety. In order to avoid a break in service and to afford the agencies the necessary time to consult regarding modifications to operations specifications, the ATMP requires that the prospective purchaser notify the agencies as early as possible of its intention to purchase the entity holding allocations and to certify that it will comply with the terms of the ATMP.

- **Section 3.7 F Hovering**

The final ATMP includes a resource protection measure prohibiting hovering aircraft in place.

- **Section 3.8 Quiet Technology Incentives**

The agencies revised the language in Section 3.8 regarding the quiet technology incentive required by NPTMA in response to comments on this and other draft ATMPs requesting a definition of the term "quiet technology" or suggesting a definition for such term. The agencies have not included a definition of quiet technology in the ATMP. Instead, the ATMP provides for a consultation with operators regarding which of their aircraft qualify for the incentive at the time this ATMP is implemented. Subsequently, should operators wish to purchase new aircraft or make appropriate modifications to existing aircraft, they are encouraged to consult with the agencies prior to making such investment to determine whether the aircraft would qualify for the incentive. In response to comments regarding whether the incentive should or should not be applied retroactively to aircraft that may already qualify for the incentives, the agencies revised the language in the ATMP to make clear that the incentive may apply to operators that have already converted to quiet technology aircraft, if the agencies determine that they qualify for the incentive. To do otherwise would unfairly penalize operators that were early adopters of quiet technology. The language in this section was also modified to make clear that not only will the effectiveness of the quiet technology incentive be monitored, but the effects of this incentive on Park resources and visitor experiences will be monitored by the NPS. If unanticipated effects are observed, the agencies may need to amend the ATMP to modify this or other sections. The quiet technology incentive itself—allowing aircraft that have converted to quiet technology to operate commercial air tours beginning one hour after sunrise or ending one hour before sunset —did not change from the draft ATMP to the final ATMP.

- **Section 5.0 Justification for Measures Taken**

This section was Section 4.0 in the draft ATMP. It was moved as a result of comments expressing the opinion that the monitoring and compliance measures included in one or more of the draft ATMPs were not justified or explained. In order to include a justification for these requirements in the same section as the explanations for the other requirements included in the ATMP, the agencies thought it made more logical sense to move Section 5.0, *Compliance*, as well as Section 5.1, *Aircraft Monitoring Technology*, forward in the ATMP, and they are Sections 4.0 and 4.1, respectively, in the final ATMP. This section was revised to reflect the changes to the designated routes and altitudes from the draft ATMP to the final ATMP, and to explain the justification for the designated routes and altitudes in the final ATMP. It also includes a justification for the prohibition on hovering aircraft in place. Additional changes to this section were made better align the justification for the annual operator training with the purpose of the training and the justification for the annual meeting with the purpose of the meeting. Though these requirements may be combined, they are separate requirements with slightly different justifications.

- **Section 4.0 Compliance, Section 10.0 Conformance with Operations Specifications, and Section 11.0 Effective date**

These sections were revised to make clear that the effective date of the ATMP is the date on which the operators' updated OpSpecs implementing the ATMP are issued by the appropriate FSDO. Because OpSpecs are used to inform the operators of the conditions under which they must operate and will be relied on by the FAA to enforce the terms and conditions of the ATMP, if necessary, it made sense for the effective date of the ATMP to be tied to the date that OpSpecs are modified and reissued to the operator and not to some other date. Section 4.0 of the ATMP (Section 5.0 in the draft ATMP) was revised to delete language that incorrectly assumed that there would be a difference between the effective date of the ATMP and modification of OpSpecs. Section 10.0 of the ATMP was revised to make clear that the FAA will issue new OpSpecs that incorporate the ATMP's operating parameters within 90 days of the date the ATMP is signed. Section 11.0 of the ATMP was revised to make clear that the effective date is the date new OpSpecs are issued, not some other date. In response to public comments, Section 4.0 Compliance was also revised to make clear that the public may report allegations of noncompliance and that the appropriate FSDO will investigate written reports of noncompliance consistent with FAA policy.

- **Additional changes**

In addition to the above changes, the draft ATMP was edited to clarify that the restrictions imposed by the ATMP apply not only when the operator is flying over lands or waters within the Park boundary but also when the operator is flying over lands or waters outside of the Park boundary that are within ½ mile of the boundary. Further edits were made to explain that there are no tribal lands within or abutting the Park, that the restrictions in the ATMP are protective of tribal use of the Park, and that adaptive management measures could be taken in response to tribal input.

The required communications frequency was changed from 122.9 to Common Traffic Advisory Frequency 122.8 in response to an operator comment regarding communication frequencies in the area.

Appendix A to the ATMP was revised to expressly state that IOA for the Park terminates on the effective date of the ATMP. Given that the operators will be required to fly consistent with the reissued OpSpecs, it would be inconsistent with the terms of the ATMP for IOA to remain after the ATMP is implemented. Though NPATMA provides that IOA "shall terminate 180 days" after the establishment of an ATMP, the agencies do not interpret this provision as precluding an earlier termination consistent with the terms and conditions of an ATMP. *See* 49 U.S.C. § 40128(c)(2)(E). Appendix A was also revised to include an aircraft authorized to be used by Southwest Safaris during the time period from 2017-2019 that was inadvertently omitted from the draft ATMP.

BASIS AND JUSTIFICATION FOR DECISION

- **Annual limit of commercial air tours**

The ATMP implements the existing condition, based on operator reported data, with respect to the number of authorized air tours. The agencies decided to implement the existing condition because the NPS found that the impacts associated with the existing condition, together with reasonable mitigation measures, would not result in significant adverse impacts of commercial air tour operations upon the natural and cultural resources, visitor experiences, and tribal lands. As explained above, the agencies decided to use the three-year average of operator reported air tours from 2017 to 2019 to identify the existing condition of commercial air tours over the Park. Although the State of Utah suggested that the three-year average selected by the agencies was not sufficient, and recommended that a 20 or 30-year average would be more appropriate, the agencies declined to adopt this suggestion. The agencies found that more recent data more accurately represents current trends and, regardless, as reporting data has only been available since 2013, this suggestion is not implementable.[8]

The agencies did not use IOA as the number of air tour operations authorized under the ATMP because IOA was based on air tour operations reported by operators more than 20 years ago, does not represent the most current or reliable operational data, and is not verifiable by the agencies. Moreover, the actual numbers of commercial air tours conducted over the Park have been substantially below IOA (3,131 commercial air tours per year) since the implementation of NPATMA's reporting requirement in 2013.

Some commenters opposed the limits on the number of air tours included in the ATMP and advocated for an increase in the number of authorized air tours per year. The agencies declined to increase the number of air tours authorized per year above the existing condition (the three-year average from 2017-2019) for the following reasons. First, at the outset of this planning process the agencies used available reporting data, operator provided routes, and other available information in order to model the existing condition and the impacts of the ATMP including proposed mitigations. The agencies could not, and should not be required to, continually shift their planning efforts, and expend further resources, to account for and model continually shifting data and also complete an ATMP for the Park consistent with the Compliance Plan. Second, the ATMP includes mitigation measures, including designated altitudes, annual limits on air tours, and route modifications. These mitigation measures were necessary to mitigate the impacts of current commercial air tours on Park resources, visitor experience, and tribal use of the Park and to meet NPS management objectives for the Park. Further increases in the annual limit of commercial air tours have not been analyzed and may have impacts to these resources that could prevent the NPS from achieving its Park management objectives. Third, the ATMP amendment process could allow for an increase in the number of commercial air tours authorized

[8] The State of Utah also commented that the FAA and NPS should be taking steps to regulate private tours. All such tours that meet the definition of a commercial air tour under NPATMA and the FAA's implementing regulations are regulated under the ATMP. NPATMA does not authorize the agencies to regulate private tours that do not meet the definition of a commercial air tour provided above through an ATMP.

per year and would permit the agencies to evaluate the potential impacts of any additional air tours in the context of a concrete proposal from the operator that includes sufficient information for the agencies to assess the effects of such a proposal on Park resources. Fourth, though some commenters argued that the average of air tours from 2017 to 2019 was artificially low due to an airport closure and a strong U.S. Dollar, the reporting data does not support this claim. The period from 2017 to 2019 includes two of the years with the highest number of reported commercial air tours over the Park since NPATMA's reporting requirement was first implemented in 2013.

Some commenters advocated for the elimination of air tours, consideration of a no air tours alternative, a reduction in the number of air tours authorized per year, or phasing out air tours. While NPATMA does state that an ATMP may ban air tours, it also contemplates that air tours may be an appropriate use over parks subject to restrictions that reduce significant impacts on park resources and visitor experience. The operating parameters and other conditions in the ATMP provide appropriate restrictions on commercial air tours over the Park and there are no significant impacts to Park resources and visitor experience. And, while some commenters advocated for designated no fly weeks or daily flight limits, the agencies did not find such limits necessary given the number of air tours authorized by the ATMP and the operators' reported operations.

- **Designated routes and minimum altitude**

The ATMP includes aircraft specific designated routes and altitudes. When flying over the Park or outside the Park but within ½ mile of its boundary, helicopters are required to maintain an altitude of 9,250 ft. MSL and fixed wing aircraft are required to maintain an altitude of 9,750 ft. MSL. The 500 ft vertical separation between the two types of aircraft is a safety measure to deconflict the airspace. Due to the Park's uneven terrain, flying the designated altitudes expressed in MSL means that helicopters will generally maintain altitudes from 1,500 ft. to 2,600 ft. AGL, though for a few small segments they will maintain altitudes from 1,000 ft. to 1,500 ft. AGL. Fixed wing aircraft will generally maintain altitudes from 2,000 ft. to 2,600 ft. AGL, with a small segment in the southern area of the Park where fixed wing aircraft will fly at altitudes from 1,500 ft. to 2,000 ft. AGL.

In order to maintain this spatial buffer for the protection of Park resources and visitor experience, the sixteen routes reported by operators were consolidated and moved over lower elevation areas the Park, which are generally on the east side of the Park. The routes were consolidated into two loops (one designated for helicopter use and that other designated for use by fixed wing aircraft) that avoid the most visited areas of the Park, including the visitor center, and spend less time over wilderness areas as compared to current conditions. The helicopter loop (depicted in blue in the ATMP) has three different entry and exit pathways (depicted in blue, pink, and purple) and four different turn around points (all depicted in blue). The fixed wing loop (depicted in red in the ATMP) also has multiple entry and exit pathways. Commenters on the draft ATMP suggested consolidating routes, reducing the number of routes and avoiding backcountry areas. Though made primarily for a combination of resource protection and safety reasons, the changes in the designated routes from the draft to the final ATMP also address these comments. Though some commenters also suggested increased altitudes, as explained above, due

to the Park's high elevation, the altitudes of routes could not be increased without potentially requiring the passengers and pilot to use supplemental oxygen.[9] Further, considering the modified routes and altitudes in the final ATMP, together with the other included restrictions and mitigation measures (for example, the prohibition on hovering), the NPS found they were sufficient to protect the Park's natural and cultural resources and visitor experience.

- **Hours of operation**

The ATMP authorizes air tours to operate beginning one hour after sunrise until three hours before sunset, as defined by the National Oceanic and Atmospheric Administration (NOAA), unless the aircraft qualifies for the quiet technology incentive, a mitigation measure that offers resource protection during times of day which are important to wildlife and visitor experience. As noted above, the agencies changed the hours of operation from the draft ATMP due to safety concerns raised in the public comment process. Though commenters requested changes further restricting the hours during which commercial air tours are permitted to operate, the agencies declined to change these operating parameters because the NPS found the hours of operation in the ATMP, together with the designated routes, minimum altitudes, and other conditions in the ATMP to be sufficiently protective of the Park's natural and cultural resources and visitor experience.

- **Annual meetings and annual training**

The ATMP requires operators to attend an annual meeting at the request of either agency. Commenters requested changes to these provisions including making the meetings public and requiring that the operators distribute certain materials to passengers. The agencies declined to change these provisions of the ATMP. It is important to allow Park staff the flexibility to tailor meetings to meet Park needs and incorporate new information as Park management needs change. It is not necessary, at this point, to prescribe the format for information to be provided to the operators and would be burdensome on operators and Park staff to require operators to provide specific printed material to air tour patrons. The agencies also declined to make operator meetings public as it would not serve the communication and coordination purposes of these meetings. The NPS needs to be able to meet with the operators as it does with other commercial service providers that operate within Park boundaries. However, other avenues remain available for other stakeholders to provide the agencies with their input regarding commercial air tour operations. For example, the National Parks Overflights Advisory Group meets every year to discuss various aspects of air tour management throughout the National Park System and those meetings are open to the public.

The ATMP also requires operators to attend a training course at least once per year when it is made available by the NPS. The training will include information that the operators can use

[9] Because the term commercial air tour over a national park is defined by regulation as a flight below 5,000 ft. AGL, 14 CFR § 136.33(d)(i), raising the altitude to more than 5,000 ft. AGL would be tantamount to a ban on commercial air tours over the Park and outside the Park but within ½ mile of its boundary.

to further their own understanding of the NPS's management priorities or objectives for the Park as well as enhance the interpretive narrative for air tour clients. Some commenters questioned where the training would be held and the feasibility of conducting such training. The language in the ATMP is written broadly enough to allow for flexibility in the scheduling of, location for, and methods to participate in any required meetings or trainings.

- **Monitoring and Compliance**

In order to successfully implement the ATMP, the agencies determined that it should include provisions to allow the agencies to adequately monitor and ensure compliance with its conditions. To this end, Section 5.1 of the ATMP requires that operators equip aircraft used for air tours with flight monitoring technology, to use such technology when conducting air tours, and to include flight monitoring data in their semi-annual reports. The NPS consulted with the National Parks Overflights Advisory Group regarding the cost of various flight following technologies and found that there are relatively inexpensive off the shelf options that could meet the requirements of the ATMP. Though the agencies received comments suggesting alternative monitoring methodologies, including requiring equipping and using automatic dependent surveillance-broadcast (ADS-B) systems (which is a system that periodically transmits location data information in real-time) or providing for monitoring by the public, the agencies declined to include such options in the ATMP. As long as the tracking technology selected by the operator meets the performance requirements in the ATMP, the agencies did not find it necessary to require operators to install and use a specific technology. As to public monitoring, the agencies do not have the resources to stand up and staff a compliance response line and, given the monitoring measures included in the ATMP, such a line would be unnecessary. Additionally, because commercial air tours are not the only flights conducted over the Park, information from a public tip line would likely be less reliable as the public would likely have difficulty distinguishing between, for example, a commercial air tour flight and a general aviation flight.[10]

- **Adaptive Management**

The provisions in Section 8.0 of the ATMP are included to allow minor modifications to the authorized operating parameters (for example, slight deviations in routes) to avoid adverse impacts to Park resources, values, or visitor experiences; address safety concerns; or address new information (including information received through tribal input and/or consultation) or changed circumstances. Such modifications could only be made through adaptive management if the impacts to Park resources are within the scope of impacts already analyzed under NEPA, the Endangered Species Act, and Section 106 of the National Historic Preservation Act. This process was designed to ensure that actions that are potentially more impactful to resources would only be authorized through the amendment process, which requires public participation, after further environmental compliance. At least one commenter expressed concern that adaptive management would be used to remove, or lessen, measures designed to mitigate impacts on Park

[10] Multiple commenters suggested that the ATMP should regulate general aviation or other flights that do not meet the definition of a commercial air tour under NPATMA or the FAA's implementing regulations.

resources and visitor experience or increase the number of commercial air tours allowed, but the agencies believe that the provisions of Section 8.0 are clear that adaptive management could not be used in this way. Authorization of additional air tours, beyond the 515 authorized in the ATMP, would require an amendment to the ATMP, which requires public notice and comment as well as environmental compliance.

- **Competitive bidding**

NPATMA requires that where an ATMP limits the number of authorized commercial air tours within a specific time frame, the agencies must develop an open and competitive process for evaluating competing proposals to conduct commercial air tours. 49 U.S.C. § 40128(a)(2)(B). The ATMP outlines a competitive bidding process and identifies situations that may be addressed through competitive bidding. Based on operator comments on the draft ATMP for the Park, it appears that one or more existing operators (operators allocated commercial air tours under the ATMP) may seek additional operating authority or that one or more operators that currently hold IOA for the Park but are not allocated operations under the ATMP may seek to be accommodated as new entrants, which could be another circumstance addressed through competitive bidding. Upon receipt of a request from an existing operator for additional operating authority or a new entrant application, the agencies will request information necessary for them to determine whether and when competitive bidding is appropriate to address any such requests or applications.

- **Quiet Technology Incentive**

The ATMP includes a quiet technology incentive that allows aircraft utilizing quiet technology to fly commercial air tours that begin one hour after sunrise or that end one hour before sunset on all days that flights are authorized. Non-quiet technology aircraft would be required to begin air tours one hour after sunrise and end three hours before sunset. Though many commenters on this and other draft ATMPs requested a definition for quiet technology, the agencies found that creating a definition for quiet technology in this ATMP was not practicable because aviation technology continues to evolve and advance and because the FAA periodically updates its noise certification standards. An aircraft that may qualify as quiet technology today may be out of date 10 years from now.

The agencies also declined to extend the definition of quiet technology established for commercial air tours over Grand Canyon National Park to the ATMPs developed under NPATMA. The standard for Grand Canyon National Park was developed pursuant to legislation specific to that park through a rulemaking process that was completed in 2005. That standard applies only to Grand Canyon National Park and was based on narrow site-specific noise requirements. In addition, quiet aircraft technology has advanced substantially since that time. The aircraft used to conduct air tours over Grand Canyon National Park are much larger and heavier than the aircraft used to conduct tours over Bryce Canyon National Park, and since noise certification standards are based on the size and weight of the aircraft, the noise standards used to support the Grand Canyon quiet technology definition would not be appropriate for aircraft conducting tours over Bryce Canyon National Park.

As noted above, the ATMP provides for a consultation with operators regarding which of their aircraft qualify for the incentive at the time this ATMP is implemented. Though some commenters requested that the incentive only apply to future aircraft purchases, the agencies included current aircraft in the incentive so as not to penalize early adopters of quiet technology. In the future, should operators wish to purchase new aircraft, the ATMP allows for consultation with the agencies before the operator makes the investment in a new aircraft to determine whether such aircraft would qualify for the incentive.

Some commenters questioned the effectiveness of the quiet technology incentive itself and its inclusion in the ATMP, while others suggested different or stricter quiet technology requirements. A quiet technology incentive is required to be included in the ATMP by NPATMA. 49 U.S.C. § 40128(b)(3)(D). The agencies believe this incentive should be strong enough to encourage the adoption of quiet technology by operators balanced with the fact that quiet technology equipped aircraft still produce noise. The agencies believe the quiet technology incentive in the ATMP strikes the appropriate balance.

- **Analysis of Impacts**

Many commenters noted the lack of impact analysis in the ATMP. However, impact analysis is not required content in an ATMP. The impacts of the ATMP were evaluated using an Environmental Screening Form, Appendix B, to determine the applicability of a categorical exclusion and whether any extraordinary circumstances were present that would preclude the application of a categorical exclusion, consistent with NPS practice. Likewise, the FAA conducted an analysis of potential effects under Section 4(f) of the Department of Transportation Act and analyzed whether there were any extraordinary circumstances under FAA Order 1050.1F, Paragraph 5-2 and subsequently adopted the NPS's categorical exclusion determination under 40 CFR § 1506.3(d). The agencies acknowledge that no previous NEPA analysis of IOA occurred because the issuance of IOA for commercial air tours over the Park was a nondiscretionary action directed by Congress. Because of this, the agencies considered the impacts of air tours on the Park resources and visitor experience. 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. Several metrics were modeled and considered. The NPS considered maximum sound level (L_{Amax}) and the amount of time that aircraft from commercial air tour operations were above specific sound levels that relate to different Park management objectives (e.g., 35 and 52 decibels). The FAA used the average sound level over 12 hours (L_{Aeq}) in order to compute their standard noise metric of Day-Night Average Sound Level (DNL). The agencies used their respective modeling results to compare the acoustic environment at the Park with existing air tour operations to the predicted changes due to the mitigation measures under the ATMP.

The impact analysis provided in the Environmental Screening Form for this ATMP demonstrates that the ATMP does not result in significant impacts when considering the change from existing conditions. The analysis also discloses the impacts associated with the use itself; the analysis evaluates the impacts of 515 commercial air tours over the Park on designated routes that have been consolidated from existing routes. The impacts of the action, whether evaluating

the change from existing condition or the impacts from 515 air tours per year, are minimal. Many days will not have any air tours, and on those that do, there will be limited noise intrusion, and the integrity of all Park resources will remain intact, including the opportunity for visitor enjoyment of natural quiet and solitude. Park resources and values impacted from air tours, including the acoustic environment, will continue to exist in a condition that will allow the American people to have present and future opportunities to enjoy them. *See* 2006 NPS Management Policies § 1.4.4.

The agencies evaluated the noise impacts of the commercial air tours authorized by the ATMP on Park resources, including the Park's acoustic resources, visitor experience, wildlife, cultural resources, and the aesthetic scene. *See* Environmental Screening Form, Appendix B. The number of noise events, duration, and sound levels are important characteristics when evaluating noise and the number of air tours, duration, and intensity of noise exposure at any location in the Park is extremely low under the ATMP. While the agencies acknowledge that some air tour noise will be present at times, the intrusion is limited. Acoustic conditions resulting from the ATMP would continue to be similar to or quieter than the existing condition due the measures included in the ATMP that are changed from existing conditions, including designated routes and altitudes and a prohibition on hovering. Further, NPATMA contemplates that air tours may be an acceptable use over parks so long as protections are in place to protect park resources. In this case, given the limited number of air tours authorized, altitude restrictions, designated routes, and other protections included in the ATMP, the NPS found that air tour operations authorized by the ATMP would be conducted in a way that protects the Park's resources and values.

The number of air tours authorized by the ATMP is the same as the number of tours the operators currently conduct, based on the three-year average of tours reported from 2017-2019, with mitigations to protect Park resources and visitor experience. Thus, the agencies did not find that a study of economic impacts was warranted and do not expect the ATMP to impact visitor spending on air tours or economic activity in the local communities. *See* Environmental Screening Form, Appendix B.

Some commenters also expressed the position that air tours have less or different impacts than on-the-ground Park visitation. However, in analyzing the impacts of air tours on Park resources, the point was not to compare noise of air tours to vehicle traffic, but 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 natural and cultural resources and visitor experiences, and on tribal lands.

- **Wildlife**

As noted above, the agencies found that the ATMP would have no effect on three federally listed threatened or endangered species and the U.S. Fish and Wildlife Service concurred with their determination that the ATMP may affect but was not likely to adversely affect the California condor, the Mexican spotted owl, southwestern willow flycatcher, and the yellow-billed cuckoo. *See* Appendix E. Though the ATMP does not include the 2,600 ft. AGL avoidance for Mexican spotted owl recommended by the Raptor Guidelines, as demonstrated by a noise technical analysis, the maximum sound levels resulting from the authorized air tours

would not exceed the noise levels, frequency or duration thresholds recommended in the U.S. Fish and Wildlife Service's recovery plan for the Mexican spotted owl. While California condors currently do not nest or roost in the Park, past nesting is unknown and could have occurred. Condors may occasionally fly over the Park and there have been three known sightings in the Park. And the Park contains habitat that could support future nesting of condors. Thus, the ATMP includes avoidance measures recommended by the U.S. Fish and Wildlife Service in the event condors, or their nests, are observed in the Park in the future. The other two listed species are primarily found in lower altitude riparian areas over which the designated routes included in the ATMP are able to maintain a higher altitude AGL.

In addition to concerns about threatened or endangered species, commenters expressed concerns regarding the impacts of commercial air tours on the Park's wildlife. Compared to current conditions, the ATMP substantially consolidates the routes reportedly flown by operators (from sixteen routes to four routes), meaning that fewer areas of the Park will be overflown by air tours. The routes have been consolidated over lower elevation areas of the Park in order to provide for aircraft safety while at the same time including an adequate spatial buffer for resource protection and visitor experience. The routes were sited to avoid known peregrine falcon nesting sites and to minimize the other raptor habitat overflown by air tours. Compared to current conditions, the designated altitudes are also protective of wildlife. Currently, operators report flying helicopter tours as low as 300 ft. AGL. Under the ATMP, helicopter tours will generally maintain altitudes 1,500 ft. AGL to 2,600 ft. AGL, with some exceptions, and fixed wing aircraft will generally fly from 2,000 ft. AGL to 2,600 ft. AGL, with some exceptions. Though the minimum altitude is largely in place to protect bird species that can be found at higher altitudes or may be nesting, these altitude restrictions also reduce noise impacts as a result of commercial air tours on other species. The NPS found that given the limited number of flights per year (515) authorized by the ATMP, the limited duration of any potential noise exposure, designated routes, and other measures included in the ATMP, there will be limited adverse effects to wildlife. Further monitoring in addition to that already provided in the ATMP is not necessary. The ATMP also provides for adaptive management measures to be taken which could be used to address unanticipated effects to wildlife.

- **Wilderness**

Many commenters noted concerns related to the protection of the Park's wilderness, with some commenters taking the position that the Wilderness Act prohibits commercial air tours. There is no Congressionally designated wilderness in the Park, though approximately 58% of the Park is recommended for designation as wilderness and managed as designated wilderness by the NPS pursuant to the 2006 NPS Management Policies. Neither the 2006 NPS Management Policies nor the Wilderness Act prohibit overflights. No commercial air tours are permitted to land within the Park, including within recommended wilderness. Though NPATMA does not require the ATMP to include analysis of impacts to recommended wilderness, consistent with the requirements of NEPA, the agencies evaluated the impacts of the commercial air tours authorized by the ATMP on the qualities of wilderness character in the development of the ATMP, including impacts on the opportunity for solitude, impacts to the natural quality of wilderness, and impacts to other features of value which is documented in the Environmental Screening Form, Appendix B. Compared to current conditions, the ATMP designates routes and

consolidates them, meaning that less of the Park's recommended wilderness will be overflown by air tours, and the air tours themselves will spend less time flying over wilderness. The designated routes also avoid many campgrounds in recommended wilderness. And the ATMP includes other limitations that are protective of wilderness character, including an annual limit on the number of air tours permitted, designated altitudes, and a prohibition on hovering. Though the analysis in the Environmental Screening Form demonstrates that noise and visual intrusions from air tours may temporarily disrupt the opportunity for solitude in recommended wilderness, because of the limited number of flights, the limited duration of noise, the routes used, and the limited duration of potential exposure of air tours make it unlikely that the majority of visitors will encounter noise from air tours within recommended wilderness. If a visitor in recommended wilderness does hear noise from an air tour, it is unlikely, because of the limited number of tours, the routes, and operator capacity that the visitor will hear more than a few per day and the noise exposure will be for a very short duration of time. Accordingly, the NPS found that the ATMP is protective of wilderness character and is consistent with the Park's enabling legislation, the 2006 NPS Management Policies, and the requirements of NPATMA.

- **Interim Operating Authority**

Nine air tour operators hold IOA for a combined total of 3,131 commercial air tours per year over the Park or within ½ mile of its boundary. Of the operators that currently hold IOA, six flew tours between 2017 and 2019. Three operators with IOA for the Park did not report any commercial air tours from 2013 (when NPATMA's reporting requirement was implemented) through 2020. The ATMP provides that the FAA, through the appropriate FSDO, will update the OpSpecs of all operators with IOA for the Park to incorporate the terms of the ATMP within 90 days of the date on which the ATMP is fully signed (meaning 90 days from the date on which the ATMP and this ROD have been signed by all required signatories). The operators' OpSpecs currently allow them to overfly the Park in accordance with their IOA. Once the OpSpecs are modified, only those operators that hold allocations of operations under the ATMP will be permitted to conduct commercial air tours over the Park, or within ½ mile of its boundary, and then all commercial air tours conducted will be required to comply with the ATMP in all respects.

Some operators with IOA for the Park opposed the allocation of commercial air tours in the ATMP because they were either allocated fewer air tour operations than permitted under IOA, or not allocated any air tour operations under the ATMP. Specifically, the operators commented that IOA "has never been a use or lose arrangement" and that the elimination of their IOA through the implementation of the ATMP constitutes a taking for which there was no due process. However, IOA is not property. *See* Notice of Final Opinion on the Transferability of Interim Operating Authority Under the National Parks Air Tour Management Act, 72 Fed. Reg. 6,802 (Feb. 13, 2007). Nor was IOA intended to last indefinitely. It was intended by Congress to be a stopgap measure to preserve the status quo until an ATMP for the Park could be established. NPATMA specifically provides that IOA for the Park terminates a maximum of 180 days after the establishment of an ATMP for the Park, 54 U.S.C. § 40128(c)(2)(E), though the agencies determined that because the modification of OpSpecs was required to implement the ATMP, IOA would terminate when the OpSpecs were modified, and not at some later date. The issuance

of IOA was based on operator reported tours conducted either in the year prior to NPATMA's enactment in 2000, or the three-year average of flights conducted in the three years prior to NPATMA's enactment, whichever was higher. 49 U.S.C. § 40128(c)(2)(A). As noted above, IOA is not based on the most current or reliable operational data and is not verifiable by the agencies. The ATMP allocations are based on the most current operator reported data based on operator reported information.

- **Public participation**

Commenters, including operators and the State of Utah, criticized the development of the ATMP, contending that the ATMP should have been developed in consultation with the operators or that the public outreach conducted by the agencies was deficient. However, the agencies followed the public participation requirements of NPATMA that apply to the establishment of an ATMP. The agencies released a draft ATMP for public notice and comment and held a virtual public meeting open to stakeholders and the general public alike. Moreover, where operator input was necessary to the development of an ATMP, for example in identifying current flight routes and altitudes, the FAA reached out to operators to give them an opportunity to provide this information. The planning process relied heavily on operator reported information submitted in NPATMA's required reporting process and provided by operators voluntarily through this outreach. It further appears that the commenters may be confusing the ATMP process as set forth by NPATMA with the voluntary agreement process that has already taken place with respect to seven operators with IOA for Glen Canyon National Recreation Area and Rainbow Bridge National Monument.

- **Providing access for individuals with disabilities**

Some commenters requested expanded air tours in order to accommodate or expand access to individuals with disabilities, older persons, or those with mobility issues. However, air tours are not the only way for a person with a disability or mobility issues to experience Bryce Canyon National Park. The NPS works to ensure that people with disabilities can participate in the same programs, activities, and opportunities available to those without disabilities in the most integrated setting possible. The NPS has a full team dedicated to breaking physical and programmatic barriers to make parks more inclusive for people with sensory, physical, and cognitive disabilities including a full accessibility program with accessibility coordinators in all 12 NPS regions. The accessibility coordinators ensure that NPS staff have the tools and training necessary to provide accessible and inclusive outdoor recreation and interpretation opportunities for park visitors. Stunning vistas are available from accessible viewpoints along the Park's main public roadway. Specific information regarding accessibility at Bryce Canyon National Park is available at:

https://www.nps.gov/brca/planyourvisit/accessibility.htm

- **Voluntary Agreement**

The State of Utah commented that the agencies should have pursued a voluntary agreement for the Park instead of moving forward with the ATMP. However, as explained in the Compliance Plan, in order to bring all eligible parks into compliance with NPATMA in the time

frame contemplated by the Court, the agencies determined that it was no longer feasible to move forward with their previously stated preference to attempt first to reach voluntary agreements with operators before transitioning to the preparation of an ATMP. As compared to a voluntary agreement process, the agencies have more control over an ATMP process. Another factor the agencies consider in deciding whether pursuing a voluntary agreement is feasible, is the number of operators with IOA for the Park. The higher the number of operators, the more complex the agreement is to negotiate and the longer it takes to complete. Moreover, any one operator could thwart the agencies' efforts by refusing to participate in the process, declining to sign a voluntary agreement, or signing a voluntary agreement then withdrawing. Such an operator could continue flying over the Park consistent with IOA, meaning that the Park would again be out of compliance with NPATMA without any of the protective provisions for resources and visitor experience included in the ATMP.

The fact that there are nine operators with IOA for the Park indicates that there would be a somewhat high level of complexity in developing a voluntary agreement for the Park and a greater risk that one or more operators would not sign an agreement. Two of the operators with IOA for the Park also hold IOA for Glen Canyon National Recreation Area and/or Rainbow Bridge National Monument and previously declined to sign a voluntary agreement for those parks, which the agencies spent 4.5 years and considerable effort to implement. Despite the agencies' substantial past efforts, Glen Canyon National Recreation Area and Rainbow Bridge National Monument are not in compliance with NPATMA and are included in the current planning process which is being conducted under Court supervision pursuant to the Compliance Plan. Establishing and implementing an ATMP for the Park will bring the Park into compliance with NPATMA and provide certainty that the Park will remain so and that the NPS will achieve its management objectives.

- **NEPA compliance**

Commenters in general noted concerns that an environmental analysis was not released for public review and comment and either advocated for the consideration of various alternatives or criticized that consideration and analysis of alternatives was required under NEPA. Consistent with the Council on Environmental Quality Regulations for Implementing the Procedural Provisions of NEPA, agencies may, but are not required to, develop a range of alternatives to the proposed action when using a categorical exclusion to comply with NEPA. *See* 40 CFR §§ 1501.4, 1502.14. Actions covered by categorical exclusions by definition do not have significant impacts and therefore are not subject to the requirement to develop alternatives to reduce significant impacts. In this case, the agencies evaluated the potential impacts of the proposed action (ATMP) when compared to current conditions, and determined that the proposed ATMP would not result in significant impacts to Park resources and that no significant impacts from air tours have been observed at the Park in the past. The agencies considered actions to reduce impacts to Park resources and included those in the ATMP, e.g., altitude and route restrictions. Public review of categorical exclusions is not required. Public scoping is also not required where a categorical exclusion is applied. Though NPATMA provides that both agencies must "sign the environmental decision document required by section 102 of [NEPA] which may include a finding of no significant impact, an environmental assessment, or an environmental impact

statement and the record of decision" the agencies do not interpret NPATMA to preclude the application of a categorical exclusion for an ATMP. *See* 49 U.S.C. § 40128(b)(2).

- **Tribal Consultation**

The tribal consultation conducted by the agencies prior to the signing of this ROD is described above in the section that discusses the agencies' compliance with the National Historic Preservation Act. The agencies remain committed to engaging in tribal consultation after the ATMP is implemented to address ongoing tribal concerns as needed. Further, the ATMP itself includes mechanisms that could be used to address tribal concerns post-implementation. Tribes may be invited to the annual meeting provided for in Section 3.7A of the ATMP to discuss their concerns directly with both the operators and the agencies. Section 3.5 of the ATMP authorizes the NPS to set temporary no-fly periods for special events, including tribal events, ceremonies, or other practices, with advance notice to the operators. Section 8.0 of the ATMP provides for adaptive management measures to be taken as a result of tribal input or information received through tribal consultation, without a formal plan amendment if the impacts of any changes are within the impacts already analyzed by the agencies in their compliance documentation for the ATMP. If tribal concerns cannot be addressed through adaptive management, the agencies may consider amending the ATMP consistent with the process outlined in Section 9.0 of the ATMP. In addition, the aircraft monitoring technology that operators are required to install and use (Section 4.0), coupled with the ATMP's reporting requirements (Section 3.6), will not only aid the agencies in ensuring compliance with the terms and conditions of the ATMP, but will also aid in determining whether overflights that are concerning to tribes are commercial air tours, or some other type of overflight not subject to the requirements of NPATMA.

- **Compliance with NPS-specific laws and policies**

In managing National Park System units, the NPS is bound by the Organic Act of 1916, 54 U.S.C. §§ 100101 et *seq.*, which requires the NPS to manage parks to "conserve the scenery, natural and historic objects, and wild life in the System units and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations." In addition, NPS management of System units is guided by the 2006 NPS Management Policies and other policy and guidance documents that do not apply to the FAA. The Statement of Compliance, Appendix G, details the NPS's compliance with its Organic Act, as well as NPS policy documents.

DECISION

The undersigned have carefully considered the agencies' common and respective goals in relation to the issuance of an Air Tour Management Plan for Bryce Canyon National Park including the environmental impacts of their decision, the mitigation measures available to preserve Park resources, visitor experience and tribal lands, and aviation safety. Based on the record of this proposed Federal action, and under the authority delegated to the undersigned by the Administrator of the FAA and the Director of the NPS, the undersigned find that the issuance of the Air Tour Management Plan for Bryce Canyon National Park is reasonably supported. The

undersigned hereby direct that action be taken, together with the necessary related and collateral actions, to carry out the agency decisions as detailed in this ROD including the issuance of an Air Tour Management Plan for Bryce Canyon National Park and issuance or modification of applicable operations specifications.

Approved by:

KATHARINE HAMMOND
Digitally signed by KATHARINE HAMMOND
Date: 2022.10.12 11:49:06 -06'00'

Kate Hammond
Acting Regional Director
Interior Regions 6, 7, & 8
National Park Service

GRADY B STONE
Digitally signed by GRADY B STONE
Date: 2022.10.07 11:40:49 -07'00'

Grady Stone
Regional Administrator
Northwest Mountain Region
Federal Aviation Administration

RAYMOND SAUVAJOT
Digitally signed by RAYMOND SAUVAJOT
Date: 2022.10.12 10:40:20 -04'00'

Raymond M. Sauvajot
Associate Director
Natural Resource Stewardship and Science Directorate
National Park Service

KEVIN W. WELSH
Digitally signed by KEVIN W. WELSH
Date: 2022.10.07 12:56:48 -04'00'

Kevin Welsh
Executive Director
Office of Environment & Energy
Federal Aviation Administration

RIGHT OF APPEAL

This Record of Decision constitutes a final order of the FAA Administrator and is subject to exclusive judicial review under 49 U.S.C. § 46110 by the U.S. Circuit Court of Appeals for the District of Columbia or the U.S. Circuit Court of Appeals for the circuit in which the person contesting the decision resides or has its principal place of business. Any party having substantial interest in this order may apply for review of the decision by filing a petition for review in the appropriate U.S. Court of Appeals no later than 60 days after the order is issued in accordance with the provisions of 49 U.S.C. § 46110.

Appendices

A. Air Tour Management Plan for Bryce Canyon National Park

B. Environmental Screening Form

C. Categorical Exclusion Documentation Form

D. FAA Categorical Exclusion Adoption

E. Endangered Species Act: Section 7 Compliance Documentation

F. National Historic Preservation Act: Section 106 Compliance Documentation

G. NPS Statement of Compliance

H. Summary of Public Comments and Comment Analysis on the Draft Air Tour Management Plan for Bryce Canyon National Park

APPENDIX A

Final Air Tour Management Plan for Bryce Canyon National Park

FINAL AIR TOUR
MANAGEMENT PLAN
BRYCE CANYON NATIONAL PARK

SUMMARY

This Air Tour Management Plan (ATMP) provides the terms and conditions for commercial air tours conducted over Bryce Canyon National Park (Park) pursuant to the National Parks Air Tour Management Act (Act) of 2000.

1.0 INTRODUCTION

The Act requires that commercial air tour operators conducting or intending to conduct commercial air tours over a unit of the National Park System apply to the Federal Aviation Administration (FAA) for authority before engaging in that activity. The Act further requires that the FAA in cooperation with the National Park Service (NPS) establish an ATMP for each National Park System unit for which one or more applications has been submitted, unless that unit is exempt from this requirement.[1]

The objective of this ATMP is to develop acceptable and effective measures to mitigate or prevent the significant adverse impacts, if any, of commercial air tours on natural and cultural resources, visitor experiences and tribal lands.

2.0 APPLICABILITY

This ATMP applies to all commercial air tours over the Park and commercial air tours within ½ mile outside the boundary of the Park, as depicted in Figure 1 below. A commercial air tour subject to this 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 1/2 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).

See 14 CFR § 136.33(d).

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[1] The Act provides an exemption to the ATMP requirement for parks with 50 or fewer commercial air tour operations each year unless the exemption is withdrawn by the Director of the NPS. *See* 49 U.S.C. § 40128(a)(5). As an alternative to an ATMP, the agencies also have the option to execute voluntary agreements with all operators operating at any of the parks.

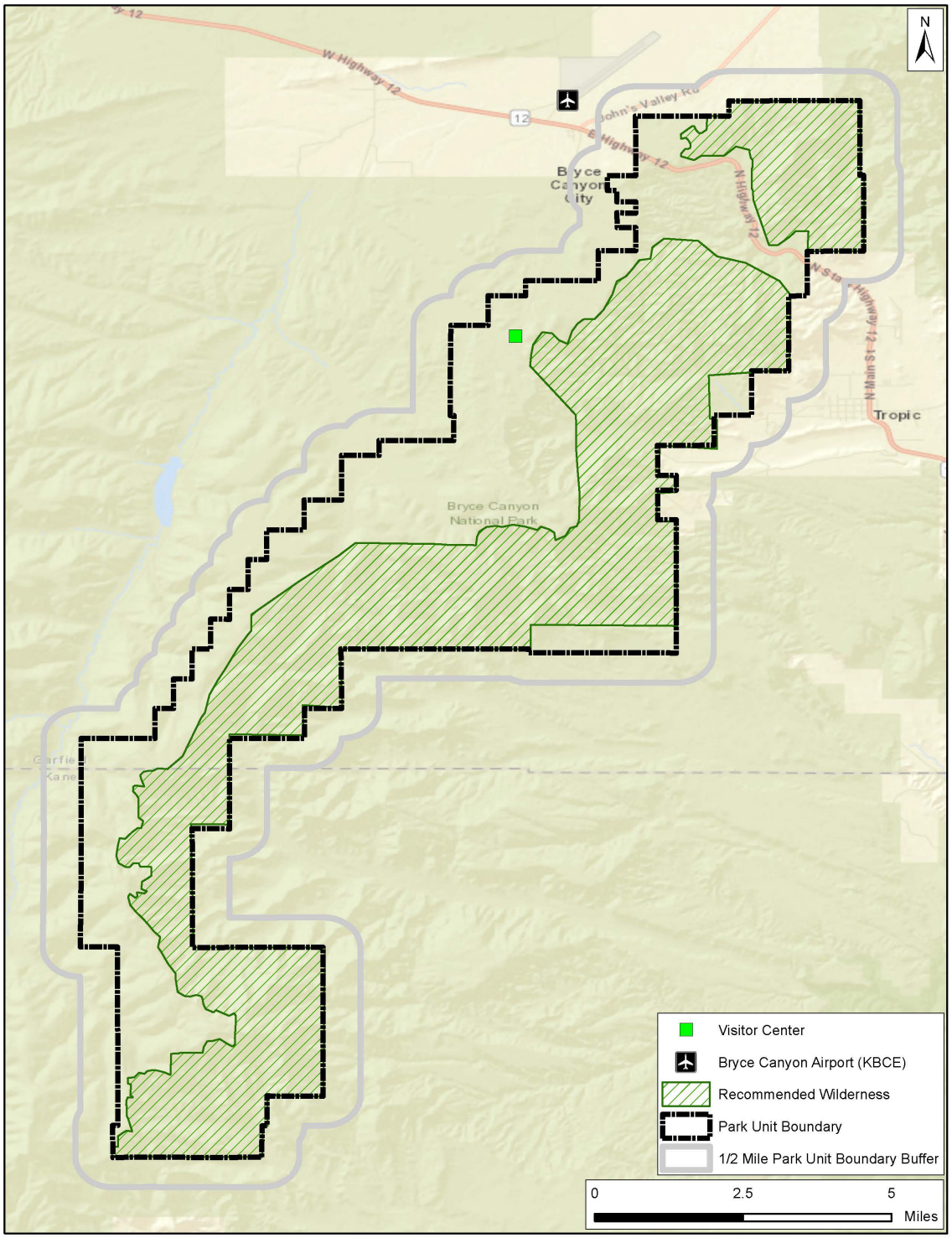


Figure 1. Map of area subject to the ATMP for Bryce Canyon National Park

2.1 Park Overview

The Park preserves 35,835 acres in south-central Utah and contains the largest concentration of hoodoos (irregular columns of rock) found anywhere on Earth. Over two million visitors come to experience the Park each year, most between March and

early October. The Park contains several popular viewpoints, including, but not limited to: Farview, Bryce, Inspiration, Sunset, Sunrise, and Yovimpa/Rainbow Points that offer a variety of recreational experiences including hiking trails, ranger-led programs, and access to backcountry/wilderness camping. The Park also offers two developed campgrounds, lodging at Bryce Canyon Lodge and other associated buildings, and a five mile multi-use path within the Park that connects to a 13 mile path outside the Park.

Approximately 58% of the Park (20,810 acres) is recommended wilderness, which is managed by the NPS as if it were designated wilderness pursuant to the 2006 NPS Management Policies, to preserve its wilderness character. Wilderness character is the combination of biophysical, experiential, and symbolic ideals that distinguishes wilderness from other lands. The five qualities of wilderness character are (1) untrammeled, (2) undeveloped, (3) natural, (4) offers outstanding opportunities for solitude or primitive and unconfined recreation, and (5) other features of scientific, educational, scenic, or historical value. Outside of maintained trails, campsites, and signing, the recommended wilderness in Bryce Canyon National Park is undeveloped, natural and is relatively free from human-caused sounds where natural sounds prevail providing opportunities to experience solitude and unconfined recreation.

The Park sits on the high Paunsagaunt Plateau with an elevation range from 6,600 to 9,100 feet that supports 12 different vegetation associations found within the broader sub-alpine spruce/fir forest, ponderosa pine forests and associated meadows, pinyon/juniper forest, and shrub-steppe habitats. This vegetation diversity supports a variety of wildlife that is typically not found within the stark desert landscape surrounding the Park. More than 100 species of birds, dozens of mammals, and more than 1,000 plant species exist in the Park. Wildlife commonly seen include: Utah prairie dog, deer, elk, pronghorn, occasional sightings of bear and mountain lion, and a variety of migratory birds.

The area has historically been utilized by Native Americans for hunting and gathering activities, and over 20 Native American tribes traditionally associate with the landscapes within the Park. Though the Park contains traditional cultural properties important to at least one tribe, there are no tribal lands as defined by the Act within or abutting the Park.

In addition to traditional cultural properties, the Park contains 17 properties listed in or determined eligible for listing in the National Register of Historic Places, including most of the Bryce Canyon trail system, cabins that are now used by employees and visitors, and many structures built by the Civilian Conservation Corps. The Bryce Canyon Lodge and Deluxe Cabins have been designated as a National Historic Landmark.

The purpose of the Park is to protect and conserve resources integral to a landscape of unusual scenic beauty exemplified by highly colored and fantastically eroded geological features, including rock fins and spires, for the benefit and enjoyment of the people. Preservation of the natural soundscapes in the Park is a key part of the Park's mission. Natural quiet is important for visitors seeking opportunities for solitude.

The following management objectives from existing Park planning documents relate to the development of this ATMP:

- Protect individuals and populations of wildlife species known to be sensitive to the effects of aircraft overflights, including several species of diurnal raptors (e.g., golden eagle, peregrine falcon) and the federally listed Mexican spotted owl.
- In areas managed as wilderness, protect remote experiences for visitors and opportunities to experience quiet and solitude in a remote natural setting.
- Maintain efforts to keep informed of and mitigate threats to Park air resources, solitude, and scenic resources.

3.0 CONDITIONS FOR THE MANAGEMENT OF COMMERCIAL AIR TOUR OPERATIONS

3.1 Commercial Air Tours Authorized

Under this ATMP, 515 commercial air tours are authorized per year. Appendix A identifies the operators authorized to conduct commercial air tours and annual flight allocations.

3.2 Commercial Air Tour Routes and Altitudes

Commercial air tours authorized under this ATMP shall be conducted on the designated air tour routes and altitudes in Figure 2 below.[2] 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 mean sea level (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. Based on aircraft type, aircraft will be separated by altitude to de-conflict the airspace. When flying over the Park or outside the Park but within ½ mile of its boundary, commercial air tours conducted via helicopter shall maintain an altitude of 9,250 feet (ft.) MSL and tours conducted via fixed-wing aircraft shall maintain an altitude of 9,750 ft. MSL. Due to the Park's uneven terrain, flying the designated MSL altitudes means that helicopters will generally maintain altitudes from 1,500 ft. to 2,600 ft. AGL, though for a few short segments altitudes will be from 1,000 ft. to 1,500 ft. AGL. Flying the designated MSL altitudes means that fixed wing aircraft will generally maintain altitudes from 2,000 ft. to 2,600 ft. AGL, with a short segment in the southern area of the Park where the aircraft will be flying altitudes from 1,500 ft. to 2,000 ft. AGL. Except in an emergency or to avoid unsafe conditions, or unless otherwise authorized for a specified purpose, operators may not deviate from these designated routes and altitudes.

[2] Appendix B contains an enlarged Figure 2.

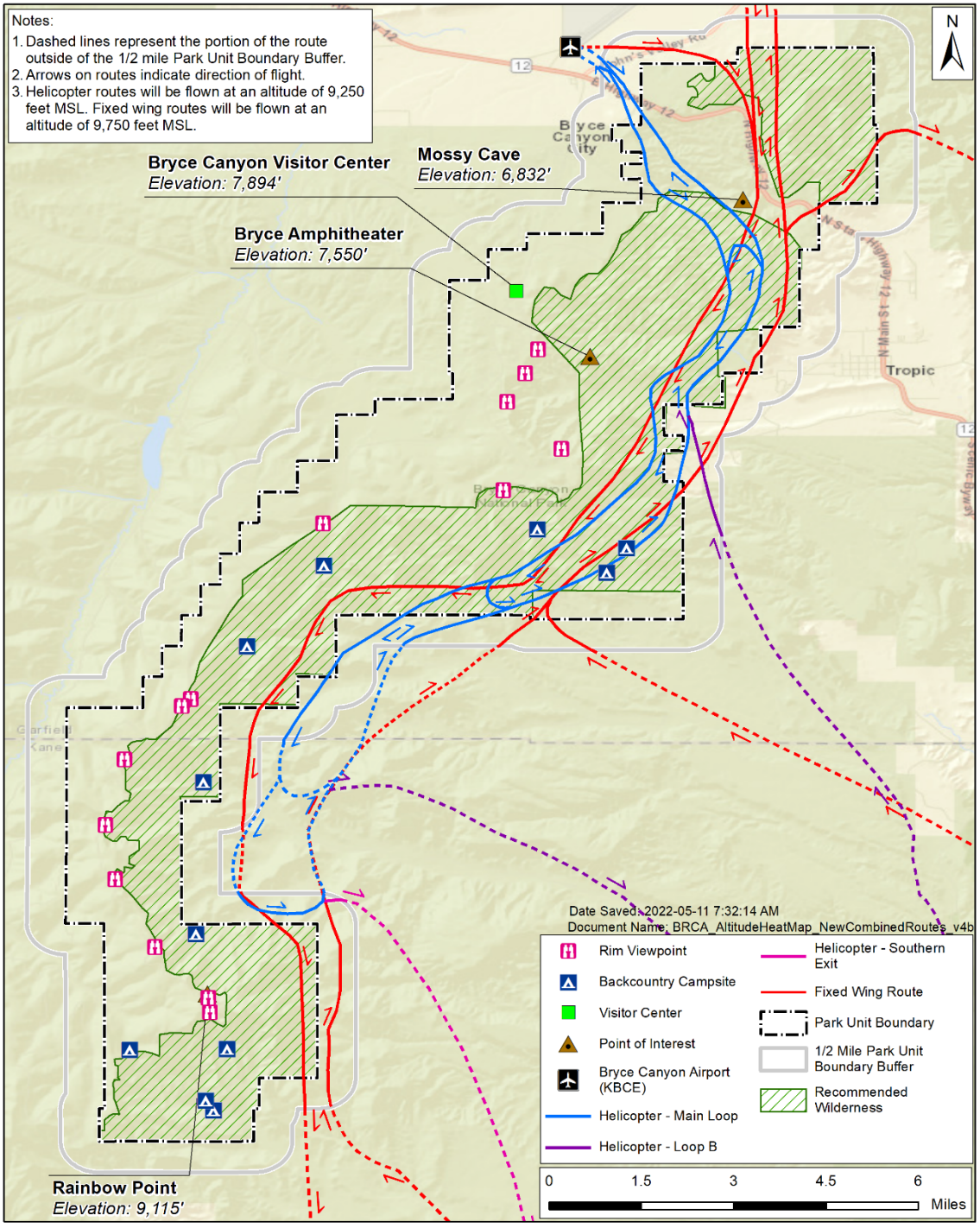


Figure 2. Commercial air tour routes over Bryce Canyon National Park

3.3 Aircraft Type

The aircraft types authorized to be used for commercial air tours are identified in Appendix A. Any new or replacement aircraft must not exceed the noise level produced by the aircraft being replaced. In addition to any other applicable notification

requirements, operators will notify the FAA and the NPS in writing of any prospective new or replacement aircraft and obtain concurrence before initiating air tours with the new or replacement aircraft.

3.4 Day/Time

Except as provided in Section 3.8 "Quiet Technology Incentives," air tours may operate one hour after sunrise until three hours before sunset, as defined by the National Oceanic and Atmospheric Administration (NOAA).[3] Air tours may operate any day of the year, except under circumstances provided in Section 3.5 "Restrictions for Particular Events."

3.5 Restrictions for Particular Events

The NPS can establish temporary no-fly periods that apply to air tours for special events or planned Park management. Absent exigent circumstances or emergency operations, the NPS will provide a minimum of 15 days written notice to operators for any restrictions that temporarily restrict certain areas or certain times of day, or 60 days written notice to operators for any full-day restrictions in advance of the no-fly period. Events may include tribal ceremonies or other similar events.

3.6 Required Reporting

Operators will submit to the FAA and the NPS semi-annual reports regarding the number of commercial air tours over the Park or within ½ mile of its boundary that are conducted by the operator. These reports will also include the flight monitoring data required under Section 4.1 of this ATMP and such other information as the FAA and the NPS may request. Reports are due to both the FAA and the NPS no later than 30 days after the close of each reporting period. Reporting periods are January 1 through June 30 and July 1 through December 31. Operators shall adhere to the requirements of any reporting template provided by the agencies.

3.7 Additional Requirements

3.7A Operator Training and Education: When made available by Park staff, operators/pilots will take at least one training course per year conducted by NPS staff. The training will include Park information that operators can use to further their own understanding of Park priorities and management objectives as well as enhance the interpretive narrative for air tour clients and increase understanding of parks by air tour clients.

3.7B Annual Meeting: At the request of either of the agencies, the Park staff, the local FAA Flight Standards District Office (FSDO), and all operators will meet once per year to discuss the implementation of this ATMP and any amendments

[3] Sunrise and sunset data are available from the NOAA Solar Calculator, https://www.esrl.noaa.gov/gmd/grad/solcalc/

or other changes to the ATMP. This annual meeting could be conducted in conjunction with any required annual training.

3.7C In-Flight Communication: For situational awareness when conducting tours of the Park, the operators will utilize Common Traffic Advisory Frequency 122.8 and report when they enter and depart a route. The pilot should identify their company, aircraft, and route to make any other aircraft in the vicinity aware of their position.

3.7D Wildlife Avoidance: California condors currently do not nest or roost in the Park. However, condors may occasionally fly over the Park and there have been three sightings of condors in the Park, two in 1999 and one in 2009. Because California condor habitat exists in the Park, protective measures are necessary should condors be identified and occupying habitat in the Park. This ATMP includes the following protective measures for California condors:

- Air tour operators are required to report visual identification of California condors to the NPS, with an optional notification to U.S. Fish and Wildlife Service (USFWS), within 24 hours of initial sighting.

- Once NPS becomes aware of the presence of California condor nests, notification and coordination will be conducted between the Park staff, the NPS Intermountain Region Wildlife Biologist and Threatened and Endangered Species Coordinator, the local USFWS field office, the air tour operators, and the FSDO, as necessary, to determine the best avoidance measures for operators to take. Generally, operators will be required to avoid identified nesting areas, feeding areas, or other known areas of congregation by 1 mile vertically or laterally as long as the NPS determines that other natural or cultural resources are not impacted or affected and such avoidance measures would not result in operating conditions deemed unsafe by the FAA.

- The agencies may temporarily restrict use of air tour routes over nesting areas, feeding areas, or other known areas of congregation while: 1) working with operators to modify air tour routes (i.e., 1 mile shifts away from sensitive condor areas); and 2) assessing the natural, cultural, and safety impacts of any changes.

- Avoidance measures will remain in effect until the NPS determines that condors are no longer present and the NPS notifies the operators in writing that avoidance measures are no longer necessary.

3.7E Non-transferability of Allocations: Annual operations under this ATMP are non-transferable. An allocation of annual operations may be assumed by a successor purchaser that acquires an entity holding allocations under this ATMP in its entirety. In such case, the prospective purchaser shall notify the FAA and NPS of its intention to purchase the operator at the earliest possible opportunity to avoid any potential interruption in the authority to conduct commercial air tours

under this ATMP. This notification must include a certification that the prospective purchaser has read and will comply with the terms and conditions in the ATMP. The FAA will consult with NPS before issuing new or modified operations specifications (OpSpecs) or taking other formal steps to memorialize the change in ownership.

3.7F Hovering: Aircraft hovering in place is prohibited.

3.8 Quiet Technology Incentives

This ATMP incentivizes the use of quiet technology aircraft by commercial air tour operators conducting commercial air tours over the Park. Operators that have converted to quiet technology aircraft, or are considering converting to quiet technology aircraft, may request to be allowed to extend air tours an additional two hours (i.e., up to one hour before sunset) on all days that flights are authorized. Because aviation technology continues to evolve and advance and the FAA updates its noise certification standards periodically, the aircraft eligible for this incentive will be analyzed on a case-by-case basis at the time of the operator's request to be considered for this incentive. The NPS will periodically monitor Park conditions and coordinate with the FAA to assess the effectiveness of this incentive. If implementation of this incentive results in unanticipated effects on Park resources or visitor experience, or tribal use of the Park, further agency action may be required to ensure the protection of Park resources, visitor experience, or tribal use of the Park.

4.0 COMPLIANCE

On the effective date of this ATMP, all commercial air tours over the Park or within ½ mile of the Park boundary must comply with the terms of this ATMP in all respects, except as provided in Section 4.1 below. The NPS and the FAA are both responsible for the monitoring and oversight of the ATMP. If the NPS identifies instances of non-compliance, the NPS will report such findings to the FAA's FSDO with geographic oversight of the Park. The public may also report allegations of non-compliance with this ATMP to the FSDO. The FSDO will investigate and respond to all written reports consistent with applicable FAA guidance.

Investigative determination of non-compliance may result in partial or total loss of authorization to conduct commercial air tours authorized by this ATMP. Any violation of OpSpecs shall be treated in accordance with FAA Order 2150.3, *FAA Compliance and Enforcement Program*.

4.1 Aircraft Monitoring Technology

Operators are required to equip all aircraft used for air tours with flight monitoring technology, to use flight monitoring technology during all air tours under this ATMP, and to report flight monitoring data as an attachment to the operator's semi-annual reports. The required flight monitoring data shall be provided in a file format approved by the agencies, such as a .csv or .xlsx format. Data must include the following information for each row of data (i.e., each ping):

- Unique flight identifier
- Latitude
- Longitude
- Geometric altitude
- Tail number
- Date
- Time stamp
- Operator and Doing Business As (DBA), if different
- Aircraft type
- Aircraft model

The ping rate should be set to a maximum of 15 seconds. Operators already using aircraft equipped with flight monitoring technology shall ensure it meets the performance standards listed above or acquire and install acceptable flight monitoring technology within 180 days of the effective date of this ATMP. For aircraft not already equipped with flight monitoring technology, within 180 days of the effective date of this ATMP, operators shall equip those aircraft with suitable flight monitoring technology.

5.0 JUSTIFICATION FOR MEASURES TAKEN

The provisions and conditions in this ATMP are designed to protect Park resources and visitor experience from the effects of commercial air tours, and support NPS management objectives for the Park.

Under the Act, the FAA was required to grant Interim Operating Authority (IOA) for commercial air tours over the Park or outside the Park but within ½ mile of the Park's boundary. IOA does not provide any operating conditions (e.g., routes, altitudes, time of day, etc.) for air tours other than an annual limit.

The total number of air tours authorized under this ATMP is consistent with the existing air tours reported over the Park. The annual flight limits in this ATMP are intended to protect visitor experience, tribal use, cultural and natural resources, and wilderness character throughout the Park by limiting the number of potential disturbances caused by commercial air tours.

The condition that commercial air tours are conducted on designated air tour routes and altitudes results in compliance with the recovery plan for the Mexican spotted owl.[4] Because raptor habitat exists throughout the Park and the location of nests may change over time, the designated altitudes provide an appropriate spatial buffer directly under the route for species of concern. It will further avoid or minimize potential effects on other avian species and wildlife by reducing the noise intensity of air tour events in the areas nearest the routes. Additionally, this provision improves visitor experiences on the ground, including opportunities for solitude and remoteness from sights and sounds in

[4] U.S. Fish and Wildlife Service (2012). Final Recovery Plan for the Mexican Spotted Owl (Strix occidentalis lucida), First Revision. U.S. Fish and Wildlife Service. Albuquerque, New Mexico, USA. 413 pp.

recommended wilderness by reducing the intensity of air tour noise at ground level. Given the minimum altitudes identified above for raptor protection, the required routes and altitudes are also safety measures necessary to de-conflict the airspace. Neither aircraft type will need to fly above 10,000 ft. MSL at any point along the authorized routes.

Sunrise and sunset are important times of the day for wildlife and visitor use and experience. Biologically important behaviors for many species occur during this time, such as prime foraging, mating, and communication. The time restrictions have been included in this ATMP to protect these Park resources. The hours of operation provide quiet periods of the day during which visitors can enjoy natural sounds and preserve opportunities for solitude in recommended wilderness areas.

Restrictions for particular events are intended to prevent noise interruptions of Park events or tribal practices.

Operator training and education will provide opportunities to enhance the interpretive narrative for air tour clients and increase understanding of parks by air tour companies and their clients. The annual meeting will facilitate effective implementation of the ATMP because it will be used to review and discuss implementation of this ATMP between Park staff, local FAA FSDO, and all operators. It will thus serve to ensure that air tour operators remain informed regarding the terms and conditions of this ATMP, including any adaptive management measures or amendments, and are made aware of new or reoccurring concerns regarding Park resources.

The condition that commercial air tours may not hover in place is intended to minimize disturbances to noise sensitive wildlife, visitor experience, and traditional activities.

The requirements to equip aircraft with flight monitoring technology, use flight monitoring technology during all air tours under this ATMP, and to report flight monitoring data as an attachment to the operator's semi-annual reports are necessary to enable the agencies to appropriately monitor operations and ensure compliance with this ATMP.

6.0 NEW ENTRANTS

For the purposes of this ATMP, a "new entrant" is a commercial air tour operator that has not been granted any operations under this ATMP or that no longer holds operations under this ATMP at the time of the application. New entrants must apply for and be granted operating authority before conducting commercial air tours over the lands and waters covered by this ATMP.

The FAA and the NPS will publish additional information for interested parties about the form and required content of a new entrant application. The FAA and the NPS will jointly consider new entrant applications and determine whether to approve such applications. Review of applications submitted prior to the effective date of this ATMP will commence within six months of the effective date. Applications submitted after that

time will be considered no less frequently than every three years from the effective date of this ATMP.

If any new entrant is granted operating authority under this ATMP, the FAA will issue OpSpecs (and, if necessary, will revise OpSpecs of operators whose allocation of operating authority changes due to accommodation of a new entrant) within 90 days of the publication of an amended ATMP or of the effective date of ATMP changes implemented through the adaptive management process.

7.0 COMPETITIVE BIDDING

When appropriate, the FAA and the NPS will conduct a competitive bidding process pursuant to the criteria set forth in 49 U.S.C. § 40128(a)(2)(B) and other criteria developed by the agencies. Competitive bidding may be appropriate to address: a new entrant application; a request by an existing operator for additional operating authority; consideration by the agencies of Park-specific resources, impacts, or safety concerns; or for other reasons.

The agencies will request information necessary for them to undertake the competitive bidding process from operators. Operators who do not provide information in a timely manner may be disqualified from further consideration in the competitive bidding process.

Competitive bidding may necessitate an amendment to this ATMP, additional environmental review, and/or the issuance of new or revised OpSpecs. If updated OpSpecs are required, they will be issued within 90 days.

8.0 ADAPTIVE MANAGEMENT

Adaptive management allows for minor modifications to this ATMP without a formal ATMP amendment if the impacts of such changes are within the impacts already analyzed by the agencies under the National Environmental Policy Act, the National Historic Preservation Act, and the Endangered Species Act. Adjustments to the number of commercial air tours allocated to individual operators as a result of the competitive bidding process and minor changes to routes, altitudes, or other operating parameters are examples of adaptive management measures that may not require a formal ATMP Amendment. Such modifications may be made if: 1) the NPS determines that they are necessary to avoid adverse impacts to Park resources, values, or visitor experiences; 2) the FAA determines the need for such changes due to safety concerns; or 3) the agencies determine that appropriate, minor changes to this ATMP are necessary to address new information (including information received through tribal input and/or consultation) or changed circumstances.

9.0 AMENDMENT

This ATMP may be amended at any time: if the NPS, by notification to the FAA and the operator(s), determines that the ATMP is not adequately protecting Park resources and/or

visitor enjoyment; if the FAA, by notification to the NPS and the operator(s), determines that the ATMP is adversely affecting aviation safety and/or the national aviation system; or, if the agencies determine that appropriate changes to this ATMP are necessary to address new information or changed circumstances that cannot be addressed through adaptive management.

The FAA and the NPS will jointly consider requests to amend this ATMP from interested parties. Requests must be made in writing and submitted to both the FAA and the NPS. Requests must also include justification that includes information regarding how the requested amendment: is consistent with the objectives of this ATMP with respect to protecting Park resources, tribal lands, or visitor use and enjoyment; and would not adversely affect aviation safety or the national aviation system. The FAA and the NPS will publish additional information for interested parties about the form and manner for submitting a request.

Increases to the total number of annual air tours authorized under this ATMP resulting from accommodation of a new entrant application or a request by an existing operator will require an amendment to this ATMP and additional environmental review.

Notice of all Amendments to this ATMP will be published in the Federal Register for notice and comment.

10.0 CONFORMANCE OF OPERATIONS SPECIFICATIONS

New OpSpecs that incorporate the operating parameters set forth in this ATMP will be issued within 90 days of the date of signature on this ATMP.

11.0 EFFECTIVE DATE

This ATMP is effective on the date new OpSpecs incorporating its operating parameters are issued.

James F. Ireland — Date
Superintendent
Bryce Canyon National Park
National Park Service

Grady Stone — Date
Regional Administrator
Northwest Mountain Region
Federal Aviation Administration

Kate Hammond — Date
Acting Regional Director
Interior Regions 6, 7, & 8
National Park Service

Kevin Welsh — Date
Executive Director
Office of Environment & Energy
Federal Aviation Administration

Raymond M. Sauvajot — Date
Associate Director
Natural Resource Stewardship
and Science Directorate
National Park Service

APPENDIX A

1.0 COMMERCIAL AIR TOUR ALLOCATIONS

Table 1 provides allocations of the annual operations along with authorized aircraft type by operator. IOA previously issued for the Park terminates on the effective date of this ATMP.

Table 1. Air Tour Operations and Aircraft Type by Operator

Air Tour Operator	Annual Operations	Daily Operations	Aircraft Type
Aero-Copters of Arizona, Inc. (Helivision, Canyon Airlines, Bryce Canyon Helicopters, Bryce Canyon Airlines)	462	No set limit	BELL-206-B CE-206-206
Adams, Bruce M. (Southwest Safaris)	1	1	CE-182-R CE-207-T207A
American Aviation, Inc. (Frog Air, American Air Charter)	3	No set limit	CE-172-N CE-207-207 CE-207-T207A
Grand Canyon Airlines, Inc. (Grand Canyon Airlines, Scenic Airlines, Grand Canyon Scenic Airlines)	38	No set limit	CE-208-B DHC-6-300
Maverick Helicopters, Inc.	1	1	EC-130-B4 EC-130-T2
Papillon Airways, Inc. (Papillon Grand Canyon Helicopters, Grand Canyon Helicopters)	10	No set limit	AS-350-B3 BHT-206-L1 BHT-206-L3 EC-130-B4 EC-130-T2 MDHS-MD-900

2.0 DAY/TIME RESTRICTIONS

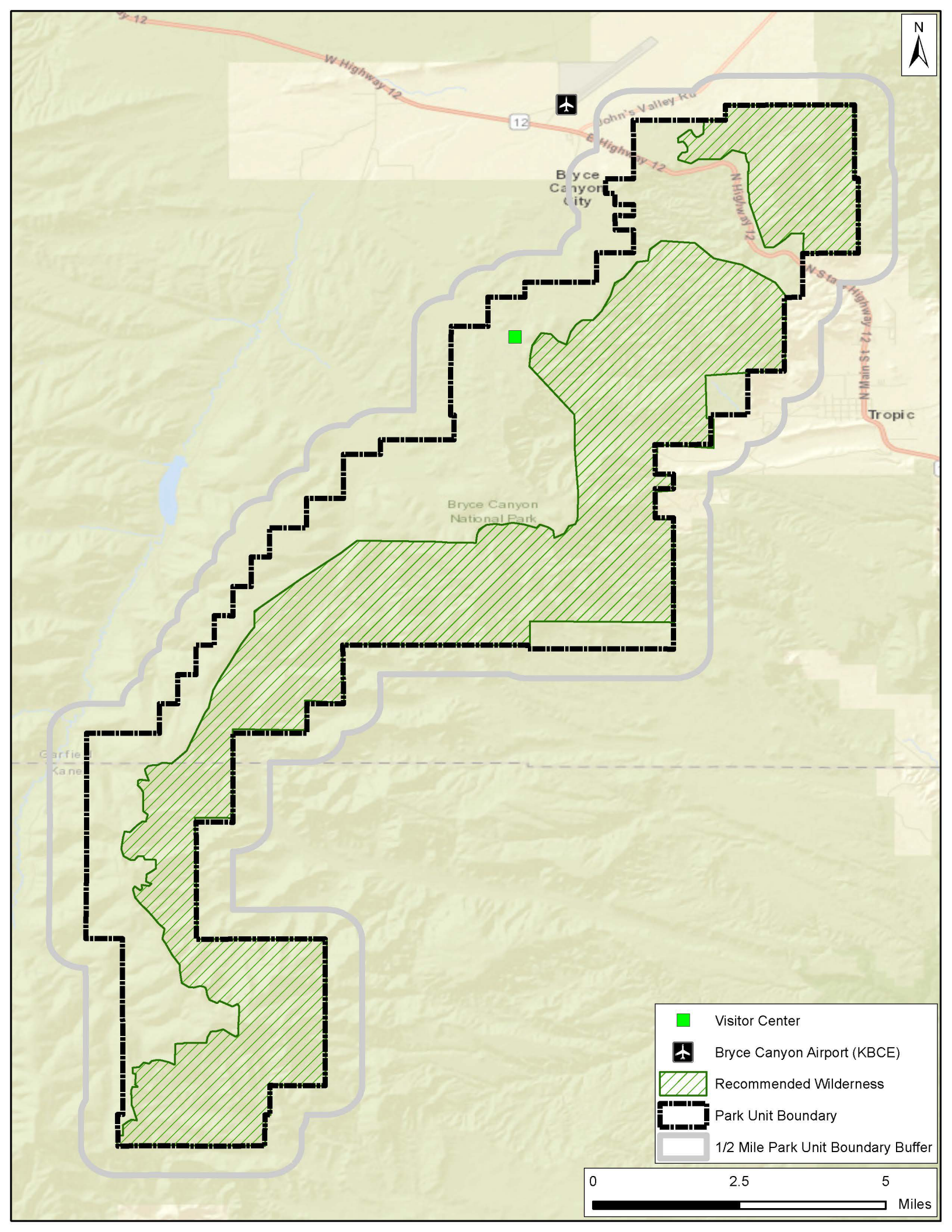
Table 2 lists the time-of-day and day-of-week when air tours may occur.

Table 2. Air Tour Authorizations by Time-of-Day and Day-of-Week

Air Tour Operator	Time-of-Day	Day-of-Week
Aero-Copters of Arizona, Inc. (Helivision, Canyon Airlines, Bryce Canyon Helicopters, Bryce Canyon Airlines)	One hour after sunrise until three hours before sunset.	The NPS can establish temporary no-fly periods that apply to air tours for special events or planned Park management.
Adams, Bruce M. (Southwest Safaris)	One hour after sunrise until three hours before sunset.	The NPS can establish temporary no-fly periods that apply to air tours for special events or planned Park management.
American Aviation, Inc. (Frog Air, American Air Charter)	One hour after sunrise until three hours before sunset.	The NPS can establish temporary no-fly periods that apply to air tours for special events or planned Park management.
Grand Canyon Airlines, Inc. (Grand Canyon Airlines, Scenic Airlines, Grand Canyon Scenic Airlines)	One hour after sunrise until three hours before sunset.	The NPS can establish temporary no-fly periods that apply to air tours for special events or planned Park management.
Maverick Helicopters, Inc.	One hour after sunrise until three hours before sunset.	The NPS can establish temporary no-fly periods that apply to air tours for special events or planned Park management.
Papillon Airways, Inc. (Papillon Grand Canyon Helicopters, Grand Canyon Helicopters)	One hour after sunrise until three hours before sunset.	The NPS can establish temporary no-fly periods that apply to air tours for special events or planned Park management.

APPENDIX B

Enlarged Figures 1 and 2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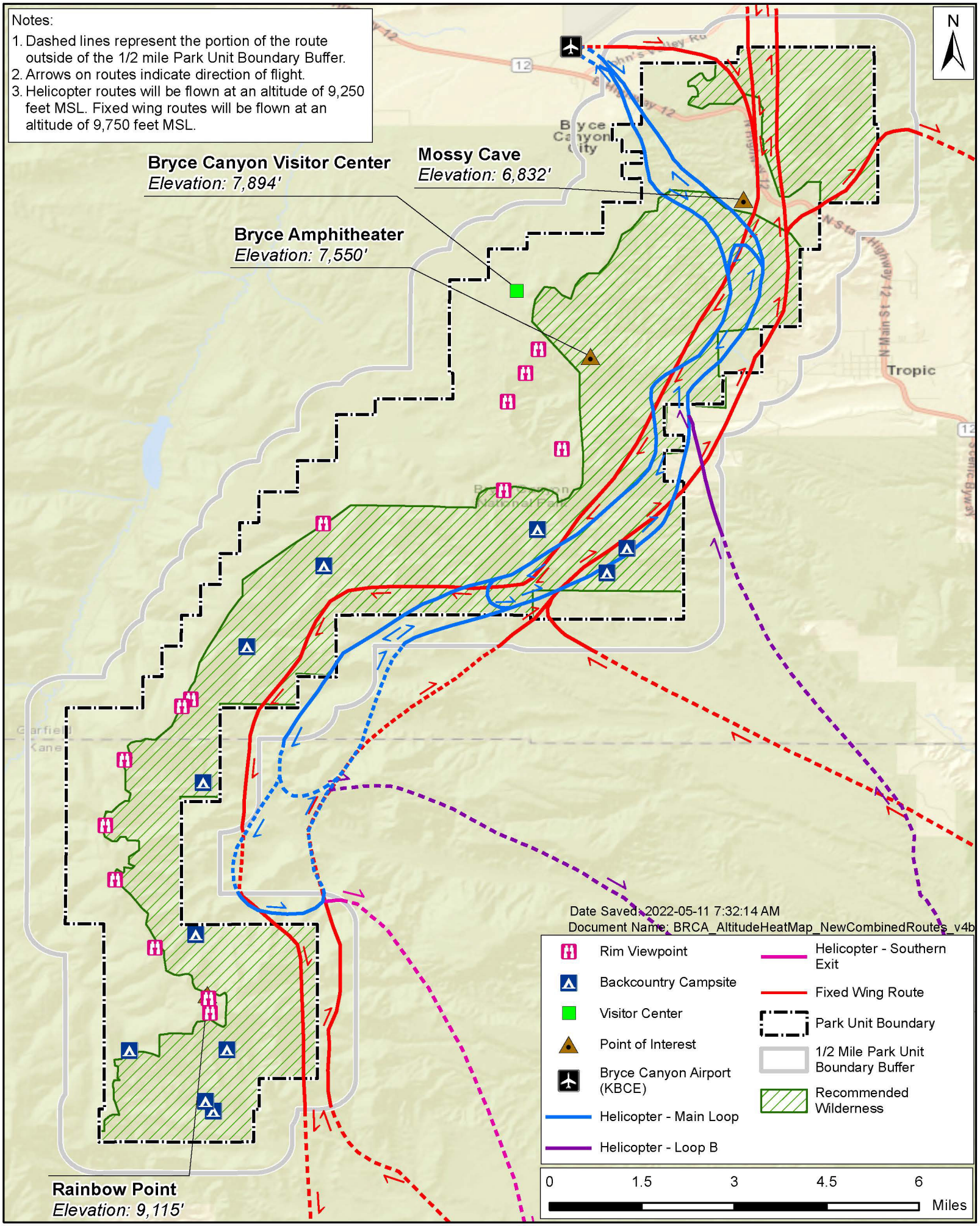
E Highway 12
N Highway 12
N State Highway 12 St Main N
Bryce Canyon City
Bryce Canyon National Park
Tropic
Garfield
Kane
Visitor Center
Bryce Canyon Airport (KBCE)
Recommended Wilderness
Park Unit Boundary
1/2 Mile Park Unit Boundary Buffer
0
2.5
5
Miles

Bryce Canyon National Park Updated Fixed Wing and Helicopter Routes



APPENDIX B

Environmental Screening Form

ENVIRONMENTAL SCREENING FORM (ESF)

PROJECT INFORMATION

Project Title: Bryce Canyon National Park Air Tour Management Plan

PEPC Project Number: 103148

Project Type: Categorical Exclusion

Project Locations: Garfield County and Kane County, Utah

PROJECT DESCRIPTION

The proposed action is to implement an Air Tour Management Plan (ATMP) for Bryce Canyon National Park (the Park). The "Project Description" section of the Categorical Exclusion (CE) Form for the ATMP sets out the elements of the ATMP and is incorporated herein by reference.

RESOURCE IMPACTS TO CONSIDER

Definition of Effects or Impact (40 C.F.R. § 1508.1(g))
Effects or impacts means changes to the human environment from the proposed action or alternatives that are reasonably foreseeable and include direct effects, indirect effects, and cumulative effects. Effects include ecological (such as the effects on natural resources and on the components, structures, and functioning of affected ecosystems), aesthetic, historic, cultural, economic, social, or health, whether direct, indirect, or cumulative. Effects may also include those resulting from actions which may have both beneficial and detrimental effects, even if on balance the agency believes that the effects will be beneficial.

For the purposes of considering environmental impacts, the National Park Service (NPS) evaluated the change to the human environment resulting from implementation of the ATMP. Consistent with Council on Environmental Quality regulations, the baseline from which to measure environmental impacts of the ATMP is the current condition of the human environment. In this case, the baseline is the current condition of Park resources and values, as impacted by 515 commercial air tours per year (existing three-year average of tours conducted on an annual basis from 2017-2019) along with other planned actions and trends. The baseline also includes the route and altitude information of commercial air tours provided by the operators, as well as the timing and daily commercial air tour information from commercial air tour reports provided by the operators from 2017-2019.

Existing Conditions of Commercial Air Tours over the Park
Nine commercial air tour operators hold Interim Operating Authority (IOA) to conduct a combined total of 3,131 commercial air tours over the Park each year. Based on the three-year average of reporting data from 2017 to 2019, the operators conduct an average of 515 commercial air tours over the Park each year. Six operators have reported flying commercial air tours over the Park from 2017-2019. Aero-Copters of Arizona, Inc. conducts an average of 462 commercial air tours over the Park each year, Southwest Safaris conducts an average of one commercial air tour over the Park each year, American Aviation, Inc. conducts an average of three commercial air

tours over the Park each year, Grand Canyon Airlines, Inc. conducts an average of 38 commercial air tours over the Park each year, Maverick Helicopters, Inc. conducts an average of one commercial air tour over the Park each year, and Papillon Airways, Inc. conducts an average of ten commercial air tours over the Park each year. The operators conduct commercial air tours on 16 different routes over the Park. Aero-Copters of Arizona, Inc. conducts commercial air tours on five different routes using CE-206-206 and BELL-206-B aircraft at a minimum altitude of 1,000 feet (ft.) above ground level (AGL). Southwest Safaris conducts commercial air tours on one route using CE-182-R and CE-207-T207A aircraft at a minimum altitude of 1,000 ft. AGL. American Aviation, Inc. conducts commercial air tours on one route using CE-172-N, CE-207-207, and CE-207-T207A aircraft at a minimum altitude of 2,000 ft. AGL. Grand Canyon Airlines, Inc. conducts commercial air tours on three different routes using CE-208-B and DHC-6-300 aircraft at a minimum altitude of 2,000 ft. AGL. Maverick Helicopters, Inc. conducts commercial air tours on two different routes using EC-130-B4 and EC-130-T2 aircraft at a minimum altitude of 1,000 ft. AGL. Papillon Airways, Inc. conducts commercial air tours on four different routes using AS-350-B3, BHT-206-L1, BHT-206-L3, EC-130-B4, EC-130-T2, and MDHS-MD-900 aircraft at a minimum altitude of 300 ft. AGL. Commercial air tours are typically conducted between one hour after sunrise until three hours before sunset and occur year-round.

Summary of the ATMP

The ATMP limits the number of commercial air tours that are authorized over the Park or within ½ mile of its boundary to the existing three-year average of tours conducted from 2017-2019 for each operator (462 tours per year for Aero-Copters of Arizona, one tour per year for Southwest Safaris, three tours per year for American Aviation, 38 tours per year for Grand Canyon Airlines, one tour per year for Maverick Helicopters, and ten tours per year for Papillon Airways, for a combined total of 515 commercial air tours per year over the Park). The ATMP requires operators to fly on consolidated routes that reflect the most heavily utilized current routes according to operator-provided reporting data from 2017-2019. The routes authorized by the ATMP have been consolidated for the protection of the Park's natural and cultural resources as well as for aviation safety and on-the-ground visitor experience. The ATMP establishes an altitude of 9,250 ft. MSL for helicopter aircraft which results in helicopters flying at least 1,500 ft. AGL for most of the time during a commercial air tour over the Park and ½ mile buffer, whereas under existing operations, some helicopter tours are conducted as low as 300 ft. AGL and others as low as 1,000 ft AGL, depending on the operator. The ATMP establishes an altitude of 9,750 ft. MSL for fixed-wing aircraft which results in fixed-wing aircraft flying at least 2,000 ft. AGL for most of the time during a commercial air tour, consistent with most existing fixed-wing operations. Thus, the ATMP increases the minimum altitude as compared to most existing helicopter operations and maintains the minimum altitude as compared to most existing fixed-wing operations. The ATMP prohibits aircraft hovering in place. The ATMP restricts the hours during which commercial air tours may be conducted over the Park, beginning one hour after sunrise until three hours before sunset, except as provided by quiet technology incentives. The ATMP allows the NPS to establish no-fly periods for special events or planned Park management.

Evaluation of the ATMP

Table 1. Potential Issues and Impacts to Resources

Resource	**Potential Issues & Impacts**
Air Air Quality	The findings from the screening analysis demonstrate that implementing the ATMP will not meaningfully impact (meaning that it will have no or minimal impact) local air quality and will not have regional impacts. See *Air Quality Technical Analysis* below.
Biological Species of Special Concern or Their Habitat	Federally Listed Threatened and Endangered Species The Park has a number of Federally designated threatened and endangered species, including listed birds and mammals.

	The NPS specifically analyzed potential impacts to California condor (*Gymnogyps californianus*), Mexican spotted owl (*Strix occidentalis lucida*), southwestern willow flycatcher (*Empaidonax traillii extimus*), and western yellow-billed cuckoo (*Coccyzus americanus*). The Section 7 analysis conducted by the agencies considered the potential effects of the ATMP on listed species and/or designated critical habitat without the consequences to those listed species by the existing commercial air tours, in accordance with 50 CFR § 402.02. The NPS conducted informal consultation with the U.S. Fish and Wildlife Service (USFWS) in accordance with Section 7 of the Endangered Species Act. Based on this consultation, the agencies determined the ATMP *may affect, not likely to adversely affect* California condor, Mexican spotted owl, southwestern willow flycatcher and western yellow-billed cuckoo. The USFWS concurred with this determination on August 4, 2022. See the *Correspondence* submitted to the USFWS on July 8, 2022, which includes the agencies' analysis. California condors currently do not nest or roost in the Park. However, condors may occasionally fly over the Park and there have been three known sightings in the park, two in 1999 and one in 2009. Because California condor habitat exists in the Park, protective measures are necessary should condors be identified and occupying habitat in the Park. USFWS guidelines for raptor protection from human and land use disturbance recommends a seasonal buffer zone of one mile from February 1 through November 30 to protect nest sites and territories (USFWS, 2002). The ATMP includes this measure to protect California condor should the species range expand and nesting occur at the Park. <u>Special Status Species and Migratory Birds</u> Bald eagles, golden eagles, and peregrine falcons are protected raptor species that are present in the Park.[1] These species are especially sensitive to low flying aircraft and their associated noise. Nesting eagles that are repeatedly disturbed by noise will abandon their nests. Additionally, raptors may collide with aircraft because of the altitude at which raptors fly. Scientific and national level guidance recommends a minimum aircraft standoff of 1,000 ft. for bald eagles (USFWS, 2007) and golden eagles to reduce noise impacts (Richardson and Miller, 1997). The ATMP authorizes the same number of flights on similar routes when compared to current operations, and increases the minimum altitude for most existing helicopter operations and maintains the minimum altitude for most existing fixed-wing operations. Therefore, the ATMP is expected to have no impacts on these species when compared to current conditions. Additionally, as these raptors may be impacted by flights below 1,000 ft. during nesting season and near communal roost sites based on the National Bald Eagle Management Guidelines, there will be beneficial impacts from raising the minimum altitude under the ATMP. The requirement that commercial air tours are conducted on designated commercial air tour routes and altitudes provides an appropriate spatial buffer directly under the route for raptor protection including threatened, endangered and migratory birds. A number of other migratory birds[2] and other avian species use the Park. Information related to migratory birds are summarized more generally below under wildlife. Migratory birds will be exposed to noise at a similar or decreased level compared to what is currently occurring because the number of authorized flights under the ATMP will be

[1] Bald eagles and golden eagles are protected under the Bald and Golden Eagle Protection Act.
[2] Migratory bird species are protected under the Migratory Bird Treaty Act.

	the same as the average number of flights from 2017-2019 on similar routes compared to current operations. Also, the routes have been shifted slightly to the east thereby reducing noise impacts near known raptor nesting locations. Therefore, the ATMP is expected to have negligible or only beneficial impacts on these species when compared to current conditions. In addition, because altitudes will increase when compared with existing operations, new impacts from the ATMP are expected to be beneficial for these species when compared to current conditions. It should be noted that when the altitude of an aircraft is increased, the total area exposed to the noise from that aircraft may also increase depending on the surrounding terrain. Although the area exposed to noise might increase, this would not meaningfully affect raptors or other migratory birds because of the attenuation of the noise from higher altitude and transient nature of the impacts.
Biological Wildlife and/or Wildlife Habitat including terrestrial and aquatic species	The Park and its surroundings are home to a wide variety of wildlife. Notable wildlife within the Park includes Utah prairie dog, deer, elk, pronghorn, occasional sightings of bear and mountain lion, and a variety of migratory birds. Noise from commercial air tours may impact wildlife, including migratory birds, in a number of ways: altered vocal behavior, breeding relocation, changes in vigilance and foraging behavior, and impacts on individual fitness and the structure of ecological communities to name a few (Shannon et al., 2016; Kunc et al., 2016; Kunc and Schmidt, 2019). Understanding the relationships between commercial air tour noise attributes (e.g., timing, intensity, duration, and location) and ecosystem responses is essential for understanding impacts to these species and developing management actions to address them (Gutzwiller et al., 2017). Since the ATMP authorizes a maximum number of commercial air tours per year equivalent to the existing three-year average on similar routes compared to current operations, it is anticipated that there will be little to no change to existing operating conditions and the resultant disturbances to wildlife. Furthermore, the ATMP requires the operators to continue to fly on similar routes, when compared with current operations, at the same or increased altitudes that are flown under existing operations. This limits noise exposure to wildlife in the Park and will result in a beneficial impact compared to current conditions. It should be noted that when the altitude of an aircraft is increased, the total area exposed to the noise from that aircraft may also increase depending on the surrounding terrain. Although the area exposed to noise might increase, this would not meaningfully affect wildlife because of the attenuation of the noise from higher altitude and transient nature of the impacts. Many species of wildlife move, making daily maximum exposure less likely. Sunrise and sunset are important times of the day for wildlife. Biologically important behaviors for many species occur during these times, such as the dawn chorus for songbirds, foraging, and communication. The day/time restrictions and quiet technology incentives included in the ATMP provide protection to wildlife that are active during sunrise and sunset, which represents an improvement to current conditions. In the event that operators request and are authorized to use the quiet technology incentive, those tours would result in the possibility of noise during the sunrise/sunset time periods. The impacts from these flights would be less than the noise modeled in the *Noise Technical Analysis* but could be more than when there are no flights during this time of day.

	In conclusion, while wildlife will continue to be exposed to noise, effects are expected to be insignificant and will not be widespread throughout the Park. Any disturbances will likely be temporary in nature and infrequent on both a daily and annual basis. Noise from commercial air tours will be experienced by only those wildlife under or near the designated routes, leaving most wildlife in the Park unaffected. The level of noise exposure will be similar or decrease compared to current conditions because the number of authorized flights under the ATMP will be the same as the average number of flights from 2017-2019. Therefore, impacts to wildlife are not significant, and because altitudes will increase when compared to existing flight operations, new impacts from the ATMP are expected to be beneficial for these species when compared to current conditions. See also the discussion above for special status species.
Cultural Cultural Landscapes	The NPS defines a Cultural Landscape as: a geographic area, including both cultural and natural resources and the wildlife or domestic animals therein, associated with a historic event, activity, or person or exhibiting other cultural or aesthetic values. There are four general kinds of cultural landscape, not mutually exclusive: historic sites, historic designed landscapes, historic vernacular landscapes, and ethnographic landscapes (NPS, 2002). An impact to a cultural landscape will occur if the project alters any of the characteristics that help make the cultural landscape eligible for listing the National Register of Historic Places (NRHP). This includes any diminishment of the cultural landscape's integrity of location, design, setting, materials, workmanship, feeling, or association. The potential impacts to cultural landscapes from the ATMP are limited to the continuation of visual and audible elements that diminish the integrity of the landscape setting and/or feeling. The Bryce Canyon Lodge/Deluxe Cabins and the Old NPS Housing Historic District are historic properties within the Park that have been identified and evaluated within the context of cultural landscapes and are considered eligible for listing on the NRHP. The number of authorized flights under the ATMP will be the same as the average number of flights from 2017-2019 and the consolidated routes are located further away from these specific historic properties than under existing operations. Additionally, the ATMP increases the minimum altitude as compared to most existing helicopter operations and maintains the minimum altitude as compared to most existing fixed-wing operations. The *Noise Technical Analysis* shows that aircraft noise related to commercial air tours may be audible (exceed 35 dBA) for less than 75 minutes a day (see Figure 1). Therefore, impacts to cultural landscapes will be similar or decrease compared to impacts currently occurring because the number of authorized flights under the ATMP will be the same as the average number of flights from 2017-2019. The Federal Aviation Administration (FAA), in coordination with the NPS, consulted with the Utah State Historic Preservation Office, Native American tribes, and other consulting parties on the potential impacts of the ATMP on Historic Properties, including cultural landscapes as part of Section 106 consultation. That consultation process led to a finding that the ATMP will have no adverse effect on historic properties. The FAA proposed this finding to all consulting parties via letter dated August 5, 2022. The SHPO concurred with the finding on August 10, 2022. The FAA did not receive any objections to the finding.
Cultural Ethnographic Resources	The NPS defines Ethnographic Resources as: a site, structure, object, landscape, or natural resource feature assigned traditional legendary, religious, subsistence, or other significance in the cultural system of a group traditionally associated with it (NPS,

	2002). Ethnographic resources include Traditional Cultural Properties (TCPs) (NPS, 1992). An impact to an Ethnographic Resource will occur if the project affected those elements of the resources that make it significant to the group traditionally associated with the resource, or if the project interferes with the use of the resource by the associated groups. The following tribes attach religious or cultural significance to areas within and adjacent to the Park: • Chemehuevi Indian Tribe of the Chemehuevi Reservation, California • Confederated Tribes of the Goshute • Hopi Tribe of Arizona • Indian Peaks Band of Paiute Indians • Kaibab Band of Paiute Indians of the Kaibab Indian Reservation • Kanosh Band of Paiute Indians • Koosharem Band of Paiute Indians • Las Vegas Tribe of Paiute Indians of the Las Vegas Indian Colony, Nevada • Moapa Band of Paiute Indians of the Moapa River Indian Reservation, Nevada • Navajo Nation, Arizona, New Mexico & Utah • Northwestern Band of Shoshone Nation • Paiute Indian Tribe of Utah • San Juan Southern Paiute Tribe of Arizona • Shivwits Band of Paiute Indians • Skull Valley Band of Goshute Indians of Utah • Southern Ute Indian Tribe of the Southern Ute Reservation, Colorado • Ute Indian Tribe of the Uintah & Ouray Reservation, Utah • Ute Mountain Tribe of the Ute Mountain Reservation, Colorado, New Mexico & Utah • White Mesa Ute Community • Zuni Tribe of the Zuni Reservation, New Mexico Tribes have informed Park staff that a number of TCPs are present within the Park. The TCPs are actively used by tribes for ceremonial and other purposes. There are a number of areas throughout the Park that contain traditional natural resources significant to tribes such as medicine and food plants and minerals used in pigments and for ceremonial purposes. The ATMP includes provisions that allow for the establishment of no-fly periods. These no-fly periods may be established to avoid conflicts or impacts to tribal ceremonies or similar activities, therefore no impacts on ethnographic resources are anticipated. Sacred ceremonies or other Tribal activities which occur without notice to the NPS may be interrupted by noise, however, commercial air tours have no effect on Tribal access. The FAA, in coordination with the NPS, consulted with the tribes listed above on the potential impacts of the ATMP on Ethnographic Resources, through compliance with Section 106 of the National Historic Preservation Act. That consultation led to a finding that the ATMP will have no adverse effect on historic properties, which includes Ethnographic Resources. The FAA proposed this finding to all consulting parties via letter dated August 5, 2022. The SHPO concurred with the finding on August 10, 2022. The FAA did not receive any objections to the finding.

Cultural Prehistoric/historic structures	Cultural resources within the Park include a number of archaeological sites and historic structures. As noted above, impacts to these resources will occur if the ATMP alters the characteristics of an archaeological site or historic structure that make it eligible for NRHP listing. Commercial air tours, by their nature, have the potential to impact resources for which feeling and setting are the contributing elements. Feeling and setting have been identified as contributing elements for 18 cultural resources at the Park (see the Section 106 documentation for a complete list). Commercial air tours will result in the continuation of visual and audible elements that are inconsistent with the feeling and setting for these resources. These intrusions will be limited to a maximum of 515 instances per year, and of limited duration. The number of authorized flights under the ATMP will be the same as the average number of flights from 2017-2019 and the consolidated routes are located further away from historic properties than under existing conditions. Additionally, the ATMP increases the minimum altitude as compared to most existing helicopter operations and maintains the minimum altitude as compared to most existing fixed-wing operations. The *Noise Technical Analysis* shows that aircraft noise related to commercial air tours are predicted to be audible (exceed 35 dBA) for less than 75 minutes a day (see Figure 1). These impacts will be similar to or decrease compared to impacts currently occurring because the number of authorized flights under the ATMP will be the same as the average number of flights from 2017-2019. Therefore, the ATMP is expected to have negligible or only beneficial impacts on cultural resources when compared to current conditions. The FAA, in coordination with the NPS, consulted with the Utah State Historic Preservation Office, Native American tribes, and other consulting parties on the potential impacts of the ATMP on Historic Properties, including cultural landscapes as part of Section 106 consultation. That consultation process led to a finding that the ATMP will have no adverse effect on historic properties. The FAA proposed this finding to all consulting parties via letter dated August 5, 2022. The SHPO concurred with the finding on August 10, 2022. The FAA did not receive any objections to the finding.
Geologic Geologic Resources	A review of potential vibrational impacts on geologic resources at Rainbow Bridge National Monument recommends a minimum helicopter standoff distance of ¼-mile (1,320 ft.) horizontal radius at altitudes less than 500 ft. above the top of the structure to avoid damage to geologic resources associated with the vibrational energy of helicopter blades (Moore, 2018). The Park does not have any documented reports of vibrational impacts or damages on the Park's geologic features. Although the Park currently lacks a vibrational study on specific Bryce Canyon geological features and hoodoos, the ATMP requires commercial air tours to fly at higher altitudes as compared to existing conditions. The ATMP would require helicopters to fly a minimum of 1,000 to 2,600 ft. AGL, and for fixed-wing a minimum of 1,500 to 2,600 ft. AGL depending on terrain. Routes would be shifted to the east away from the main amphitheater area; therefore, flights would not occur directly over the fragile Bryce geologic formations. For these reasons, vibrational impacts to geologic resources within the Park are not anticipated to be significant for the commercial air tour aircraft specified in the ATMP.
Lightscapes Lightscapes	Under the ATMP, unless they qualify for the quiet technology incentive, commercial air tours are not permitted within three hours before sunset and one hour after sunrise. Any lights from commercial air tour aircraft are not likely to be noticeable and any impacts will be similar to or decrease compared to current conditions because the number of authorized flights under the ATMP will be the same as the average number of flights from 2017-2019. Therefore, impacts to lightscapes will not be significant.

Other Human Health and Safety	Commercial air tours are subject to the FAA regulations for protecting individuals and property on the ground, and preventing collisions between aircraft, land or water vehicles, and airborne objects. The operators must continue to meet the FAA safety regulations.
Socioeconomic Minority and low-income populations, size, migration patterns, etc.	U.S. Census data (United States Census Bureau, 2021) for census blocks surrounding the Park was reviewed to determine the presence of minority or low-income populations immediately outside and within ½-mile of the Park boundary. Based on this review, low-income populations were identified in Garfield County and Kane County. Minority populations were not identified in either Garfield County or Kane County. However, commercial air tours will not have a disproportionate impact on low-income or minority populations, since the noise associated with commercial air tours will occur in areas directly beneath and adjacent to the routes over the Park and will not be concentrated over low-income or minority populations. Based on the *Noise Technical Analysis*, noise levels above 52 dBA (which is associated with speech interference) are anticipated to occur for less than ten minutes a day (see Figure 2). Therefore, the ATMP will not have a disproportionate impact on low-income or minority populations.
Socioeconomic Socioeconomic	Commercial air tours generate income for operators and potentially generate income for other ancillary visitor industry businesses. Visitors from outside the immediate area contribute to this income. The income from commercial air tours provides a benefit to the local economy. Because the number of commercial air tours authorized under the ATMP is the same as the average number of flights from 2017-2019, the Park does not expect visitor spending on commercial air tours or economic activity in the local communities to change. The competitive bidding process may redistribute the number of flights and income between individual operators in the future but is not anticipated to affect the overall average number of flights or local business activity generated by these flights. The agencies acknowledge that flights permitted by the ATMP could limit future expansion of air tours unless the ATMP were amended to allow for additional tours over the Park. However, the ATMP would not limit economic growth in a meaningful measurable way. An economic impact modeling analysis was not completed as part of the process because the ATMP does not change the number of commercial air tour operations in a meaningful way from the existing number of flights. As to the requirements in ATMP Section 4.1 related to the installation and use of flight monitoring technology, this is necessary to enable the agencies to appropriately monitor compliance with the restrictions in the ATMP. The agencies consulted with National Parks Overflights Advisory Group (NPOAG) and assessed the cost of various flight monitoring technologies and note that there are relatively inexpensive off the shelf options that could meet the requirements of the ATMP. The agencies did not require operators to install and use the more expensive types of flight monitoring technology. The agencies believe the time and cost is reasonable for ensuring compliance with the ATMP.
Soundscapes Acoustic Environment	Baseline acoustic conditions in the Park were measured in 2009 and 2010 (National Park Service, 2011). At the locations nearest commercial air tour routes, the existing ambient daytime sound level was reported to be 22 – 42 decibels, while the natural ambient daytime sound level was reported to be 22 – 39 decibels. The existing ambient condition includes all sound associated with a given environment, i.e., natural, human, and mechanical sounds, such as automobiles and aircraft. Aircraft sound measured at a

	sampling location may include general aviation, commercial jets, military, and air tours. The natural ambient is the sound conditions found in a study area, including all sounds of nature (i.e., wind, water, wildlife, etc.) and excluding all human and mechanical sounds. Both the existing and natural ambient conditions were considered in the resource impacts analysis. Depending on a receiver's location on the ground in relation to an aircraft flying overheard, aircraft sound can range from faint and infrequent to loud and intrusive. Impacts of aircraft noise range from masking quieter sounds of nature such as bird vocalizations to noise loud enough to interrupt conversational speech between visitors. To capture how noise may affect quieter natural sounds or conversations, the resource impacts analysis below examines the time above 35 decibels (for quieter natural sounds and impacts to natural resources) and time above 52 decibels for conversational speech disturbance and impacts to visitor experience. Overall, noise impacts associated with commercial air tours over the Park are expected to be only minimal, since the ATMP authorizes the same number of flights per year as the average number of flights from 2017-2019 and increases the minimum altitude as compared to most existing helicopter operations and maintains the minimum altitude as compared to most existing fixed-wing operations, which will reduce the maximum noise levels at sites directly below the commercial air tour routes. It should be noted that when the altitude of an aircraft is increased, the total area exposed to the noise from that aircraft may also increase depending on the surrounding terrain. Although the area exposed to noise might increase, this would not meaningfully affect the acoustic environment because of the attenuation of the noise from higher altitude and transient nature of the impacts. Although the number of routes is being reduced from 16 to four, 90% of the current flights (462 out of 515) occur on routes that are being retained, and at a similar altitude. Therefore, the amount of noise on all routes is not expected to change much from current conditions. For purposes of assessing noise impacts from commercial air tours on the acoustic environment of the Park under the National Environmental Policy Act (NEPA), the FAA noise evaluation is based on Yearly[3] Day Night Average Sound Level (DNL); the cumulative noise energy exposure from aircraft over 24 hours. The DNL analysis indicates that the ATMP would not result in any noise impacts that would be "significant" or "reportable" under FAA's policy for NEPA. Refer to the *Noise Technical Analysis* below.
Viewsheds Viewsheds	While 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), because the level of commercial air tour activity under the ATMP will remain the same, there will be no change in the effect to visitors in this regard. Other literature for studies on impacts from commercial air tours or overflights generally on viewsheds conclude that the visual impacts of overflights are difficult to identify because visitors primarily notice aircraft because of the accompanying noise. Aircraft are transitory elements in a scene and visual impacts tend to be relatively short. The short duration and low number

[3] As required by FAA policy, the FAA typically represents yearly conditions as the Average Annual Day (AAD). However, because ATMP operations in the Park occur at low operational levels per year and are highly seasonal in nature it was determined that a peak day representation of the operations would more adequately allow for disclosure of any potential impacts. A peak day has therefore been used as a conservative representation of assessment of AAD conditions.

	of flights (along with the position in the scene as viewed from most locations) make it unlikely the typical visitor will notice or be visually distracted by aircraft. The viewer's eye is often drawn to the horizon to take in a park view and aircraft at higher altitudes are less likely to be noticed. Aircraft at lower altitudes may attract visual attention but are also more likely to be screened by vegetation or topography. There are numerous outstanding viewsheds within the Park, many of which are present from the top of the Park's amphitheaters. Under existing operations, commercial air tours at the Park are flown on 16 different routes. The operator with the majority of flight allocations, Aero-Copters of Arizona, conducts commercial air tours on five routes over the Park, all of which enter the Park on its northern boundary, fly southward, then loop back heading northward over the Park. Overall, the routes avoid the majority of the Park's area. The ATMP limits the number of commercial air tours to 515 tours per year and maintains similar routes as are flown under existing operations. Therefore, impacts to viewsheds will be similar to or decrease compared to impacts currently occurring because the number of authorized flights under the ATMP will be the same as the average number of flights from 2017-2019, and routes will remain similar compared to existing operations. They would therefore not be considered significant, and because the ATMP increases the minimum altitude as compared to most existing helicopter operations and maintains the minimum altitude as compared to most existing fixed-wing operations, and therefore visitors are less likely to notice them, new impacts from the ATMP are expected to result in beneficial impacts to viewsheds compared to current conditions. Any visual impacts from amphitheaters are mitigated by the required increase in minimum altitude under the ATMP.
Visitor Use and Experience Recreation Resources	Commercial air tours offer a recreational experience for those who wish to view the Park from a different vantage point. Because the number of commercial air tours under the ATMP is consistent with the average number of flights from 2017-2019, there are no or minimal changes anticipated to the number of commercial air tours offered per year compared to current operations. Currently, customers on commercial air tours are not required to pay an entrance fee at the Park, nor are the commercial air tour operators required to pay a fee to the Park.
Visitor Use and Experience Visitor Use and Experience	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. Unacceptable impacts are impacts that, individually or cumulatively, will unreasonably interfere with Park programs or activities including interpretive programs, or the atmosphere of peace and tranquility, or the natural soundscape maintained in wilderness and natural, historic, or commemorative locations within the Park (National Park Service, 2006, 8.2). Effects of commercial air tours on Park visitor experience have been well documented over many years. See *Report on the Effects of Aircraft Overflights on the National Park System* (Department of Interior/NPS, 1995). The primary effect of commercial air tours is the introduction of noise into the acoustic environment. Numerous studies have identified the value and importance of soundscapes as one of the motivations for visiting parks (Haas and Wakefield, 1998; McDonald et al., 1995; Merchan et al., 2014; Miller et al., 2018), including in a cross-cultural context (Miller et al., 2018). Other studies have focused specifically on the effects of aircraft on the visitor experience both in parks and protected areas, and a laboratory setting, indicating that aircraft noise negatively impacts

	the visitor experience (Anderson et al., 2011; Ferguson, 2018; Mace et al., 2013; Rapoza et al., 2015). Currently, some Park visitors may hear noise from commercial air tours, which may disrupt visitors or degrade the visitor experience at the Park by disturbing verbal communications and masking the sounds of nature. For example, noise from commercial air tours may disrupt visitors during interpretive and educational programs at historical sites or while hiking, camping, or participating in other activities. Visitors respond differently to noise from commercial air tour overflights – noise may be more acceptable to some visitors than others. Visitors in backcountry and wilderness areas often find commercial air tours more intrusive than visitors in developed and frontcountry areas where noise from commercial air tours may not be as audible (Rapoza et al.,2015; Anderson et al., 2011). Visitor points of interest include campgrounds, historical sites, visitor centers, and trails. Ranger-led education and interpretative programs occur across the Park. Noise disturbances to visitors from commercial air tours are not expected to measurably change under the ATMP because the ATMP authorizes the same number of commercial air tours as the average number of flights from 2017-2019 on similar routes when compared with current operations and requires commercial air tours to fly at the same or increased altitudes reported by the operators, depending on type of aircraft and location over the Park. The routes have been shifted slightly to the east thereby reducing noise impacts near high visitor use areas and backcountry campsites. On days when commercial air tours will occur, noise levels above 52 dBA (which is associated with speech interference) are anticipated to occur for less than ten minutes a day. See Figure 2 in the *Noise Technical Analysis* below. It should be noted that when the altitude of an aircraft is increased, the total area exposed to the noise from that aircraft may also increase depending on the surrounding terrain. Although the area, and therefore number of visitors, exposed to noise might increase with higher altitudes, this would not meaningfully affect visitor experience because of the attenuation of sound from the higher altitude and transient nature of the impacts. Finally, limiting the operation of commercial air tours to one hour after sunrise until three hours before sunset, or extending operations until one hour before sunset if authorized by the agencies for operators that have converted to quiet technology aircraft, provides times when visitors seeking solitude may explore the Park without disruptions from commercial air tours. Collectively, these changes from existing operations and their effect on the current condition of visitor experience will result in beneficial impacts to the visitor experience at the Park.
Wilderness Wilderness	Approximately 58% of the Park (20,810 acres) is recommended wilderness, which is managed as designated wilderness by the NPS, pursuant to the 2006 NPS Management Policies. Section 2(a) of the Wilderness Act states that wilderness areas "shall be administered for the use and enjoyment of the American people in such manner as will leave them unimpaired for future use and enjoyment as wilderness, and so as to provide for the protection of these areas, the preservation of their wilderness character." The NPS manages wilderness to enhance wilderness character consistent with the Act and generally manages for the natural, untrammeled, undeveloped, solitude and unconfined recreation, and other features of value wilderness character qualities. Commercial air tours over the Park may impact the following qualities of wilderness character: opportunity for solitude, the natural quality, and other features of value (e.g., cultural

	resources). Aircraft that land in wilderness detract from the undeveloped quality of wilderness. Because commercial air tours do not land in wilderness or parks, the undeveloped quality of wilderness is not considered here. *Keeping it Wild 2, An Updated Interagency Strategy to Monitor Trends in Wilderness Character Across the National Wilderness Preservation System,* (Landres et al., 2015) notes that solitude includes attributes such as "separation from people and civilization, inspiration (an awakening of the senses, connection with the beauty of nature and the larger community of life), and a sense of timelessness (allowing one to let go of day-to-day obligations, go at one's own pace, and spend time reflecting)" (p. 51). A review of research suggests that solitude encapsulates a range of experiences, including privacy, being away from civilization, inspiration, self-paced activities, and a sense of connection with times past" (Borrie and Roggenbuck, 2001). Generally, solitude improves when sights and sounds of human activity are remote. Commercial air tours can represent both a sight and sound of human activity and therefore detract from this quality of wilderness character. Noise from commercial air tours has the potential to disrupt the opportunity for solitude in recommended wilderness areas. On days when commercial air tours will occur, noise levels above 35 dBA are not anticipated to exceed 75 minutes in areas beneath and adjacent to the routes (see Figure 1). The average sound level (Equivalent Sound Level or $L_{Aeq\ 12\ hr}$) is not anticipated to exceed 40 dB. See *Noise Technical Analysis* below. However, as described in analyses for soundscapes, viewsheds, and visitor use and experience, because the ATMP authorizes the same number of commercial air tours as the average number of flights from 2017-2019 on similar routes as compared to current operations, impacts to solitude will be similar or decrease compared to impacts currently occurring. Therefore, the impacts to solitude will not be significant. Impacts on the natural quality of wilderness character are the same as those described under the natural resource categories above (biological, etc.) and will be limited on an annual basis. Therefore, the ATMP is not expected to result in a change in impacts to natural quality compared to current conditions. As described in those previous analyses, because the ATMP authorizes the same number of commercial air tours as the average number of flights from 2017-2019 on similar routes as compared to current operations, impacts to natural character will be similar or decrease compared to impacts currently occurring. Therefore, the impacts to natural character will not be significant. Section 2 I(4) of the Wilderness Act states that wilderness "may contain features of ecological, geological, scientific, educational, scenic, or historical value." Where present, cultural and geologic resources are part of this "unique" quality of wilderness character. Therefore, active management of wilderness cultural and geological resources must take into account both cultural and geological resource values and contributions to wilderness character. Flights over sensitive cultural resources located in designated wilderness areas have the potential to impact the auditory and visual APE of both known and yet unidentified cultural resources. Flights over sensitive geological resources have the potential to cause vibrational impacts. However, as described in analyses for cultural and geological resources above, because the ATMP authorizes the same number of commercial air tours as the average number of

	flights from 2017-2019 on similar routes as compared to current operations, impacts to other features of value will be similar or decrease compared to impacts currently occurring. Therefore, the impacts to other features of value within wilderness will not be significant.
Cumulative Effects	The cumulative impact analysis for the ATMP focuses on noise and viewshed impacts. Impacts to other resources, i.e., wildlife, visitor experience, ethnographic resources, wilderness, etc. all result from noise or viewshed impacts. Many activities may contribute noise to the Park's acoustic environment. Aviation activities such as commercial air tours above 5,000 ft. AGL, and overflights by high altitude jets, private aviation, or military overflights regardless of altitude are not subject to regulation under the National Parks Air Tour Management Act (NPATMA). All of these aviation activities may currently contribute noise to the project area. These flights may detract from the viewshed of the Park as well. The Park's developed areas and roadways also contribute to ambient noise. Maintenance and other administrative activities, such as search and rescue efforts, etc. may also contribute noise to the acoustic environment, but are generally temporary, irregular, and do not last more than a few hours. Intermittent construction activities may add noise to the Park acoustic environment, though generally those occur in already developed areas where noise is generally more acceptable and expected. The agencies have qualitatively considered the cumulative impacts of commercial air tours along with impacts from existing activities generally described above. Depending on the level of Park activities at various times of the year, the noise contribution from other sources such as road traffic and visitor use in developed areas may be substantial. There is no known future project that would significantly contribute noise impacts to the project area. Considering existing ambient noise sources and foreseeably future noise sources, the commercial air tour noise is a small contribution of overall noise. Furthermore, the ATMP establishes operating conditions to protect park natural and cultural resources, and it is unlikely it would measurably change the overall acoustic environment. Commercial air tours over Park roadways are likely to be masked by existing noise and therefore the impacts would be de minimis. Finally, the ATMP does not add new noise to the existing acoustic environment. Therefore, when considering other sources of noise in the Park that are likely to continue under the ATMP, the continuation of 515 commercial air tours will not result in a meaningful change to the current condition of the visual or auditory landscape at the Park. As noted above under viewsheds, visual or viewshed impacts associated with aircraft are most noticeable because of noise. As described above, the ATMP will not result in significant impacts to the acoustic environment. Aircraft may also be less noticeable because the ATMP has increased the flight altitude for most existing helicopter operations which decreases the noise along the flight path. Additionally, there should not be significant cumulative changes to the viewshed since the number of commercial air tours are not increasing but is consistent with the 3-year average. Therefore, no significant cumulative environmental impacts are likely to result from the ATMP.
Indirect Effects	The ATMP applies to all commercial air tours over the Park and within ½-mile outside the boundary of the Park, including any tribal lands within that area, that are flown below 5,000 ft. AGL. These flights takeoff and land from the Bryce Canyon Airport, Las

	Vegas, NV, Santa Fe, NM, Page, UT, Grand Canyon Airport (AZ), and Moab, UT, which range from approximately 0.5 to 300 miles from the nearest point of the Park's ½-mile boundary buffer and are outside of the area regulated by the ATMP. Land uses between the airports and the Park primarily consist of undeveloped open space and scattered residential and commercial development. Commercial air tours traveling to and from the Park could result in some temporary noise disturbances in these areas. Commercial air tours may fly over residential areas resulting in temporary noise disturbance to homeowners. Undeveloped lands will likely experience similar impacts to those described in other sections of this ESF, i.e., temporary disturbances to wildlife, etc. although flight altitudes may be different outside the Park boundary resulting in potentially more adverse impacts than those occurring within the ATMP boundary. Because of the low number of flights (up to 515 commercial air tours per year), these effects are expected to be insignificant. Since the ATMP authorizes the same number of commercial air tours per year as existing conditions on similar routes compared to current operations, it is unlikely that the frequency and nature of these disturbances outside of the ½-mile boundary of the Park would result in a change from current condition. Therefore, the agencies consider indirect effects of the ATMP to be negligible. However, since the ATMP cannot regulate the flight path, altitude, duration, etc. of flights beyond ½-mile boundary of the Park (the operators must comply with relevant FAA regulations), the agencies are unable to require operators to continue to fly outside of the ½-mile boundary of the Park in the manner in which they currently fly under existing operations or to require operators to change any operational parameters (e.g., altitude or routes). However, the agencies are unaware of any reason the operators would deviate from their current flight paths outside the ATMP boundary since routes have not substantially changed.

Additional Technical Analysis

AIR QUALITY TECHNICAL ANALYSIS

Potential air quality impacts from proposed commercial air tour operations were estimated using an emissions inventory approach. Annual flight miles by aircraft type were calculated for the parks for which ATMPs are currently being developed and Badlands National Park (BADL) was found to have the highest annual flight miles (58,163 flight miles vs. 32,405 flight miles in the Park). BADL was thus considered the highest anticipated flight activity for parks which meet the National Ambient Air Quality Standards (i.e., attainment parks). The most common aircraft that fly commercial air tours in BADL are the Cessna 206 (fixed-wing) and Robinson R44 (helicopter) and can be considered representative of the types of fixed-wing and helicopter aircraft used for commercial air tours.

The FAA's Aviation Environmental Design Tool (AEDT) version 3d was used to develop emission factors (pounds of emissions per mile flown) for these aircraft, which were derived from the Environmental Protection Agency's (EPA) AP-42: Compilation of Emission Factors (United States Environmental Protection Agency, Office of Noise Abatement and Control, 1974). 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, these emission rates are considered a conservative estimate of emission rates for aircraft used in commercial air tours.

The maximum emissions (tons per year) were calculated for BADL by multiplying the total number of operations (by aircraft type), the longest route flown by each aircraft type within BADL and the ½-mile boundary outside of BADL, and the aircraft-specific emission factor. The sum of total emissions by aircraft type represent the maximum emissions conditions for BADL. BADL emissions results were compared with the EPA's General

Conformity *de minimis* thresholds for the most stringent[4] nonattainment areas. Although BADL and other attainment parks are not subject to General Conformity Requirements, EPA's General Conformity *de minimis* thresholds represent a surrogate for impacts to ambient air quality.

The NPS must also consider impacts to resources that are sensitive to air pollution under the NPS Organic Act mandates and the Clean Air Act (CAA). Such resources include (but are not limited to) sensitive vegetation, streams and lakes, aquatic biota and visibility. These resources are typically referred to as Air Quality Related Values (AQRVs). Parks designated Class I areas under the CAA also receive an additional measure of protection under the CAA provisions. The CAA gives the NPS an "affirmative responsibility to protect the air quality related values (including visibility) of any such lands within a Class I area."

Since emissions estimates for all pollutants in BADL are well below the *de minimis* levels (Table 2), and the Park will have a lower combination of proposed operations per year and route distances using similar fixed-wing aircraft, emissions in the Park will also not exceed *de minimis*. The most stringent *de minimis* emission thresholds for federal conformity determinations are sufficiently low relative to emission thresholds the NPS will use to determine whether additional air quality analysis is necessary under a NEPA analysis. Given this, and the fact that the maximum projected emissions from overflights in the Park are well below these *de minimis* levels (< 1 TPY for nitrogen oxides, particulate matter, and sulfur dioxide – criteria pollutants that have the most significant impact on AQRVs), it is expected that emissions from overflights in the Park under the ATMP will not meaningfully impact AQRVs, or local air quality, and will not have regional impacts from implementation of the ATMP in the Park.

Table 2. Comparison of the emissions inventory for proposed commercial air tours in BADL with *de minimis* thresholds for the most stringent non-attainment areas.

Pollutant	***de minimis* threshold (Tons per Year)**	**Emissions Inventory for BADL (Tons per Year)**
Carbon Monoxide	100	73.11
Volatile Organic Compounds	10	0.61
Nitrogen Oxides	10	0.01
Particulate Matter, diam. < 2.5 μm	70	0.04
Particulate Matter, diam. < 10 μm	70	0.04
Lead	25	0.04
Sulfur Oxides	70	0.06
Carbon Dioxide	n/a	156.43

NOISE TECHNICAL ANALYSIS

Indicators of acoustic conditions

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 metrics and acoustical terminology used for the ATMP are shown in Table 3.

[4] 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 and sulfur dioxide.

Table 3. Primary metrics used for the noise analysis.

Metric	Relevance and citation
Time Above 35 dBA [5]	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 35 dB 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 (American National Standards Institute/Acoustical Society of America S12.60/Part 1-2010).
Time Above 52 dBA	The amount of time (in minutes) that aircraft sound levels are above a given threshold (i.e., 52 dBA) This metric represents the level at which one may reasonably expect interference with Park interpretive programs. At this background sound level (52 dB), 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).
Equivalent 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 a.m. to 7 p.m. 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 ten dB penalty between 10 p.m. and 7 a.m. local time. Note: Both $L_{Aeq,\ 12hr}$ and L_{dn} characterize: • 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 L_{dn}) If there are no nighttime events, then $L_{Aeq,\ 12hr}$ is arithmetically three dBA higher than L_{dn}. The FAA's (2015 Exhibit 4-1) 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.
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.

[5] dBA (A-weighted decibels): Sound is measured on a logarithmic scale relative to the reference sound pressure for atmospheric sources, 20 μPa. The logarithmic scale is a useful way to express the wide range of sound pressures perceived by the human ear. 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 in order 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.

ATMP as related to indicators

In order to provide a conservative evaluation of potential noise effects produced by commercial air tours under the ATMP, the CE analysis is based on a representation of a peak day[6] of commercial air tour activity. For the busiest year of commercial air tour activity from 2017-2019 based on the total number of commercial air tour operations and total flight miles over the Park, the 90th percentile day was identified for representation of a peak day 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. For the Park, the 90th percentile day was identified as three flights on the M3 route using a Bell 206 B III aircraft, one flight on the M1 route using a Bell 206 B III aircraft, and one flight on the M3 route using an EC130 aircraft. Altitudes were modeled at 9,250 ft. MSL.

Noise contours for the following acoustic indicators were developed using the FAA's AEDT version 3d and are provided below. A noise contour presents a graphical illustration or "footprint" of the area potentially affected by the noise.

- Time above 35 dBA (minutes) – see Figure 1
- Time above 52 dBA (minutes) – see Figure 2
- Equivalent Sound Level or $L_{Aeq,\ 12hr}$ – see Figure 3
    - Note: Contours are not presented for L_{dn} (or DNL) as it is arithmetically three dBA lower than $L_{Aeq,\ 12hr}$ if there are no nighttime events, which is the case for the ATMP modeled at the Park.
- Maximum sound level or L_{max} – see Figure 4

[6] As required by FAA policy, the FAA typically represents yearly conditions as the Average Annual Day (AAD). However, because ATMP operations in the Park occur at low operational levels per year and are highly seasonal in nature it was determined that a peak day representation of the operations would more adequately allow for disclosure of any potential impacts. A peak day has therefore been used as a conservative representation of assessment of AAD conditions.

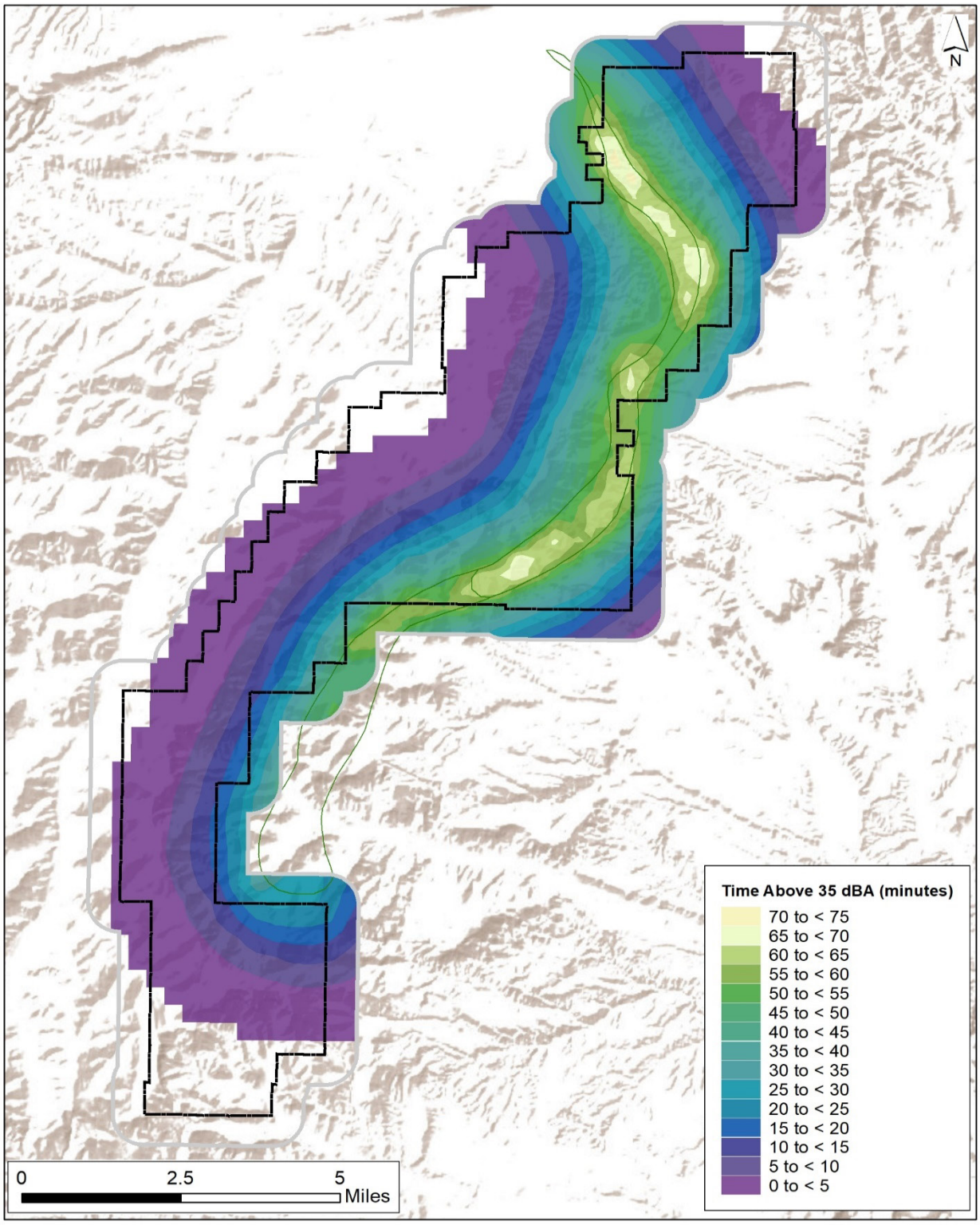


Figure 1. Time above 35 dBA (minutes)

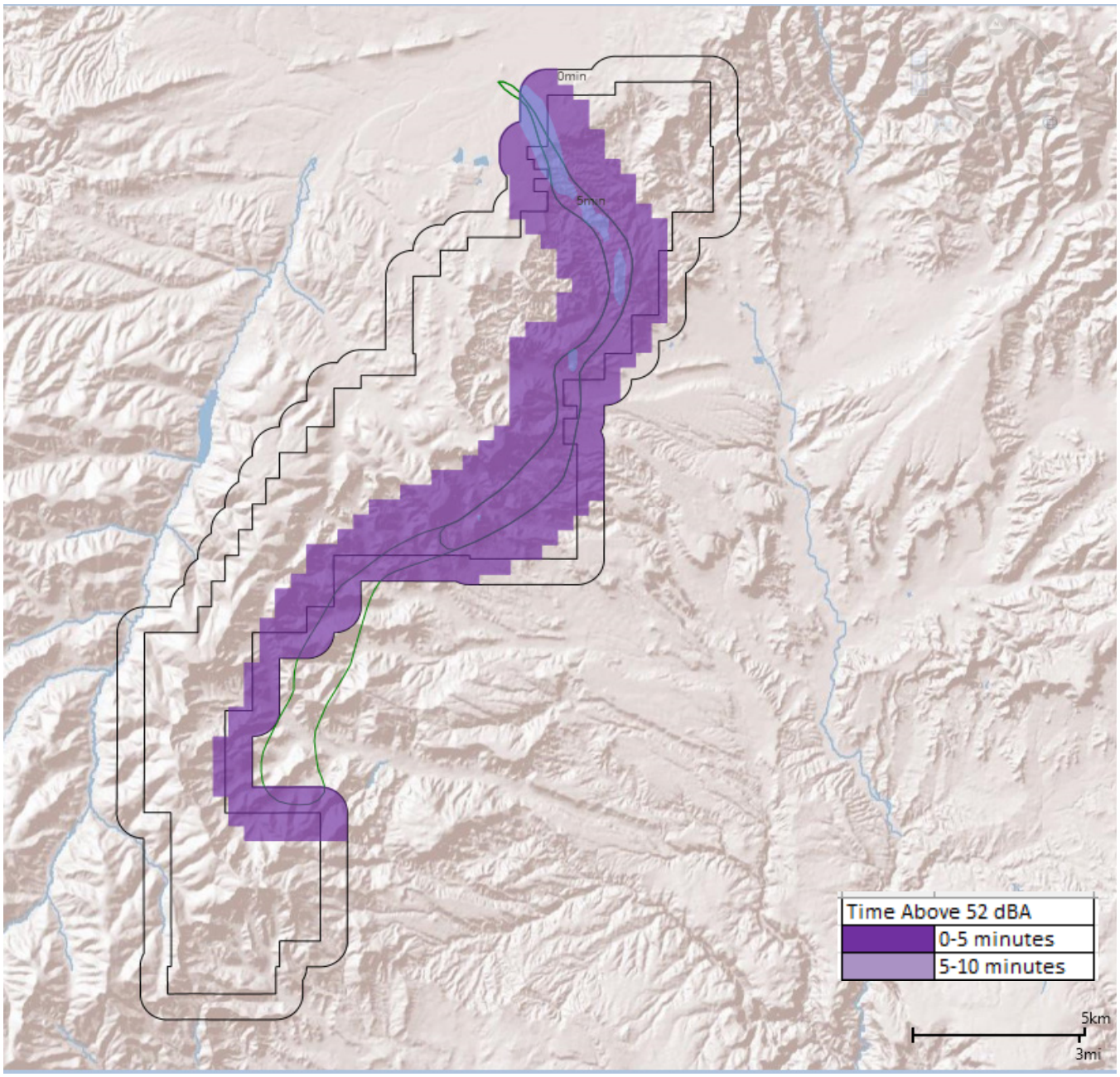


Figure 2. Time above 52 dBA (minutes)

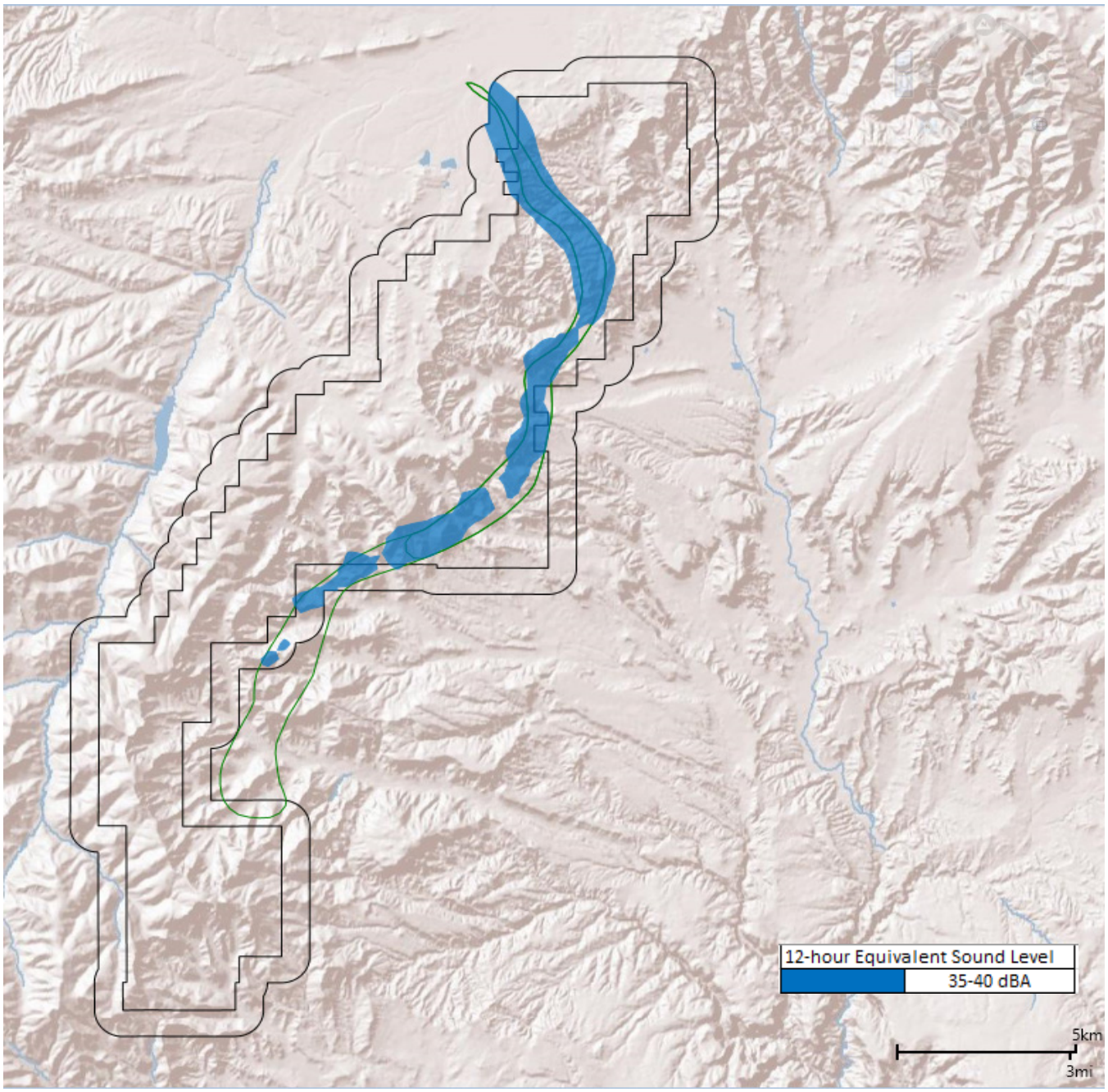


Figure 3. Equivalent Sound Level or $L_{Aeq,\ 12hr}$

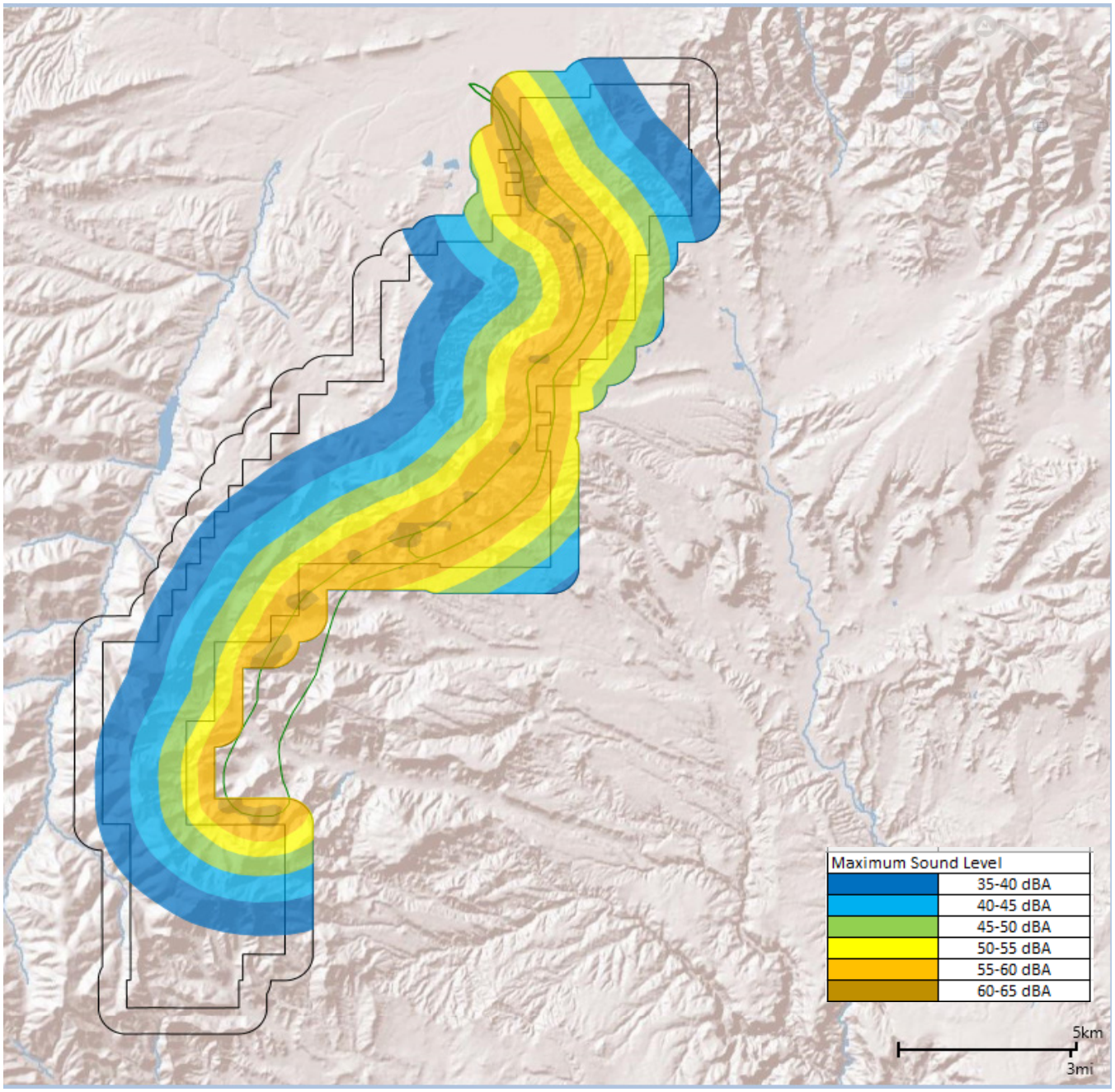


Figure 4. Maximum sound level or L_{max}

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APPENDIX C

Categorical Exclusion Documentation Form

Categorical Exclusion Documentation Form (CE Form)

PROJECT INFORMATION

Project Title: Bryce Canyon National Park Air Tour Management Plan

PEPC Project Number: 103148

Project Type: Categorical Exclusion

Project Location: Garfield County and Kane County, Utah

PROJECT DESCRIPTION

The proposed action is to implement an Air Tour Management Plan (ATMP) for Bryce Canyon National Park (the Park). The ATMP includes the following operating parameters to mitigate impacts from commercial air tours on Park resources. For a full discussion of the impacts of commercial air tours and how these operating parameters will maintain or reduce impacts to Park resources, see the *Environmental Screening Form (ESF)*.

Commercial Air Tours Authorized

Under the ATMP 515 commercial air tours per year are authorized per year. Table 1 identifies the operators authorized to conduct the commercial air tours and the annual flight allocations.

Table 1. Commercial Air Tour Operations and Aircraft Type by Operator

Commercial Air Tour Operator	Annual Operations	Daily Operations	Aircraft Type
Aero-Copters of Arizona, Inc. (Helivision, Canyon Airlines, Bryce Canyon Helicopters, Bryce Canyon Airlines)	462	No set limit	BELL-206-B, CE-206-206
Adams, Bruce M. (Southwest Safaris)	1	1	CE-182-R, CE-207-T207A
American Aviation, Inc. (Frog Air, American Air Charter)	3	No set limit	CE-172-N, CE-207-207, CE-207-T207A
Grand Canyon Airlines, Inc. (Grand Canyon Airlines, Scenic Airlines, Grand Canyon Scenic Airlines)	38	No set limit	CE-208-B, DHC-6-300
Maverick Helicopters, Inc.	1	1	EC-130-B4, EC-130-T2

Papillon Airways, Inc. (Papillon Grand Canyon Helicopters, Grand Canyon Helicopters)	10	No set limit	AS-350-B3, BHT-206-L1, BHT-206-L3, EC-130-B4, EC-130-T2, MDHS-MD-900

Commercial Air Tour Routes and Altitudes

Commercial air tours authorized under the ATMP shall be conducted on the designated air tour routes and altitudes in Figure 1 below. 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 mean sea level (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. Based on aircraft type, aircraft will be separated by altitude to de-conflict the airspace. When flying over the Park or outside the Park but within ½ mile of its boundary, commercial air tours conducted via helicopter shall maintain an altitude of 9,250 feet (ft.) MSL and tours conducted via fixed-wing aircraft shall maintain an altitude of 9,750 ft. MSL. Due to the Park's uneven terrain, flying the designated MSL altitudes means that helicopters will generally maintain altitudes from 1,500 ft. to 2,600 ft. AGL, though for a few short segments altitudes will be from 1,000 ft. to 1,500 ft. AGL. Flying the designated MSL altitudes means that fixed-wing aircraft will generally maintain altitudes from 2,000 ft. to 2,600 ft. AGL, with a short segment in the southern area of the Park where the aircraft will be flying altitudes from 1,500 ft. to 2,000 ft. AGL. Except in an emergency or to avoid unsafe conditions, or unless otherwise authorized for a specified purpose, operators may not deviate from these designated routes and altitudes.

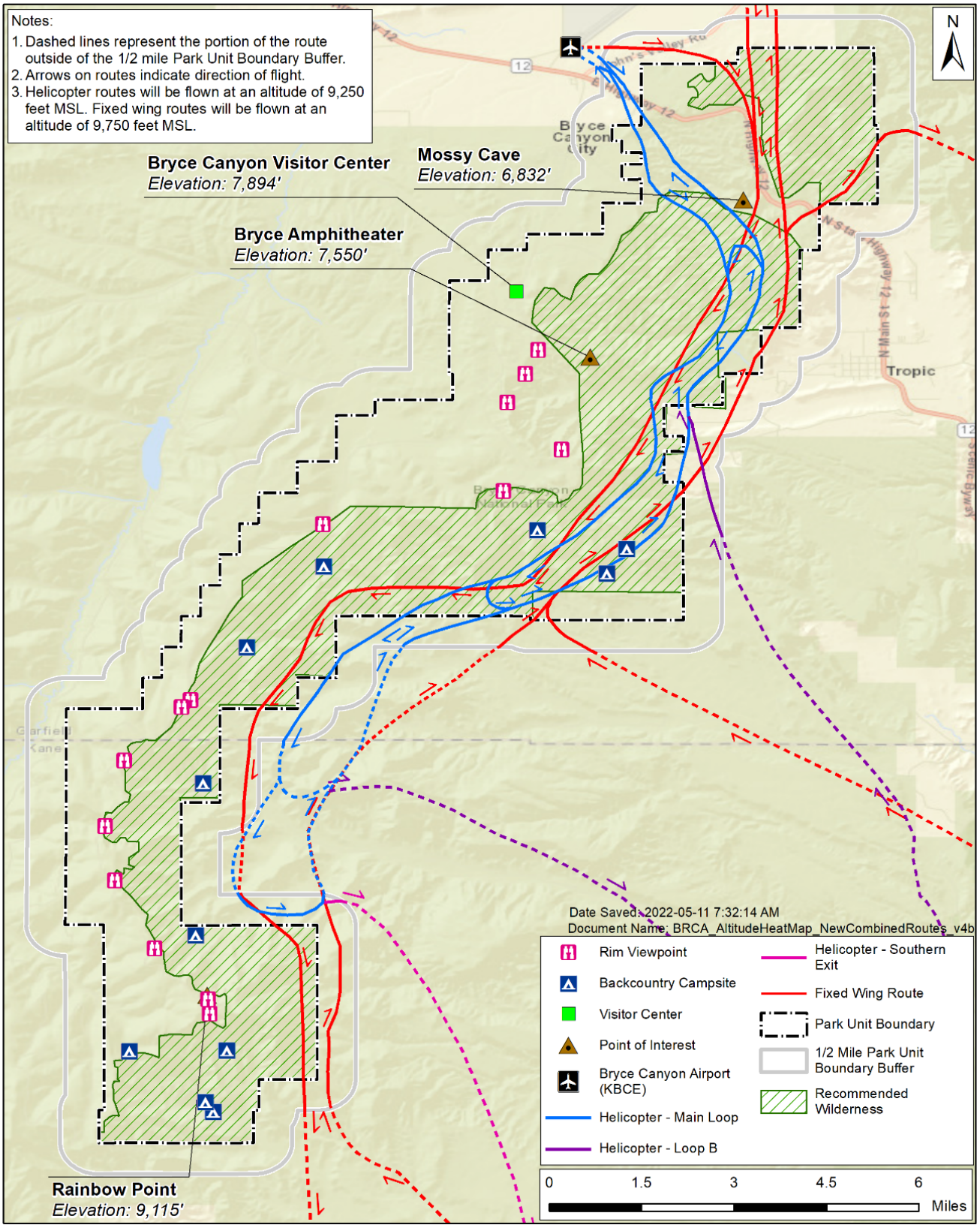

Figure 1. Commercial air tour routes over the Park

Aircraft Type

The aircraft type authorized to be used for commercial air tours is identified in Table 1. Any new or replacement aircraft must not exceed the noise level produced by the aircraft being replaced. In addition to any other applicable notification requirements, operators will notify the Federal Aviation Administration (FAA) and the National Park Service (NPS) in writing of any prospective new or replacement aircraft and obtain concurrence before initiating air tours with the new or replacement aircraft.

Day/Time

Except as provided in Section 3.8, "Quiet Technology Incentives," air tours may operate one hour after sunrise until three hours before sunset, as defined by the National Oceanic and Atmospheric Administration (NOAA).[1] Commercial air tours may operate any day of the year, except under circumstances provided in the following section entitled "Restrictions for Particular Events."

Restrictions for Particular Events

The NPS can establish temporary no-fly periods that apply to air tours for special events or planned Park management. Absent exigent circumstances or emergency operations, the NPS will provide a minimum of 15 days written notice to operators for any restrictions that temporarily restrict certain areas or certain times of day, or 60 days written notice to operators for any full-day restrictions in advance of the no-fly period. Events may include tribal ceremonies or other similar events.

Quiet Technology Incentives

The ATMP incentivizes the use of quiet technology aircraft by commercial air tour operators conducting commercial air tours over the Park. Operators that have converted to quiet technology aircraft, or are considering converting to quiet technology aircraft, may request to be allowed to extend air tours an additional two hours (i.e., up to one hour before sunset) on all days that flights are authorized. Because aviation technology continues to evolve and advance and the FAA updates its noise certification standards periodically, the aircraft eligible for this incentive will be analyzed on a case-by-case basis at the time of the operator's request to be considered for this incentive. The NPS will periodically monitor Park conditions and coordinate with the FAA to assess the effectiveness of this incentive. If implementation of this incentive results in unanticipated effects on Park resources or visitor experience, or tribal use of the Park, further agency action may be required to ensure the protection of Park resources, visitor experience, or tribal use of the Park.

Wildlife Avoidance

California condors currently do not nest or roost in the Park. However, condors may occasionally fly over the Park and there have been three known sightings of condors in the Park, two in 1999 and one in 2009. Because California condor habitat exists in the Park, protective measures are necessary should condors be identified and occupying habitat in the Park. The ATMP includes the following protective measures for California condors:

- Air tour operators are required to report visual identification of California condors to the NPS, with an optional notification to U.S. Fish and Wildlife Service (USFWS), within 24 hours of initial sighting.
- Once NPS becomes aware of the presence of California condor nests, notification and coordination will be conducted between the Park staff, the NPS Intermountain Region Wildlife Biologist and Threatened and Endangered Species Coordinator, the local USFWS field office, the air tour operators, and the Flight Standards District Office (FSDO), as necessary, to determine the best avoidance measures for operators to take. Generally, operators will be required to avoid identified nesting areas, feeding areas, or other known areas of congregation by 1 mile vertically or laterally as long as the NPS determines that other natural or cultural resources are not impacted or affected, and such avoidance measures would not result in operating conditions deemed unsafe by the FAA.
- The agencies may temporarily restrict use of air tour routes over nesting areas, feeding areas, or other known areas of congregation while: 1) working with operators to modify air tour routes (i.e., 1 mile shifts

[1] Sunrise and sunset data are available from the NOAA Solar Calculator, https://www.esrl.noaa.gov/gmd/grad/solcalc/

away from sensitive condor areas); and 2) assessing the natural, cultural, and safety impacts of any changes.
- Avoidance measures will remain in effect until the NPS determines that condors are no longer present and the NPS notifies the operators in writing that avoidance measures are no longer necessary.

Additional ATMP Parameters

The following elements of the ATMP are not anticipated to have any environmental effects:

- *Compliance* – The NPS and the FAA are both responsible for the monitoring and oversight of the ATMP. To ensure compliance, operators are required to equip all aircraft used for commercial air tours with flight monitoring technology, use flight monitoring technology during all commercial air tours under the ATMP, and to report flight monitoring data as an attachment to the operator's semi-annual reports.
- *Required Reporting* – The operators are required to submit to the FAA and the NPS semi-annual reports regarding the number of commercial air tours conducted over the Park or within ½ mile of its boundary.
- *Operator Training and Education* – When made available by Park staff, the operators/pilots will take at least one training course per year conducted by the NPS staff.
- *Annual Meeting* – At the request of either of the agencies, the Park staff, the local FAA FSDO, and all operators will meet once per year to discuss the implementation of the ATMP and any amendments or other changes to the ATMP.
- *In-Flight Communication* – For situational awareness when conducting tours of the Park, the operators will utilize Common Traffic Advisory Frequency 122.8 and report when they enter and depart a route. The pilots should identify their company, aircraft, and route to make any other aircraft in the vicinity aware of their position.
- *Hovering* – Aircraft hovering in place is prohibited.
- *Non-transferability of Allocations* – Annual operations under the ATMP are non-transferable.

CE Citation

NPS NEPA Handbook 3.3 A1 (516 DM 12): Changes or amendments to an approved action when such changes will cause no or only minimal environmental impact.

CE Justification

In 2000, Congress passed the National Parks Air Tour Management Act (NPATMA). NPATMA required operators who wish to conduct commercial air tours over national parks to apply to the FAA for authority to conduct such tours. NPATMA 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, authorizing them to conduct, on an annual basis, "the greater of (i) the number of flights used by the operator to provide the commercial air tour operations within the 12-month period prior to the date of the enactment of the act, or (ii) the average number of flights per 12-month period used by the operator to provide such operations within the 36-month period prior to such date of enactment, and, for seasonal operations, the number of flights so used during the season or seasons covered by that 12-month period."[2] Under NPATMA, the FAA was required to grant IOA for commercial air tours over the Park. IOA does not provide any operating conditions (e.g., route, altitudes, time of day, etc.) for commercial air tours other than an annual limit. In 2012, NPATMA was amended, requiring commercial air tour operators to report actual commercial air tours to the FAA and the NPS. IOA granted by the FAA consistent with NPATMA is the approved action for purposes of the CE, as it is a non-discretionary authorization directed by Congress.

[2] 49 U.S.C. § 40128(c)(2)(A)(i-ii)

Nine commercial air tour operators hold IOA to conduct a combined total of 3,131 commercial air tours over the Park each year.[3] Based on the three-year average of reporting data from 2017 to 2019, the operators conduct an average of 515 commercial air tours over the Park each year. Six operators have reported flying commercial air tours over the Park from 2017-2019. Aero-Copters of Arizona, Inc. conducts an average of 462 commercial air tours over the Park each year, Southwest Safaris conducts an average of one commercial air tour over the Park each year, American Aviation, Inc. conducts an average of three commercial air tours over the Park each year, Grand Canyon Airlines, Inc. conducts an average of 38 commercial air tours over the Park each year, Maverick Helicopters, Inc. conducts an average of one commercial air tour over the Park each year, and Papillon Airways, Inc. conducts an average of ten commercial air tours over the Park each year. See Table 2, *Reported Commercial Air Tours from 2013-2020.* 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, which is 515 commercial air tours, the existing operations 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 data due to continued abnormalities associated with the COVID-19 pandemic and the unavailability of reporting data for 2021 during most of the planning effort. Although the approved action (IOA) allowed 3,131 flights per year, the current condition of Park resources and values reflects the impact of an average of 515 flights per year, which represents existing commercial air tour operations. The ATMP sets a maximum of 515 flights per year.

The operators currently conduct commercial air tours on 16 different routes over the Park as depicted in Figure 2 below. Aero-Copters of Arizona, Inc. conducts commercial air tours on five different routes using CE-206-206 and BELL-206-B aircraft at a minimum altitude of 1,000 ft. AGL. Southwest Safaris conducts commercial air tours on one route using CE-182-R and CE-207-T207A aircraft at a minimum altitude of 1,000 ft. AGL. American Aviation, Inc. conducts commercial air tours on one route using CE-172-N, CE-207-207, and CE-207-T207A aircraft at a minimum altitude of 2,000 ft. AGL. Grand Canyon Airlines, Inc. conducts commercial air tours on three different routes using CE-208-B and DHC-6-300 aircraft at a minimum altitude of 2,000 ft. AGL. Maverick Helicopters, Inc. conducts commercial air tours on two different routes using EC-130-B4 and EC-130-T2 aircraft at a minimum altitude of 1,000 ft. AGL. Papillon Airways, Inc. conducts commercial air tours on four different routes using AS-350-B3, BHT-206-L1, BHT-206-L3, EC-130-B4, EC-130-T2, and MDHS-MD-900 aircraft at a minimum altitude of 300 ft. AGL. Commercial air tours are typically conducted between one hour after sunrise until three hours before sunset and occur year-round.

[3] Notice of Interim Operating Authority Granted to Commercial Air Tour Operators Over National Parks and Tribal Lands Within or Abutting National Parks, 70 Fed. Reg. 36,456 (June 23, 2005).

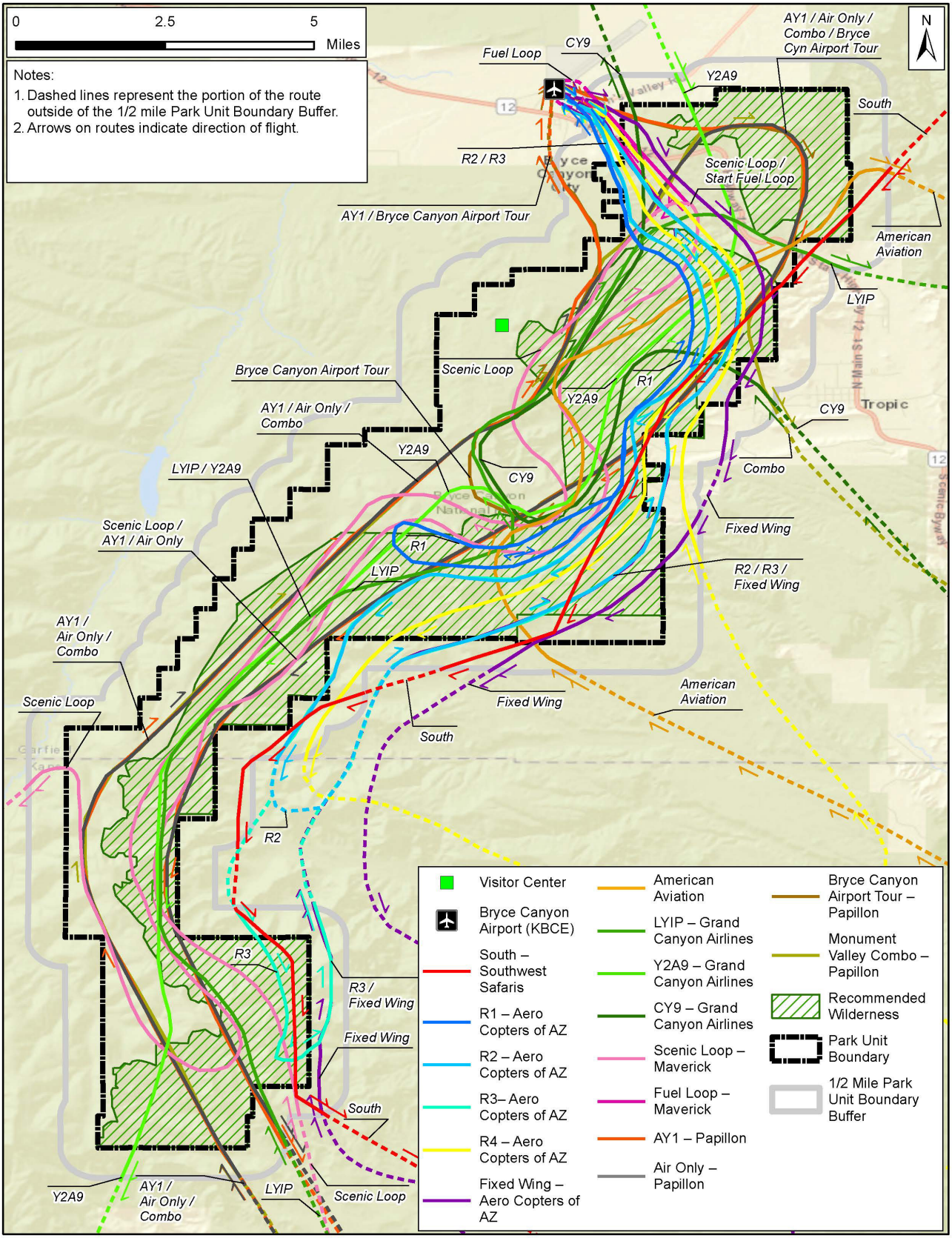

Figure 2. Existing conditions of commercial air tour routes over the Park

The ATMP limits the number of commercial air tours that are authorized over the Park or within ½ mile of its boundary to the existing three-year average of tours conducted from 2017-2019 for each operator (462 tours per year for Aero-Copters of Arizona, one tour per year for Southwest Safaris, three tours per year for American Aviation, 38 tours per year for Grand Canyon Airlines, one tour per year for Maverick Helicopters, and ten tours per year for Papillon Airways, for a combined total of 515 commercial air tours per year over the Park). The ATMP requires operators to fly on consolidated routes that reflect the most heavily utilized current routes according to operator-provided reporting data from 2017-2019. The routes authorized by the ATMP have been consolidated for the protection of the Park's natural and cultural resources as well as for aviation safety and on-the-ground visitor experience. The ATMP establishes an altitude of 9,250 ft. MSL for helicopter aircraft which results in helicopters flying at least 1,500 ft. AGL for most of the time during a commercial air tour over the Park and ½ mile buffer, whereas under existing operations, some helicopter tours are conducted as low as 300 ft. AGL and others as low as 1,000 ft AGL, depending on the operator. The ATMP establishes an altitude of 9,750 ft. MSL for fixed-wing aircraft which results in fixed-wing aircraft flying at least 2,000 ft. AGL for most of the time during a commercial air tour, consistent with most existing fixed-wing operations. Thus, the ATMP increases the minimum altitude as compared to most existing helicopter operations and maintains the minimum altitude as compared to most existing fixed-wing operations. The ATMP prohibits aircraft hovering in place. The ATMP restricts the hours during which commercial air tours may be conducted over the Park, beginning one hour after sunrise until three hours before sunset, except as provided by quiet technology incentives. The ATMP allows the Park to establish no-fly periods for special events or planned Park management.

Table 2. Reported Commercial Air Tours from 2013-2020

Operator	Aircraft	IOA	2013	2014	2015	2016	2017	2018	2019	2020[4]
Adams, Bruce M. (Southwest Safaris)	CE-182-R	23	2	1	2	0	0	1	1	3
Aero-Copters of Arizona, Inc. (Helivision, Canyon Airlines, Bryce Canyon Helicopters, Bryce Canyon Airlines)	BELL-206-B, CE-206-206	1,481	349	429	409	428	433	501	452	168
Air Grand Canyon, Inc. (Air Grand Canyon, Air Grand Canyon Family Air Tours, Air Grand Canyon Scenic Flights)	No data	15	0	0	0	0	0	0	0	0
American Aviation (Frog Air, American Air Charter)	CE-172-N, CE-207-207, CE-207-T207A	138	18	1	0	1	5	2	2	6
Grand Canyon Airlines, Inc. (Grand Canyon Airlines, Scenic Airlines, Grand Canyon Scenic Airlines)	CE-208-B, DHC-6-300	1,305*	13	0	0	26	33	17	65	76
Maverick Helicopters, Inc.	EC-130-B4, EC-130-T2	15	0	0	0	0	0	1	1	0

[4] Based on unpublished reporting data.

Papillon Airways, Inc. (Papillon Grand Canyon Helicopters, Grand Canyon Helicopters)	AS-350-B3, BHT-206-L1, BHT-206-L3, EC-130-B4, EC-130-T2, MDHS-MD-900	12	3	9	7	2	9	10	11	10
Sundance Helicopters, Inc. (Sundance Helicopters, Helicopter Services, Helicop Tours)	No data	12	0	0	0	0	0	0	0	0
Westwind Aviation, Inc. (Westwind Air Service)	No data	130	0	0	0	0	0	0	0	0
Total		**3,131**	**385**	**440**	**418**	**457**	**480**	**532**	**532**	**263**

*Grand Canyon Airlines purchased Scenic Airlines between 2013 and 2014. Scenic Airline's IOA was 1,094 resulting in a total of 1,305 IOA for Grand Canyon Airlines. Prior to that, Grand Canyon Airlines had 211 IOA.

Consistent with Council on Environmental Quality regulations, the baseline from which to measure environmental impacts of the ATMP is the current condition of the human environment. In this case, the baseline is the current condition of Park resources and values, as impacted by current commercial air tours flown under IOA (between 480 and 532 commercial air tours per year, or an average of 515 commercial air tours per year). Though IOA does not set a minimum altitude or set designated routes, the baseline also includes the route and altitude information provided by the operators, as well as timing and daily air tour information during the years of 2017-2019 as reported by the operators. Environmental impacts or effects are changes to the human environment (natural and physical) from the ATMP.[5] Because the ATMP is very similar to existing commercial air tour operations and includes new operating parameters designed to improve resource protections and visitor experience, impacts resulting from effects of the ATMP will result in no or only minimal environmental impacts. Under the ATMP, the number of commercial air tours may not increase without an amendment to the ATMP, guaranteeing no greater impacts to the environment will occur without subsequent review consistent with the National Environmental Policy Act (NEPA). An amendment would also be required for a change in the designated routes beyond that permitted by adaptive management or where the impacts have been already analyzed by the agencies. In addition, the inclusion of mitigating elements including altitude restrictions, time of day restrictions, and quiet aircraft technology incentives will further reduce the impacts of commercial air tours under the ATMP, which will lead to beneficial impacts to the environment compared to current conditions. The use of CE 3.3 A1 is appropriate because environmental impacts resulting from the ATMP will result in no or only minimal changes to the current condition of Park resources and values and impacts will be beneficial compared to current conditions.

Even if impacts of the ATMP were measured against the total number of commercial air tours authorized under IOA for the Park (though such a baseline does not reflect actual commercial air tours conducted over the Park as demonstrated by reported data and is not, therefore, an accurate depiction of the current condition of the human environment) impacts compared to current conditions will be beneficial because the ATMP will set the maximum number of commercial air tours at a level much lower than the maximum number of commercial air tours authorized under IOA and includes mitigating elements noted above. Therefore, even if the analysis were approached from a baseline of IOA, the CE would still be an acceptable NEPA pathway since NEPA is primarily concerned with adverse impacts, not beneficial ones like those that will result from the ATMP. In conclusion, the use of this CE is justified because the changes to the approved action (IOA) from the implementation of the ATMP will result in no or only minimal environmental impacts. The use of the CE is consistent with NEPA.

[5] See 40 C.F.R § 1508.1(g)

Table 3. Extraordinary Circumstances

If implemented, would the proposal...	Yes/No	Notes
A. Have significant impacts on public health or safety?	No	Commercial air tours are subject to the FAA regulations for protecting individuals and property on the ground, and preventing collisions between aircraft, land or water vehicles, and airborne objects. The operators must continue to meet the FAA safety regulations. Therefore, health and safety impacts will not be significant.
B. Have significant impacts on such natural resources and unique geographic characteristics as historic or cultural resources; park, recreation, or refuge lands; wilderness areas; wild or scenic rivers; national natural landmarks; sole or principal drinking water aquifers; prime farmlands; wetlands (Executive Order 11990); floodplains (Executive Order 11988); national monuments; migratory birds; and other ecologically significant or critical areas?	No	As noted above, the ATMP authorizes the same number of flights per year as the average number flown from 2017-2019 on similar routes when compared to existing operations. Therefore, there will be no or minimal change in the potential for impacts compared to current conditions. The designated routes, altitude requirements, and time of day restrictions further mitigate any potential adverse impacts and will ensure that no significant adverse environmental effects will occur and that impacts will be beneficial compared to current conditions. *See* ESF for a full description of the impacts considered.
C. Have highly controversial environmental effects or involve unresolved conflicts concerning alternative uses of available resources (NEPA section 102(2)(E))?	No	There are no highly controversial environmental effects. Impacts from commercial air tours generally are understood from existing modeling and literature and can be projected for Park resources. Information and models used to assess impacts for commercial air tours, as discussed in the ESF, are consistent with peer reviewed literature. Additionally, there are no unresolved conflicts over available resources. This extraordinary circumstance applies to the use or consumption of resources in a way that prohibits another use of the same resource. Commercial air tours do not consume NPS resources. The impacts from commercial air tours affect resources but the resources remain present for others to enjoy or appreciate.
D. Have highly uncertain and potentially significant environmental effects or involve unique or unknown environmental risks?	No	There are no highly uncertain impacts associated with commercial air tours over the Park. The significance of the environmental effects is to be measured by the change from current condition. As noted above, the ATMP authorizes the same number of flights per year as the average number flown from 2017-2019 on similar routes when compared to existing operations. Therefore, there will be no or minimal impacts compared to current conditions. As also noted above, the designated routes, altitude requirements, and time of day restrictions further mitigate any potential adverse impacts and will ensure that no significant adverse environmental effects will occur and that

		impacts will be beneficial compared to current conditions. *See* ESF for more information.
E. Establish a precedent for future action or represent a decision in principle about future actions with potentially significant environmental effects?	No	The ATMP will not make any decisions in principle about future actions or set a precedent for future action. The NPS and the FAA may choose to amend the ATMP at any time consistent with NPATMA.
F. Have a direct relationship to other actions with individually insignificant, but cumulatively significant, environmental effects?	No	The FAA and the NPS qualitatively considered the cumulative impacts of commercial air tours along with impacts from existing activities described in the ESF. In some cases, the noise contribution from other sources may be substantial, such as high-altitude jets or roadway traffic. The addition of commercial air tour noise is such a small contribution of noise overall that it is unlikely they would result in noticeable or meaningful change in the overall acoustic environment. Commercial air tours over roadways are likely to be masked by existing noise and therefore the impacts would be de minimis. Finally, the ATMP does not add new noise to the existing acoustic environment and visual impacts associated with aircraft are most noticeable because of noise and have been found to be not significant. Therefore, when considering other sources of noise in the Park that are likely to continue under the ATMP, the continuation of 515 commercial air tours will not result in a meaningful change to the current condition of the visual or auditory landscape at the Park, and no significant cumulative environmental impacts are likely to result from the ATMP. *See* ESF for more information.
G. Have significant impacts on properties listed or eligible for listing on the National Register of Historic Places, as determined by either the bureau or office?	No	As noted above, the ATMP authorizes the same number of flights per year as the average number flown from 2017-2019 on similar routes when compared to existing operations. Therefore, there will be no or minimal change in the potential for impacts compared to current condition. The designated routes, altitude requirements, and time of day restrictions further mitigate any potential adverse impacts; and will ensure that no significant adverse environmental effects will occur and that impacts will be beneficial compared to current conditions. The authorized level of commercial air tours is not anticipated to adversely affect properties eligible for listing on the National Register of Historic Places. The FAA, as the lead agency and in coordination with NPS, consulted with the State Historic Preservation Office, Tribal Historic Preservation Offices, federally recognized tribes and other consulting parties to reach this determination pursuant to 36 CFR Part 800. The FAA subsequently concluded that under Section 106 of

		the National Historic Preservation Act, there will be no adverse effects to historic properties from this undertaking. The FAA proposed this finding to all consulting parties via letter dated August 5, 2022. The SHPO concurred with the finding on August 10, 2022. The FAA did not receive any objections to the finding. *See* ESF for more information.
H. Have significant impacts on species listed or proposed to be listed on the List of Endangered or Threatened Species, or have significant impacts on designated Critical Habitat for these species?	No	As noted above, the ATMP authorizes the same number of flights per year as the average number flown from 2017-2019 on similar routes when compared to existing operations, and increases the minimum altitude as compared to most existing helicopter operations and maintains the minimum altitude as compared to most existing fixed-wing operations. Therefore, there will be no or minimal change in the potential for impacts compared to current conditions. The designated routes, altitude requirements, and time of day restrictions further mitigate any potential adverse impacts and will ensure that no significant adverse environmental effects will occur and that impacts will be beneficial compared to current conditions. The NPS has determined the ATMP *may affect, but is not likely to adversely affect* California condor, Mexican spotted owl, southwestern willow flycatcher, and the western yellow-billed cuckoo and the USFWS concurred with this determination on August 4, 2022. Therefore, there is no potential for significant impacts to any listed species associated with the commercial air tour activity proposed in the ATMP. *See* ESF for more information.
I. Violate a federal, state, local or tribal law or requirement imposed for the protection of the environment?	No	The ATMP will comply with all applicable federal, state, local and tribal laws. *See* ESF for more information.
J. Have a disproportionately high and adverse effect on low income or minority populations (EO 12898)?	No	The ATMP will not have a disproportionate effect on low income or minority populations. *See* ESF for more information.
K. Limit access to and ceremonial use of Indian sacred sites on federal lands by Indian religious practitioners or adversely affect the physical integrity of such sacred sites (EO 130007)?	No	The ATMP will not limit access to or change ceremonial use of Indian sacred sites on federal lands in any way. Sacred ceremonies or other Tribal activities which occur without notice to the NPS may be interrupted by noise, however, commercial air tours have no effect on Tribal access. Additionally, the ATMP does not involve any ground disturbing or other activities that would adversely affect the physical integrity of sacred sites. *See* ESF for more information.
L. Contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area or actions that may promote the	No	The ATMP does not involve any ground disturbance or other activities with the potential to contribute to the introduction, continued existence, spread, growth, or expansion of invasive or exotic species in the Park.

introduction, growth, or expansion of the range of such species (Federal Noxious Weed Control Act and Executive Order 13112)?		

Decision

I find that the action fits within the categorical exclusion above. Therefore, I am categorically excluding the described project from further NEPA analysis. No extraordinary circumstances apply.

JAMES IRELAND

Digitally signed by JAMES IRELAND
Date: 2022.10.04 07:38:56 -06'00'

James F. Ireland
Superintendent
Bryce Canyon National Park
National Park Service

Date

APPENDIX D

FAA Categorical Exclusion Adoption

Federal Aviation Administration

Adoption of the Categorical Exclusion Determination by the National Park Service for the Bryce Canyon National Park Air Tour Management Plan.

The National Parks Air Tour Management Act (NPATMA) requires that all commercial air tour operators conducting or intending to conduct a commercial air tour operation over a unit of the National Park System apply to the Federal Aviation Administration (FAA) for authority to undertake such activity. 49 U.S.C. § 40128(a)(2)(A). NPATMA, as amended, further requires the FAA, in cooperation with the National Park Service (NPS), to establish an Air Tour Management Plan (ATMP) or voluntary agreement for each park that did not have such a plan or agreement in place at the time the applications were made, unless a park has been exempted otherwise from this requirement. 49 U.S.C. § 40128(b)(1)(A).

The FAA and the NPS are proposing to implement the ATMP for Bryce Canyon National Park (Park), in accordance with NPATMA, as amended, its implementing regulations (14 Code of Federal Regulations (CFR) Part 136), and all other applicable laws and policies. This document memorializes the FAA's adoption of the NPS determination that its categorical exclusion (CATEX) covers the scope of its proposed action.

1. Regulatory Framework

The Council on Environmental Quality (CEQ) Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act (NEPA), 40 CFR Parts 1500-1508, require an agency wishing to apply a CATEX identified in its agency NEPA procedures to first make a determination that the CATEX covers the proposed action and to "evaluate the action for extraordinary circumstances in which a normally excluded action may have a significant effect." 40 CFR § 1501.4(b). If the agency determines that no extraordinary circumstances exist or that "there are circumstances that lessen the impacts or other conditions sufficient to avoid significant effects," the agency may categorically exclude the proposed action. 40 CFR §1501.4(b)(1).

Section 1506.3(a) of the CEQ regulations authorizes agencies to adopt other agencies' NEPA documents under certain conditions, while section 1506.3(d) of the regulations applies specifically to the adoption of other agencies' CATEX determinations and reads as follows:

> An agency may adopt another agency's determination that a categorical exclusion applies to a proposed action if the action covered by the original categorical exclusion determination and the adopting agency's proposed action are substantially the same. The agency shall document the adoption.

40 CFR § 1506.3(d). This document has been prepared to comply with that Regulation.

2. The NPS's Proposed Action

The NPS's proposed action is to implement an ATMP for the Park. The ATMP includes operating parameters to mitigate impacts from commercial air tours on Park resources, which are described in the NPS Categorical Exclusion Documentation Form attached to the Record of Decision (ROD) as Appendix C.

3. FAA's Proposed Action

Like the NPS, the FAA's Proposed Action is to implement the ATMP for the Park subject to the operating parameters described in the NPS Categorical Exclusion Documentation Form (see Appendix C of the ROD). In addition, the FAA will update the operations specifications (OpSpecs) for the air tour operators to incorporate the terms and conditions of the ATMP accordingly.

4. Scope of Applicable CATEX and the NPS Extraordinary Circumstances Analysis

For its proposed action, the NPS has applied the Categorical Exclusion from the NPS NEPA Handbook 3.3 A1 (516 DM 12): "Changes or amendments to an approved action when such changes will cause no or only minimal environmental impact."

Per 40 CFR § 1501.4(b), an agency must first determine that the categorical exclusion identified in its agency NEPA procedures covers the proposed action. In this case, the NPS states as follows:

> In 2000, Congress passed the National Parks Air Tour Management Act (NPATMA). NPATMA required operators who wish to conduct commercial air tours over national parks to apply to the FAA for authority to conduct such tours. NPATMA 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, authorizing them to conduct, on an annual basis, "the greater of (i) the number of flights used by the operator to provide the commercial air tour operations within the 12-month period prior to the date of the enactment of the act, or (ii) the average number of flights per 12-month period used by the operator to provide such operations within the 36-month period prior to such date of enactment, and, for seasonal operations, the number of flights so used during the season or seasons covered by that 12-month period." Under NPATMA, the FAA issued IOA for commercial air tours over the Park. IOA does not provide any operating conditions (e.g., route, altitudes, time of day, etc.) for commercial air tours other than an annual limit. In 2012, NPATMA was amended, requiring commercial air tour operators to report actual commercial air tours to the FAA and the NPS. IOA issued by the FAA consistent with NPATMA is the approved action for purposes of the CE, as it is a non-discretionary authorization directed by Congress.
>
> …The use of CE 3.3 A1 is appropriate because environmental impacts resulting from the ATMP will result in no or only minimal changes to the current condition of Park resources and values and impacts will be beneficial compared to current conditions.

For a complete discussion of the NPS's justification for using the above-noted CE, *see* the NPS's Categorical Exclusion Documentation Form, attached to the ROD as Appendix C.

Section 1501.4(b) of the CEQ regulations requires an agency seeking to categorically exclude a proposed action to "evaluate the action for extraordinary circumstances in which a normally excluded action may have a significant effect." The NPS confirms it has performed an appropriate extraordinary

circumstances analysis. *See* the NPS's Categorical Exclusion Documentation Form, attached to the ROD as Appendix C, and the NPS's Environmental Screening Form, attached to the ROD as Appendix B.

5. FAA's "Substantially the Same Action" Determination

As noted above, the CEQ Regulations provide that an agency "may adopt another agency's determination that a categorical exclusion applies to a proposed action **if the action covered by the original categorical exclusion determination and the adopting agency's proposed action are substantially the same.**" 40 CFR § 1506.3(d) (emphasis added). Thus, in order to adopt the NPS's CATEX determination, the FAA must conclude that its proposed action and the NPS's Proposed Action are "substantially the same."

In the preamble to the final amended regulations, CEQ stated:

> The final rule provides agencies the flexibility to adopt another agency's determination that a [CATEX] applies to an action when the actions are substantially the same to address situations where a proposed action would result in a [CATEX] determination by one agency and an EA and FONSI by another agency.

85 Fed. Reg. 43304, 43336 (July 16, 2020).

In this case, the FAA has been directed by Congress to implement an ATMP for the Park in cooperation with the NPS. The proposed action is an action to be taken jointly by both agencies, as NPATMA requires. Therefore, the proposed actions of the agencies are necessarily substantially the same and any reasonably foreseeable changes to the human environment arising from the NPS's implementation of the proposed action are identical to those that would arise from the FAA's proposed action. While the FAA's action also includes updating the operators' OpSpecs, the update would simply further require the operators to comply with the terms and conditions contained in the ATMP and would not result in any impacts beyond those that could result from implementation of the ATMP itself. Accordingly, the FAA determines that the NPS's Proposed Action and FAA's Proposed Action are substantially the same.[1]

6. FAA's Extraordinary Circumstances Analysis

Extraordinary circumstances are factors or circumstances in which a normally categorically excluded action may have a significant environmental impact that then requires further analysis in an EA or an EIS. For FAA proposed actions, extraordinary circumstances exist when the proposed action: (1) involves any of the circumstances described in paragraph 5-2 of FAA Order 1050.1F; and (2) may have a significant impact. *See* FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures*, section 5-2.

The most potentially relevant circumstances listed in paragraph 5-2 of FAA Order 1050.1F are as follows:[2]

[1] Updating the operators' OpSpecs is also independently subject to an FAA CATEX covering "Operating specifications and amendments that do not significantly change the operating environment of the airport." FAA Order 1050.1F, § 5-6.2(d).

[2] Section 5-2(b)(10) of FAA Order 1050.1F includes a circumstance reading "[i]mpacts on the quality of the human environment that are likely to be highly controversial on environmental grounds" and explains that "[t]he term 'highly controversial on environmental grounds' means there is a substantial dispute involving reasonable disagreement over the degree, extent, or nature of a proposed action's environmental impacts or over the action's risks of causing environmental harm. Mere opposition is not sufficient for a proposed action or its impacts to be considered highly controversial on environmental grounds." The 2020 updates to the CEQ regulations eliminated

- An adverse effect on cultural resources protected under the National Historic Preservation Act (*see* ROD Appendix F);
- An impact on properties protected under Section 4(f) of the Department of Transportation Act;
- An impact on natural, ecological, or scenic resources of Federal, state, tribal, or local significance (e.g., federally listed or proposed endangered, threatened, or candidate species, or designated or proposed critical habitat under the Endangered Species Act) (*see* ROD Appendix E);
- An impact on national marine sanctuaries or wilderness areas;
- An impact to noise levels at noise sensitive areas;
- An impact on air quality or violation of Federal, state, tribal, or local air quality standards under the Clean Air Act; and
- An impact on the visual nature of surrounding land uses.

In support of this adoption, the FAA performed its own extraordinary circumstances analysis to ensure that a CATEX was the appropriate level of environmental review and adoption of the NPS's CATEX determination was permissible. The FAA evaluated each of its extraordinary circumstances to determine if any would have the potential for significant impacts and determined that no extraordinary circumstances exist. *See* Documentation of FAA's Extraordinary Circumstances Analysis for the Park, attached as Exhibit 1.

7. Section 4(f) of the Department of Transportation Act

Section 4(f) of the Department of Transportation Act (codified at 49 U.S.C. § 303(c)), states that, subject to exceptions for *de minimis* impacts:

> … the Secretary may approve a transportation program or project…requiring the use of publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge of national, State, or local significance, or land of an historic site of national, State, or local significance (as determined by the Federal, State, or local officials having jurisdiction over the park, area, refuge, or site) only if –
>
> 1. There is no prudent and feasible alternative to using that land; and
>
> 2. The program or project includes all possible planning to minimize harm to the park, recreation area, wildlife and waterfowl refuge, or historic site resulting from the use.

The term "use" refers to both direct (physical) and indirect (constructive) impacts to Section 4(f) resources. A 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. Under the ATMP, 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.

To comply with Section 4(f) and as part of its extraordinary circumstances analysis, the FAA prepared a 4(f) analysis, which is attached as Exhibit 2, and determined that there would be no use of any 4(f) resource associated with the implementation of the proposed action. As part of this analysis, the FAA consulted with Officials with Jurisdiction of 4(f) resources in the study area. Further information about those consultations is included in Exhibit 2.

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the "intensity" factor on which this circumstance is based. The FAA nevertheless considered this factor in its extraordinary circumstances analysis for disclosure purposes and to the extent relevant.

8. Attachments:

The FAA prepared this document on review and contemplation of the documents appended to the ROD in addition to the following documents, which are attached hereto:

- Exhibit 1: Documentation of FAA Extraordinary Circumstances Analysis
- Exhibit 2: FAA Section 4(f) Analysis for Bryce Canyon National Park

9. Adoption Statement

In accordance with 40 CFR § 1506.3(d), the FAA hereby finds that the NPS's and FAA's proposed actions are substantially the same, that no extraordinary circumstances exist, and that adoption of the NPS's CATEX determination is otherwise appropriate. Accordingly, the FAA hereby adopts the NPS's CATEX determination.

Approved: GRADY B STONE Digitally signed by GRADY B STONE Date: 2022.10.06 14:12:08 -07'00'
Date:_____

Grady Stone, Regional Administrator
Northwest Mountain Region
Federal Aviation Administration

EXHIBIT 1

Documentation of FAA Extraordinary Circumstances Analysis

The FAA's Extraordinary Circumstances Analysis
For Bryce Canyon National Park ATMP

Extraordinary Circumstance	Yes	No	Notes
1. Is the action likely to have an adverse effect on cultural resources protected under the National Historic Preservation Act of 1966, as amended?		✓	The Federal Aviation Administration (FAA) in coordination with the NPS, consulted with the Utah State Historic Preservation Office, Native American tribes, and other consulting parties on the potential impacts of the ATMP on Historic Properties, including cultural landscapes as part of Section 106 consultation. That consultation process led to a finding that the ATMP will have no adverse effect on historic properties. The FAA proposed this finding to all consulting parties via letter dated August 5, 2022. The SHPO concurred with the finding on August 10, 2022. The FAA did not receive any objections to the finding. See Section 106 documentation for more information.
2. Is the action likely to have an impact on properties protected under Section 4(f) of the Department of Transportation Act?		✓	The ATMP limits the number of commercial air tours to 515 tours per year and maintains similar routes as are currently flown under existing conditions. Overall, noise impacts associated with commercial air tours over the Park are not expected to measurably change, since the ATMP authorizes the same number of flights per year as the average number of flights from 2017-2019, requires commercial air tours to maintain similar routes, and requires some commercial air tour operators to fly at increased altitudes as compared to those flown under existing conditions. Refer to the *Noise Technical Analysis*. For purposes of assessing noise impacts from commercial air tours on the acoustic environment of the Park under the National Environmental Policy Act (NEPA), the FAA noise evaluation is based on Yearly[1] Day Night Average Sound Level (Ldn or DNL); the cumulative noise energy exposure from aircraft over 24 hours. The DNL analysis indicates that the ATMP will not result in any noise impacts that would be "significant" or "reportable" under FAA's policy for NEPA. In addition, visual impacts to Section 4(f) resources will be similar to impacts currently occurring because the number of authorized flights under the ATMP will be the same as the average number of flights from 2017-2019, and routes will remain similar as compared to existing conditions. After consulting with officials with jurisdiction over appropriate 4(f) resources,

[1] As required by FAA policy, the FAA typically represents yearly conditions as the Average Annual Day (AAD). However, because ATMP operations in the park occur at low annual operational levels and are highly seasonal in nature it was determined that a peak day representation of the operations would more adequately allow for disclosure of any potential impacts. A peak day has therefore been used as a conservative representation of assessment of AAD conditions.

Extraordinary Circumstance	Yes	No	Notes
			the FAA has determined that the ATMP will not result in substantial impairment of Section 4(f) resources; therefore, no constructive use of a Section 4(f) resource associated with the ATMP will occur. See Section 4(f) analysis.
3. Is the action likely to have an impact on natural, ecological, or scenic resources of Federal, state, tribal or local significance?		✓	The ATMP limits the number of commercial air tours to 515 tours per year and maintains similar routes as are currently flown under existing conditions. Therefore, impacts to viewsheds will be similar to impacts currently occurring because the number of authorized flights under the ATMP will be the same as the average number of flights from 2017-2019 and the routes will remain similar as compared to existing conditions. Furthermore, since altitudes will increase for some operators as compared to existing conditions and therefore visitors are less likely to notice overflights, the ATMP is expected to result in beneficial impacts to viewsheds compared to current conditions. Therefore, the ATMP will not impact scenic resources. The FAA and NPS determined the ATMP *may affect, not likely to adversely affect* California condor, Mexican spotted owl, southwestern willow flycatcher and western yellow-billed cuckoo. The USFWS concurred with this determination on August 4, 2022. *See* Section 7 correspondence.
4. Is this action likely to have an impact on the following resources:			
Resources protected by the Fish and Wildlife Coordination Act		✓	The ATMP will not result in the control or modification of a natural stream or body of water. Therefore, no resources protected by the Fish and Wildlife Coordination Act will be impacted.
Wetlands		✓	While wetlands are present within the project area, the ATMP will not result in ground disturbance or fill. Therefore, no impacts to wetlands will occur.
Floodplains		✓	While floodplains are present within the project area, the ATMP will not result in ground disturbance or fill. Therefore, no impacts to floodplains will occur.
Coastal zones		✓	No coastal zones are located within the Park or its ½-mile boundary.
National marine sanctuaries		✓	No national marine sanctuaries are located within the Park or its ½-mile boundary.
Wilderness areas		✓	Approximately 58% of the Park is recommended wilderness, which per policy, the NPS manages as designated wilderness. Because commercial air tours do not land in wilderness or parks, the undeveloped quality of the Park's recommended wilderness will be maintained.

Extraordinary Circumstance	Yes	No	Notes
			Because the ATMP authorizes the same number of commercial air tours as the average number of flights from 2017-2019, and similar routes will be used, impacts to solitude and the natural quality of recommended wilderness character will be similar or decrease compared to impacts currently occurring.
National Resource Conservation Service-designated prime and unique farmlands		✓	The ATMP will not result in ground disturbance. Therefore, the project will not impact designated prime and unique farmlands.
Energy supply and natural resources		✓	The ATMP will not affect energy supplies or natural resources.
Resources protected under the Wild and Scenic Rivers Act and rivers, or river segments listed on the Nationwide Rivers Inventory (NRI)		✓	No designated, eligible, or suitable wild and scenic rivers are located within the Park or its ½-mile boundary. Therefore, the ATMP will not impact waterways potentially eligible, suitable, or designated as Wild and Scenic Rivers.
Solid waste management		✓	The ATMP will not result in the generation of solid waste, construction, or demolition debris.
5. Is the action likely to cause a division or disruption of an established community, or a disruption of orderly, planned development, or an inconsistency with community plans or goals?		✓	The ATMP will not disrupt communities or development plans or goals.
6. Is the action likely to cause an increase in surface transportation congestion?		✓	The ATMP will not cause an increase in surface transportation congestion.
7. Is the action likely to have an impact on noise levels in noise-sensitive areas?		✓	Overall, noise impacts associated with commercial air tours over the Park are not expected to measurably change, since the ATMP authorizes the same number of flights per year as the average number of flights from 2017-2019 on similar routes, and requires some commercial air tour operators to fly at increased altitudes as compared to those flown under existing conditions. Refer to the *Noise Technical Analysis* in the ESF. 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 Yearly Day Night Average Sound Level (Ldn or DNL); the cumulative noise energy exposure from aircraft over 24 hours. The DNL analysis indicates

Extraordinary Circumstance	Yes	No	Notes
			that the undertaking will not result in any noise impacts that would be "significant" or "reportable" as defined in FAA Order 1050.1F.
8. Is the action likely to have an impact on air quality or violate Federal, state, tribal, or local air quality standards under the Clean Air Act?		✓	The findings from the air quality screening analysis demonstrate that implementing the ATMP will not meaningfully impact local air quality and will not have regional impacts from implementation of the ATMP in the Park. See *Air Quality Technical Analysis* in the ESF.
9. Is the action likely to have an impact on water quality, aquifers, public water supply systems, or state or tribal water quality standards under the Clean Water Act or the Safe Drinking Water Act?		✓	The ATMP will not result in ground disturbance or other activities that will impact water quality, aquifers, public water supply systems, or water quality standards under the Clean Water Act or Safe Drinking Water Act.
10. Is the action likely to be highly controversial on environmental grounds?		✓	There are no highly controversial environmental effects. The term "highly controversial on environmental grounds" means there is a substantial dispute involving reasonable disagreement over the degree, extent, or nature of a proposed action's environmental impacts or over the action's risks of causing environmental harm. Mere opposition is not sufficient for a proposed action or its impacts to be considered highly controversial on environmental grounds. See FAA Order 1050.1F 5-2(b)(10)[2]. Impacts from commercial air tours generally are understood from existing modeling and literature and can be accurately projected for Park resources. Information and models used to assess impacts for commercial air tours, as discussed in the NPS CE/ESF, is consistent with peer reviewed literature. Therefore, the ATMP will not result in substantial dispute involving reasonable disagreement over the degree, extent, or nature of the environmental impacts or the risk of causing environmental harm.
11. Is the action likely to be inconsistent with any Federal, State, Tribal, or local law relating to the environmental aspects of the project?		✓	The ATMP will be consistent with all applicable Federal, State, Tribal, and local law.

[2] The 2020 updates to the Council on Environmental Quality Regulations for Implementing the Procedural Provisions of NEPA eliminated the "intensity" factor on which this circumstance is based. It is nevertheless included for disclosure purposes and to the extent relevant.

Extraordinary Circumstance	Yes	No	Notes
12. Is the action likely to directly, indirectly, or cumulatively create a significant impact on the human environment?		✓	The FAA and NPS qualitatively considered the cumulative impacts of commercial air tours along with impacts from existing activities described in the NPS CE/ESF. In some cases, the noise contribution from other sources may be substantial, such as high-altitude jets or roadway traffic. In those cases, the addition of commercial air tour noise is such a small contribution of noise overall that it is unlikely they will result in noticeable or meaningful change in the overall acoustic environment. Commercial air tours over roadways are likely to be masked by existing noise and therefore the impacts will be de minimis. Finally, the ATMP does not add new noise to the existing acoustic environment. Therefore, when considering other sources of noise in the Park that are likely to continue under the ATMP, the continuation of 515 commercial air tours per year will not result in a meaningful change to the current condition of the visual or auditory landscape at the Park.

**Extraordinary circumstances exist when the proposed action (1) involves any of the listed circumstances, and (2) may have significant impacts (FAA Order 1050. 1F para. 5-2 and 40 CFR § 1508.4). See also FAA Order 1050.1F Desk Reference for a more detailed description of the analysis for each extraordinary circumstance.*

EXHIBIT 2

FAA Section 4(f) Analysis for Bryce Canyon National Park

Section 4(f) Analysis in FAA Adoption Document

Table of Contents

Introduction

The Federal Aviation Administration (FAA) prepared this document to analyze and evaluate the Proposed Action's potential impacts to resources protected under Section 4(f) of the U.S. Department of Transportation Act (Section 4(f)). The Proposed Action is to implement an Air Tour Management Plan (ATMP) at Bryce Canyon National Park (the Park). As land acquisition, construction, or other ground disturbance activities would not occur under the ATMP, the Proposed Action would not have the potential to cause a direct impact to 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. 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. Department of Transportation (USDOT) and its operating administrations, including the FAA.

This document describes Section 4(f) regulations and requirements, the study area for Section 4(f), the process used to identify Section 4(f) resources in the study area, and consideration of potential impacts that could result in substantial impairment to Section 4(f) resources in the study area.

Regulatory Context

Section 4(f) of the Department of Transportation Act (codified at 49 U.S.C. § 303(c)), states that, subject to exceptions for *de minimis* impacts:

> "… the Secretary may approve a transportation program or project…requiring the use of publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge of national, State, or local significance, or land of an historic site of national, State, or local significance (as determined by the Federal, State, or local officials having jurisdiction over the park, area, refuge, or site) only if –

1. There is no prudent and feasible alternative to using that land; and
2. The program or project includes all possible planning to minimize harm to the park, recreation area, wildlife and waterfowl refuge, or historic site resulting from the use."

The term "use" refers to both direct (physical) and indirect (constructive) impacts to Section 4(f) resources. A 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. Under the ATMP, 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 uses procedures in FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures*[1] for meeting Section 4(f) requirements. Federal Highway 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.[2] The FAA requires consideration of noise impacts for proposed changes in air traffic procedures or airspace redesign across a study area which may extend vertically from the surface to 10,000 feet above ground level (AGL).[3] 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 Day Night Average Sound level (DNL), which is considered the best measure of impacts to 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. The FAA has consulted with the National Park Service (NPS) and included supplemental noise metrics in the Section 4(f) analysis for the ATMP (see Modeling Noise Impacts below).

Section 4(f) is applicable to all historic sites of national, State, or local significance, whether or not they are publicly owned or open to the public. Except in unusual circumstances, Section 4(f) protects only those historic sites that are listed or eligible for inclusion on the National Register of Historic Places (NRHP).[4] Historic sites are normally identified during the process required under Section 106 of the National Historic Preservation Act. Section 4(f) is not applicable to privately owned parks, recreation areas, and wildlife and waterfowl refuges.

Section 4(f) Resources

The study area for considering Section 4(f) resources for the ATMP consists of the Park and ½ mile buffer outside of the boundary of the Park. The study area for Section 4(f) resources also corresponds

[1] Federal Aviation Administration. 2015. 1050.1F - *Environmental Impacts: Policies and Procedures*. Also see 1050.F Desk Reference (Version 2, February 2020).
[2] See 1050.1F Desk Reference, Section 5-3.
[3] Department of Transportation, Federal Aviation Administration, Order 1050.1F, *Environmental Impacts: Policies and Procedures*, Appendix B. Federal Aviation Administration Requirements for Assessing Impacts Related to Noise and Noise-Compatible Land Use and Section 4(f) of the Department of Transportation Act (49 U.S.C. § 303), Para. B-1.3, Affected Environment. July 16, 2015.
[4] If a historic site is not NRHP-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 and the 1050.1F Desk Reference, for further detail.

with the Area of Potential Effects (APE) used for compliance with Section 106 of the National Historic Preservation Act (NHPA) of 1966 (Section 106) for the Park. See Figure 1 for a depiction of the Section 4(f) study area. Historic properties were identified as part of the Section 106 consultation process. Parks, recreational areas, and wildlife and waterfowl refuges were identified using public datasets from Federal, State, and local sources, which included the U.S. Forest Service and Bureau of Land Management. Each resource that intersected the study area (i.e., some portion of the property occurs within the Park or ½ mile buffer around the Park) was included in the Section 4(f) analysis.

Table 1 lists Section 4(f) historic sites and Table 2 shows Section 4(f) parks and recreational areas identified in the study area.[5] There were no wildlife or waterfowl refuges identified in the study area. Figure 1 shows a map of all Section 4(f) resources within the study area.

Table 1. Section 4(f) historic sites within the study area

Property Name	Official(s) with Jurisdiction	Property Type	Eligibility Status	Significant Characteristics
Bryce Canyon Horse Barn	NPS, State Historic Preservation Officer (SHPO)	Building	Listed	Significant as an example of National Park Service (NPS) rustic building design. The period of significance is 1929, which is the date of development of the building plan from the Branch of Plans and Design.
Bryce Canyon Lodge And Deluxe Cabins	NPS, SHPO	Building	Listed NHL	Bryce Lodge and deluxe cabins are the work of master architect Gilbert Stanley Underwood and are excellent pieces of the type of rustic architecture encouraged by the NPS and built by the railroads. From the Park Service point of view the buildings provided a necessary visitor service—in this instance lodging—in structures that were highly compatible with the surrounding landscape in materials, scale, massing, and design. From the railroad' s point of view, the buildings provided visitor services, but did so with a definite style that created a strong image and a strong sense of place.
Bryce Canyon Lodge Historic District	NPS, SHPO	District	Listed	The Bryce Canyon Lodge Historic District is associated with the development of concessioner's facilities between 1924-1944. The district also reflects Gilbert Stanley Underwood's approach to rustic building design. This lodge complex

[5] All data sources were accessed the week of March 21, 2022.

Property Name	Official(s) with Jurisdiction	Property Type	Eligibility Status	Significant Characteristics
				represents the UPC's first and primary visitor lodging/dining complex within the park
Bryce Canyon Loop C Comfort Station	NPS, SHPO	Building	Listed	The building continues to serve the function for which it was originally designed. This building is included in the property types defined as "Resources Associated with NPS Administrative Development". Review of the General Development Master Plan of 1938 reveals that both loops C and D had been constructed by 1938. The two Comfort Stations located within the Loop C and D, possess both historical and architectural significance and are constructed in a simple rustic style that is typical of the building styles originating from the NPS Branch of Plans and Design during the 1930s.
Bryce Canyon Loop D Comfort Station	NPS, SHPO	Building	Listed	The building continues to serve the function for which it was originally designed. This building is included in the property types defined as "Resources Associated with NPS Administrative Development". Review of the General Development Master Plan of 1938 reveals that both loops C and D had been constructed by 1938. The two Comfort Stations located within the Loop C and D, possess both historical and architectural significance and are constructed in a simple rustic style that is typical of the building styles originating from the NPS Branch of Plans and Design during the 1930s.
Bryce Canyon National Park Road System	NPS, SHPO	Landscape	Eligible	The UPC (Utah Parks Company) planned their building complex at Bryce Canyon on the assumption that the company's touring cars and buses would carry most of the tourists who visited Bryce Canyon and the other parks on the loop. In the spring of 1925 the Utah Public

Property Name	Official(s) with Jurisdiction	Property Type	Eligibility Status	Significant Characteristics
				Utilities Commission granted the UPC permission to operate touring cars. The UPC had refused to invest any money in highway improvements, but secured financial support from the USFS, the NPS, and the State of Utah to build and improve the roads on the southern Utah park circuit.
Bryce Canyon National Park Scenic Trails Historic District	NPS, SHPO	District	Listed	The nominated Bryce Canyon National Park (BRCA) Scenic Trails District consists of five structures including the Navajo Loop Trail, the Queen's Garden Trail, the Peekaboo Loop Trail, the Fairyland Trail, and the Rim Trail. Upon completion of die Rim Trail and Fairyland Trail in the mid-1930s, die scenic trails system within the park was complete. Except for the first trail constructed by the USFS, die remaining trails construction took place under the direct supervision of the park engineer and landscape architect. Thus, die scenic trails system, represents a local application of NPS design principles.
Bryce Canyon Old Administration Building	NPS, SHPO	Building	Listed	The Administration Building represents the first NPS facility constructed within the park to house the administrative activities of NPS personnel. It's placement adjacent to the rim established an administrative presence in an area heavily used by park visitors, and prior to its establishment, controlled by the UPC. This building continues to provide the only NPS presence in the Sunrise Point area. This building is an excellent example of the rustic design preferred by NPS managers for much of the historical period and produced by architects working in the Branch of Plans and Design.
Bryce Canyon Old National Park	NPS, SHPO	District	Listed	This district represents the first housing development within the park specifically designed to house NPS

Property Name	Official(s) with Jurisdiction	Property Type	Eligibility Status	Significant Characteristics
Service Housing Historic District				employees. All the plans for the buildings in the district originated from the NPS Branch of Plans and Design. Areas of significance include architecture, government, and recreation.
Bryce Inn	NPS, SHPO	Building	Listed	This building is associated with the development of recreational and administrative infrastructure within BRCA, specifically with concessioner development. Bryce Inn represents the last major improvement designed by Gilbert Stanley Underwood for the UPC.
Rainbow Point "Museum"/Overlook Shelter	NPS, SHPO	Building	Listed	Historic contexts with which the Rainbow Point buildings are associated include: 1) the development of recreation and administrative facilities within BRCA; and 2) the development of NPS rustic architecture. The NPS constructed the buildings at Rainbow Point towards the end of the New Deal era. Rainbow Point, located at the southern end of the rim road, was the last area of the park to be developed for public use prior to the end of the historical period.
Rainbow Point Comfort Station	NPS, SHPO	Building	Listed	Historic contexts with which the Rainbow Point buildings are associated include: 1) the development of recreation and administrative facilities within BRCA; and 2) the development of NPS rustic architecture. The NPS constructed the buildings at Rainbow Point towards the end of the New Deal era. Rainbow Point, located at the southern end of the rim road, was the last area of the park to be developed for public use prior to the end of the historical period.
Rainbow Point Comfort Station and Overlook Shelter	NPS, SHPO	Building	Listed	Historic contexts with which the Rainbow Point buildings are associated include: 1) the development of recreation and administrative facilities within

Property Name	Official(s) with Jurisdiction	Property Type	Eligibility Status	Significant Characteristics
				BRCA; and 2) the development of NPS rustic architecture. The NPS constructed the buildings at Rainbow Point towards the end of the New Deal era. Rainbow Point, located at the southern end of the rim road, was the last area of the park to be developed for public use prior to the end of the historical period.
Riggs Spring Fire Trail	NPS, SHPO	Landscape	Listed	The Riggs Spring Fire Trail has local significance under National Register Criterion A for its association with the development of NPS infrastructure in BRCA, and the involvement of the Civilian Conservation Corps (CCC) in such undertakings. The Riggs Spring Fire Trail represents the last segment of administrative fire trail constructed by CCC enrollees from Camp NP-3, during the 1936 field season. This segment of trail provided access to the southern-most backcountry areas of the park, and supplemented the access provided by the major administrative trail, the Under-the-Rim Trail.
Traditional Cultural Properties (TCPs)	NPS, SHPO	TCP	Eligible	The Moapa Band of Paiute Indians have informed the FAA of multiple TCPs present within the APE.
Under-The-Rim Trail	NPS, SHPO	Landscape	Listed	The Under-the-Rim Trail was constructed specifically for administrative purposes, namely, to provide access to the timbered areas of the park located below the rim of the plateau. Although planned as early as 1932, construction of this fire trail was not undertaken until the combination of the availability of Emergency Conservation Work funding and CCC labor made the project feasible. CCC enrollees from camp NP-3 constructed the main trail and the connecting trails during 1934 and 1935.

Property Name	Official(s) with Jurisdiction	Property Type	Eligibility Status	Significant Characteristics
Utah Parks Company (UPC) Service Station	NPS, SHPO	Building	Listed	This building represents the last major improvement constructed by the UPC within BRCA, and was aimed at upgrading their facilities and extending the range of services to tourists within the park. The presence of a service station within BRCA mirrors the development in other western parks, wherein the range of services demanded by park visitors expanded to include not only gas stations but full-service facilities
Well/Pumphouse	NPS, SHPO	Building	Listed	The building is a contributing element of the Bryce Canyon Lodge and Deluxe Cabins Historic District. Bryce Canyon Lodge and the associated deluxe cabins, as well as the other outbuildings included in the district, are the work of master architect Gilbert Stanley Underwood, and are excellent examples of the rustic architecture encouraged by the NPS and built by the railroads in their effort to develop destination resorts in the parks

Table 2. Section 4(f) parks and recreational resources in the study area

Property Name	Official(s) with Jurisdiction	Description	Approximate Size
Bryce Canyon National Park	NPS	Bryce Canyon National Park is located in southwestern Utah and is known for natural amphitheaters and hoodoos, formed by frost weathering and stream erosion.	35,835 acres
Grand Staircase-Escalante National Monument	Bureau of Land Management	This National monument is protecting the Grand Staircase of cliffs and terraces, the Kaiparowits Plateau, and the Canyons of Escalante.	1.9 million acres (13,471 acres in study area)
Dixie National Forest	U.S. Forest Service	This property is the largest national forest in Utah, straddling the divide between the Great Basin and the	1.9 million acres (1,781 acres in study area)

Property Name	Official(s) with Jurisdiction	Description	Approximate Size
		Colorado River. Includes red sandstone formations in Red Canyon.	

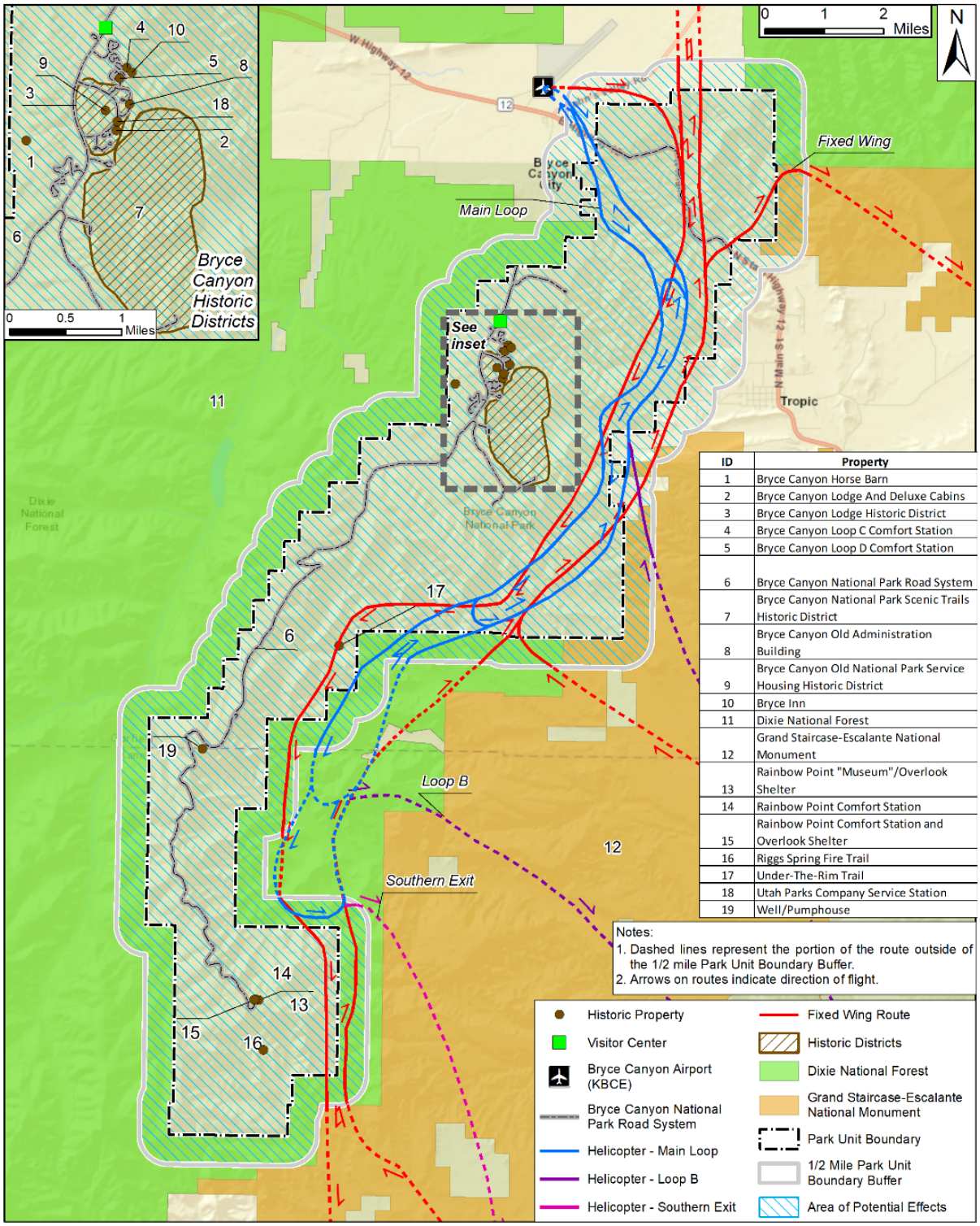

Figure 1. Map of Section 4(f) resources at the Park; includes resources entirely and partially within the Park study area.

Potential Use of Section 4(f) Resources

Evaluating potential impacts to Section 4(f) resources focuses on changes in aircraft noise exposure and visual effects resulting from implementing the ATMP. 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 evaluated the Section 4(f) resources for potential noise (including vibration) and visual impacts to determine if there was substantial impairment to Section 4(f) resources due to the ATMP that would result in a constructive use.

Noise Impacts Analysis

Indicators of Acoustic Conditions

There are numerous ways to describe 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 FAA's noise evaluation is based on Day Night Average Sound Level Average Annual Day (L_{dn} or DNL), the cumulative noise energy exposure from aircraft. As part of the ATMP noise analysis, the NPS provided supplemental metrics to assess the impact of commercial air tours on visitor experience in quiet settings, including noise sensitive areas of Section 4(f) resources. The metrics and acoustical terminology considered for the Section 4(f) noise analysis are shown in Table 3**.**

Table 3. Metrics used for the noise analysis.

Metric	**Relevance and citation**
Day-night average sound level, 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 ten dB penalty between 10 p.m. and 7 a.m. local time. The FAA's 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.[6]
Equivalent 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 a.m. to 7 p.m. to represent typical daytime commercial air tour operating hours. Note: Both $L_{Aeq,\ 12hr}$ and DNL and characterize: • 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) However, DNL takes into account the increased sensitivity to noise at night by including a ten dB penalty between 10 p.m. and 7 a.m. local time. If there are no nighttime events, $L_{Aeq,\ 12hr}$ will be three dB higher than DNL.

[6] FAA Order 1050.1F, Exhibit 4-1

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.
Time Above 35 dBA[7]	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 35 dB degrade experience in outdoor performance venues (ANSI 12.9-2007, Quantities And Procedures For Description And Measurement Of Environmental Sound – Part 5: Sound Level Descriptors For Determination Of Compatible Land Use); Blood pressure increases in sleeping humans (Haralabidis et al., 2008); maximum background noise level inside classrooms (ANSI/ASA S12.60/Part 1-2010, Acoustical Performance Criteria, Design Requirements, And Guidelines For Schools, Part 1: Permanent Schools).
Time Above 52 dBA	The amount of time (in minutes) that aircraft sound levels are above a given threshold (i.e., 52 dBA) This metric represents the level at which one may reasonably expect interference with Park interpretive programs. At this background sound level (52 dB), 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.[8]

Modeling Noise Impacts

For aviation noise analyses under the National Environmental Policy Act (NEPA), the FAA determines the cumulative noise energy exposure of individuals resulting from aviation activities in terms of the Average Annual Day (AAD). However, because ATMP operations in the park and study area occur at low annual operational levels and are highly seasonal in nature FAA determined that a peak day representation of the operations would more adequately allow for disclosure of any potential impacts.[9] A peak day has therefore been used as a conservative representation of assessment of AAD conditions required by FAA policy.

This provides a conservative evaluation of potential noise impacts to park resources, as well as Section 4(f) resources, under the ATMP, as the AAD will always reflect fewer commercial air tour operations than a peak day. The 90th percentile day was identified for representation of a peak day and derived from the busiest year of commercial air tour activity from 2017-2019, based on the total number of commercial air tour operations (532 annual commercial air tours on 14 different routes) and total flight miles over the Park.

[7] dBA (A-weighted decibels): Sound is measured on a logarithmic scale relative to the reference sound pressure for atmospheric sources, 20 µPa. The logarithmic scale is a useful way to express the wide range of sound pressures perceived by the human ear. 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 in order 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.

[8] Environmental Protection Agency. Information on Levels of Noise Requisite to Protect the Public Health and Welfare with an Adequate Margin of Safety, March 1974.

[9] See *U.S. Air Tour Ass'n v. F.A.A.*, 298 F.3d 997, 1017-18 (D.C. Cir. 2002).

The type of aircraft and routes currently flown by operators were further assessed to determine if it is a reasonable representation of the commercial air tour activity at the Park. Under the ATMP, operators will be allowed to conduct commercial air tours on routes that are similar as the existing routes, but which have been reduced in number and consolidated for the protection of the Park's natural and cultural resources as well as for aviation safety reasons The ATMP establishes an altitude of 9,250 feet (ft.) mean sea level (MSL) for helicopter aircraft which results in helicopters flying at least 1,500 ft. AGL for the majority of the commercial air tour, whereas some existing helicopter tours are conducted as low as 300 ft. AGL and others as low as 1,000 ft AGL, depending on the operator. The ATMP establishes an altitude of 9,750 ft. MSL for fixed-wing aircraft which results in fixed-wing aircraft flying at least 2,000 ft. AGL for the majority of the commercial air tour, consistent with most existing fixed-wing operations. Thus, the ATMP increases the minimum altitude as compared to most existing helicopter operations and maintains the minimum altitude as compared to most existing fixed-wing operations. For the Park, the 90th percentile day was identified as three flights on the Helicopter Main Loop route (at the third turn-around) using a Bell 206 B III aircraft, one flight on the Helicopter Main Loop route (at the first turn-around) using a Bell 206 B III aircraft, and one flight on the Helicopter Main Loop route (at the third turn around) using an EC130 aircraft. Altitudes were modeled at 9,250 ft. MSL.

The noise was modeled for the acoustic indicators in Table 3 and 90th percentile day using the FAA's Aviation Environmental Design Tool (AEDT) version 3d. The noise was modeled at points spaced every 0.25 nautical mile throughout the potentially affected area. Please refer to the Environmental Screening Form for further detail.

Summary of Potential Noise Impacts

The noise analysis indicates that the ATMP would not result in any noise impacts that would be "significant" or "reportable" under FAA's policy for the NEPA guidance.[10] Under the ATMP, there are no changes to the number of commercial air tours and the routes are similar as compared with existing conditions (even though they have been consolidated and reduced in number). The resultant DNL due to the ATMP is expected to be below DNL 45 dBA and does not cause any reportable noise as there is no expected increase or change in noise from the ATMP.

Because the number of authorized flights under the ATMP would be the same or less than the average number of flights from 2017 to 2019, evaluation of NPS supplemental metrics show that impacts to Section 4(f) resources would be similar to impacts currently occurring:

- On days when commercial air tours will occur, noise levels above 35 dBA (an indicator used by NPS to assess the potential for degradation of the natural sound environment) will occur for less than 75 minutes a day (see NPS Environmental Screening Form, Figure 1).
- On days when commercial air tours will occur, noise levels above 52 dBA (which is associated with speech interference) are not anticipated to exceed 10 minutes in areas directly beneath and adjacent to the routes. Section 4(f) resources which fall under the 52 dBA noise contour occur in the southern portion of the Park and includes the Under-the-Rim Trail (see Environmental Screening Form, Figure 2).

In addition, the ATMP limits the operation of commercial air tours to between one hour after sunrise and three hours before sunset any day of the year, or extends operations until one hour before sunset if

[10] Per FAA Order 1050.1F, the FAA refers to noise changes meeting the following criteria as "reportable": for DNL 65 dB and higher, ± DNL 1.5 dB; for DNL 60 dB to <65 dB, ± DNL 3 dB; for DNL 45 dB to <60 dB, ± DNL 5 dB. See also 1050.1F Desk Reference, Section 11.3.

authorized by the agencies for operators that have converted to quiet technology aircraft. These time restrictions provide times when visitors seeking solitude may experience the Section 4(f) resources without disruptions from commercial air tours. The altitudes required by the ATMP, which increases the minimum altitude as compared to most existing helicopter operations and maintains the minimum altitude as compared to most existing fixed-wing operations, will reduce the maximum noise levels at sites directly below the air tour routes. Collectively, these changes from existing operations and their effect on Section 4(f) resources will likely result in beneficial impacts to the Section 4(f) resources.

As a result, FAA concludes there would be no substantial impairment on Section 4(f) resources in the study area from noise-related effects by the implementation of the ATMP. The ATMP would not result in significant or reportable increase in noise at the Park and the ATMP will likely provide beneficial impacts to Section 4(f) resources. This all supports the FAA's determination that implementation of the Proposed Action would not constitute constructive use of Section 4(f) resources in the study area. This Section 4(f) determination is also consistent with the Section 106 no adverse effect determination at the Park (see Section 106 Consultation and Finding of No Adverse Effect letter).

Vibrational Impacts

A review of the potential for vibrational impacts on sensitive structures such as geological resources, historic buildings, parklands, and forests suggests that the potential for damage resulting from fixed-wing propeller aircraft overflights is minimal, as the fundamental blade passage frequency is well above the natural frequency of these structures. Additionally, the vibration amplitude of these overflights at the altitudes prescribed in the ATMP will be well below recommended limits.[11, 12] Vibrational impacts are not anticipated to surrounding parkland and National Forest areas given that aircraft overflights do not contain vibrational energy at levels which would affect outdoor areas or natural features and there is no substantial change from existing conditions.

A review of potential vibrational impacts on geologic resources at Rainbow Bridge National Monument recommends a minimum helicopter standoff distance of ¼-mile (1,320 ft.) horizontal radius at altitudes less than 500 ft. above the top of the structure to avoid damage to geologic resources associated with the vibrational energy of helicopter blades (Moore, 2018). The Park does not have any documented reports of vibrational impacts or damages on the Park's geologic features. Although the Park currently lacks a vibrational study on specific Bryce Canyon geological features and hoodoos, the ATMP requires commercial air tours to fly at higher altitudes as compared to existing conditions. The ATMP would require helicopters to fly a minimum of 1,000 to 2,600 ft. AGL, and for fixed-wing a minimum of 1,500 to 2,600 ft. AGL depending on terrain. Routes would be shifted to the east away from the main amphitheater area; therefore, flights would not occur directly over the fragile Bryce geologic formations. For these reasons, vibrational impacts to geologic resources within the Park are not anticipated to be significant for the commercial air tour aircraft specified in the ATMP.

Visual Impacts Analysis

The ATMP would not substantially impair Section 4(f) resources within the study area because there would be no measurable change in visual effects from existing conditions. The level of commercial air tour activity under the ATMP will remain substantially similar. Recognizing that some types of Section

[11] Hanson, C.E., King, K.W., et al., "Aircraft Noise Effects on Cultural Resources: Review of Technical Literature," NPOA Report No. 91-3 (HMMH Report No.290940.04-1), September 1991.
[12] Volpe National Transportation Systems Center, Department of Transportation, 2014. Literature Review: Vibration of Natural Structures and Ancient/Historical Dwellings, Internal Report for National Park Service, Natural Sounds and Night Skies Division, August 21, 2014.

4(f) resources may be affected by visual effects of commercial air tours, the FAA and NPS considered the potential for the introduction of visual elements that could substantially diminish the significance or enjoyment of Section 4(f) resources in the study area. Aircraft are transitory elements in a scene and visual impacts tend to be relatively short. The short duration and low number of flights make it unlikely a historic property, forest, or parkland would experience a visual effect from the ATMP. One's perspective of or viewshed from a historic property and natural areas is often drawn to the horizon and aircraft at higher altitudes are less likely to be noticed. Aircraft at lower altitudes may attract visual attention but are also more likely to be screened by vegetation or topography. The ATMP allows the Park to establish no-fly periods for special events or planned Park management with 15-days advance notice to the operators.

The ATMP limits the annual number of commercial air tours to 515 flights and the routes are similar as are currently flown under existing conditions. Visual impacts to Section 4(f) resources will be similar to impacts currently occurring because the number of authorized flights under the ATMP will be the same as or less than the average number of flights from 2017-2019, and the routes are similar as compared to existing conditions. The ATMP would not introduce visual elements or result in visual impacts that would substantially diminish the activities, features or attributes of a Section 4(f) resource. Therefore, there would be no constructive use from visual impacts of Section 4(f) resources.

Conclusion

The FAA has determined that there would be no constructive use to Section 4(f) properties from implementation of the Proposed Action because noise and visual impacts from commercial air tours under the ATMP would not constitute a substantial impairment of Section 4(f) resources in the study area. The noise analysis indicated that there would be no significant impact or reportable increase from implementation of the ATMP. NPS's supplemental noise metrics show that the noise impacts would be similar to current conditions and provisions within the ATMP would provide benefits to Section 4(f) resources. Likewise, the visual impacts to Section 4(f) resources would be similar to impacts currently occurring because the number of authorized flights under the ATMP (515 flights per year) would be the same as or less than the average number of flights from 2017 to 2019, and the routes are similar as compared to existing conditions. Together, this supports the FAA's determination that the Proposed Action would not substantially diminish the protected activities, features, or attributes of the Section 4(f) resources in the study area.

The FAA consulted with the NPS and other officials with jurisdiction (OWJ) over Section 4(f) resources in the study area regarding FAA's finding of no substantial impairment, and hence, its no constructive use determination. As a cooperating agency on the Air Tour Management Plan and associated environmental review, NPS was actively engaged with FAA on the proposed action. FAA consulted with the Utah State Historic Preservation Office (SHPO) on historic properties and received a concurrence on a finding of "no adverse effect."

In addition to consultation with the NPS and the SHPO, FAA corresponded with the officials with jurisdiction related to the remaining Section 4(f) resources. On August 26, 2022, FAA sent a letter to the U.S. Forest Service and the Bureau of Land Management describing the proposed action, analysis on potential use of Section 4(f) resources under their respective jurisdiction, and FAA's preliminary determination (see attached). Follow-up emails were sent on September 2, 2022. The U.S. Forest Service responded that they do not have any concerns with the proposed plan (see attached). No response, and hence, no objections, was received from the Bureau of Land Management.

CORRESPONDENCE

U.S. Department of Transportation
Federal Aviation Administration

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 26, 2022

Re: Consultation under Section 4(f) of the U.S. Department of Transportation Act (49 U.S.C. § 303) for the development of an Air Tour Management Plan for Bryce Canyon National Park

Adé Nelson
Bureau of Land Management
669 South Highway 89A
Kanab, UT 84741

Dear Adé Nelson:

The Federal Aviation Administration (FAA), in cooperation with the National Park Service (NPS), is developing an Air Tour Management Plan (ATMP) for the Bryce Canyon National Park (Park). The FAA is preparing documentation for the ATMP in accordance with the National Parks Air Tour Management Act (NPATMA) and other applicable laws, including Section 4(f) of the U.S. Department of Transportation Act (Section 4(f)). The purpose of this letter is to coordinate with you on FAA's preliminary findings related to the ATMP's potential impacts to Grand Staircase-Escalante National Monument, which is a protected property under Section 4(f).

Project Background and Purpose of the Action

NPATMA (Public Law 106-181, codified at 49 U.S.C. § 40128) of 2000, directs the agencies to develop ATMPs for commercial air tour operations over units of the national park system. A commercial air tour operation is defined as "a flight conducted for compensation or hire in a powered aircraft where the purpose of the flight is sightseeing over a national park, within ½ mile outside the boundary of a national park or over tribal lands, during which the aircraft flies below an altitude of 5,000 feet (ft.) above ground level (AGL) or less than 1 mile laterally from any geographic feature within the park (unless more than ½ mile outside the boundary)." When NPATMA was passed in 2000, existing air tour operators were permitted to continue air tour operations in parks until an ATMP was completed. To facilitate this continued use, FAA granted Interim Operating Authority (IOA) to existing air tour operators. IOA set an annual limit of the number of flights per operator for each park. In 2012, NPATMA was amended by Congress to, among other things, require operators to report the number of flights conducted on a quarterly interval each year. On February 14, 2019, Public Employees for Environmental Responsibility and the Hawai'i Coalition Malama Pono filed a petition for writ of mandamus seeking to have the agencies complete air tour management plans or voluntary agreements at seven specified parks, In re Public Employees for Environmental Responsibility, et al., Case No. 19-1044 (D.C. Cir.). On May 1, 2020,

the United States Court of Appeals for the District of Columbia Circuit Court granted the petition and ordered the agencies to file a proposed schedule for bringing twenty-three eligible parks, including Bryce Canyon National Park, into compliance with NPATMA within two years. The agencies submitted a plan to complete all ATMPs to the court on August 31, 2020.

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. Department of Transportation (USDOT) and its operating administrations, including the FAA. Section 4(f) of the Department of Transportation Act (codified at 49 U.S.C. § 303(c)), states that, subject to exceptions for *de minimis* impacts:

> "… the Secretary may approve a transportation program or project…requiring the use of publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge of national, State, or local significance, or land of an historic site of national, State, or local significance (as determined by the Federal, State, or local officials having jurisdiction over the park, area, refuge, or site) only if –
>
> 1. There is no prudent and feasible alternative to using that land; and
> 2. The program or project includes all possible planning to minimize harm to the park, recreation area, wildlife and waterfowl refuge, or historic site resulting from the use."

The term "use" refers to both direct (physical) and indirect (constructive) impacts to Section 4(f) resources. A 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. Under the ATMP, 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.

Description of the Proposed Action

The FAA and the NPS (collectively, the agencies) are developing ATMPs for 24 parks,[1] including the Bryce Canyon National Park. The ATMPs are being developed in accordance with NPATMA. Each ATMP is unique and therefore, each ATMP is being assessed individually under Section 4(f).

Commercial air tours have been operating intermittently over the Park for over 20 years. Since 2005, these air tours have been conducted pursuant to IOA issued by FAA in accordance with NPATMA. IOA does not provide any operating conditions (e.g., routes, altitudes, time of day, etc.) for air tours other than a limit of 3,131 air tours per year. The ATMP will replace IOA.

The FAA and the NPS have documented the existing conditions for commercial air tour operations at the Park. The FAA and the NPS consider the existing operations for commercial air tours to be an average of 2017-2019 annual air tours flown, which is 515 air tours. The agencies decided to use a three-year average because it reflects the most accurate and reliable air tour conditions based on available

[1] On March 4, 2021, the NPS notified the FAA that an air tour management plan was necessary to protect Muir Woods National Monument's resources and values and withdrew the exemption for the that park. The agencies are now proceeding with ATMPs for 24 parks instead of 23.

operator reporting, and accounts for variations across multiple years, excluding more recent years affected by the COVID 19 pandemic.[2]

The proposed action is implementing the ATMP at the Park. The following elements of the ATMP are included for the Park:

- A maximum of 515 commercial air tours are authorized per year on the routes depicted in **Attachment A**;
- The aircraft types authorized to be used for commercial air tours are CE-172-N, CE-182-R, CE-206-206, CE-207-207, CE-207-T207A, CE-208-B, and DHC-6-300 fixed-wing aircraft and AS-350-B3, BHT-206-L1, BHT-206-L3, BELL-206-B, EC-130-B4, EC-130-T2, and MDHS-MD-900 helicopters. Any new or replacement aircraft must not exceed the noise level produced by the aircraft being replaced;
- The ATMP establishes altitude based on aircraft type rather than direction. The ATMP requires helicopters to conduct tours at an altitude of 9,250 ft. MSL and fixed-wing aircraft to conduct tours at an altitude of 9,750 ft. MSL.
- The ATMP limits the operation of commercial air tours to between one hour after sunrise and three hours before sunset any day of the year, or extends operations until one hour before sunset if authorized by the agencies for operators that have converted to quiet technology aircraft. The ATMP allows the Park to establish no-fly periods for special events or planned Park management with 15-days advance notice to the operators;
- The operator is required to install and use flight monitoring technology on all authorized commercial air tours, and to include flight monitoring data in their semi-annual reports to the agencies, along with the number of commercial air tours conducted;
- When made available by Park staff, the operator/pilot will take at least one training course per year conducted by the NPS. The training will include Park information that the operator can use to further their own understanding of Park priorities and management objectives as well as enhance the interpretive narrative for air tour clients and increase understanding of parks by air tour clients;
- At the request of either of the agencies, the Park staff, the FAA Flight Standards District Office (FSDO), and all operators will meet once per year to discuss the implementation of this ATMP and any amendments or other changes to the ATMP. This annual meeting could be conducted in conjunction with any required annual training; and
- For situational awareness when conducting tours of the Park, the operator will utilize frequency 122.9 and report when they enter and depart a route. The pilot should identify their company, aircraft, and route to make any other aircraft in the vicinity aware of their position.

The FAA and the NPS are both responsible for monitoring and oversight of the ATMP.

Section 4(f)

The study area for considering Section 4(f) resources for the ATMP consists of the Park and a ½ mile buffer outside the boundary of the Park. The study area for Section 4(f) resources also corresponds with the Area of Potential Effects (APE) used for compliance with Section 106 of the National Historic

[2] 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.

Preservation Act (NHPA) of 1966 (Section 106) for the Park. See **Attachment A** for a depiction of the Section 4(f) study area. Historic properties were identified as part of the Section 106 consultation process. Parks, recreational areas, and wildlife and waterfowl refuges were identified using public datasets from Federal, State, and local sources, which included the U.S. Forest Service and Bureau of Land Management. Each resource that intersected the study area (i.e., some portion of the property fell within the Park or ½ mile buffer) was included in the Section 4(f) analysis.

Potential Use of Section 4(f) Resources

Evaluating potential impacts to Section 4(f) resources focuses on changes in aircraft noise exposure and visual effects resulting from implementing the ATMP. 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 evaluated the Section 4(f) resources for potential noise (including vibration) and visual impacts to determine if there was substantial impairment to Section 4(f) resources due to the ATMP that might result in a constructive use.

Noise Impacts Analysis

The FAA's noise evaluation is based on Day Night Average Sound Level Average Annual Day (Ldn or DNL), the cumulative noise energy exposure from aircraft. As part of the ATMP noise analysis, the NPS provided supplemental metrics to assess the impact of commercial air tours on visitor experience in quiet settings, including noise sensitive areas of Section 4(f) resources. The metrics and acoustical terminology considered for the Section 4(f) noise analysis are shown in the table below.

Table 1. Metrics and acoustical terminology considered for the Section 4(f) noise analysis

Metric	**Relevance and citation**
Day-night average sound level, 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 ten dB penalty between 10 p.m. and 7 a.m. local time. The FAA's 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.[3]
Equivalent 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 a.m. to 7 p.m. to represent typical daytime commercial air tour operating hours. Note: Both $L_{Aeq,\ 12hr}$ and DNL and characterize: • 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)

[3] FAA Order 1050.1F, *Environmental Impacts: Policies and* Procedures, Exhibit 4-1

	However, DNL takes into account the increased sensitivity to noise at night by including a ten dB penalty between 10 p.m. and 7 a.m. local time. If there are no nighttime events, $L_{Aeq, 12hr}$ will be three dB higher than DNL.
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.
Time Above 35 dBA[4]	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 35 dB degrade experience in outdoor performance venues (ANSI 12.9-2007, Quantities And Procedures For Description And Measurement Of Environmental Sound – Part 5: Sound Level Descriptors For Determination Of Compatible Land Use); Blood pressure increases in sleeping humans (Haralabidis et al., 2008); maximum background noise level inside classrooms (ANSI/ASA S12.60/Part 1-2010, Acoustical Performance Criteria, Design Requirements, And Guidelines For Schools, Part 1: Permanent Schools).
Time Above 52 dBA	The amount of time (in minutes) that aircraft sound levels are above a given threshold (i.e., 52 dBA) This metric represents the level at which one may reasonably expect interference with Park interpretive programs. At this background sound level (52 dB), 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.[5]

For aviation noise analyses under the National Environmental Policy Act (NEPA), the FAA determines the cumulative noise energy exposure of individuals resulting from aviation activities in terms of the Average Annual Day (AAD). However, because ATMP operations in the park occur at low annual operational levels and are highly seasonal in nature, the FAA determined that a peak day representation of the operations would more adequately allow for disclosure of any potential impacts. A peak day has therefore been used as a conservative representation of assessment of AAD conditions required by FAA policy.

This provides a conservative evaluation of potential noise impacts to park resources, as well as Section 4(f) resources, under the ATMP, as the AAD will always reflect fewer commercial air tour operations

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than a peak day. The 90th percentile day was identified for representation of a peak day and derived from the busiest year of commercial air tour activity from 2017-2019, based on the total number of commercial air tour operations and total flight miles over the Park.

The type of aircraft and routes currently flown by operators were further assessed to determine if it is a reasonable representation of the commercial air tour activity at the Park. Under the ATMP, operators will be allowed to conduct commercial air tours on routes that are similar as compared to the existing routes, but which have been reduced in number and consolidated for the protection of the Park's natural and cultural resources as well as for aviation safety reasons The ATMP establishes an altitude of 9,250 feet (ft.) mean sea level (MSL) for helicopter aircraft which results in helicopters flying at least 1,500 ft. AGL for the majority of the commercial air tour, whereas some existing helicopter tours are conducted as low as 300 ft. AGL and others as low as 1,000 ft AGL, depending on the operator. The ATMP establishes an altitude of 9,750 ft. MSL for fixed-wing aircraft which results in fixed-wing aircraft flying at least 2,000 ft. AGL for the majority of the commercial air tour, consistent with most existing fixed-wing operations. Thus, the ATMP increases the minimum altitude as compared to most existing helicopter operations and maintains the minimum altitude as compared to most existing fixed-wing operations. For the Park, the 90th percentile day was identified as three flights on the Helicopter Main Loop route (at the third turn-around) using a Bell 206 B III aircraft, one flight on the Helicopter Main Loop route (at the first turn-around) using a Bell 206 B III aircraft, and one flight on the Helicopter Main Loop route (at the third turn around) using an EC130 aircraft. Altitudes were modeled at 9,250 ft. MSL.

The noise was modeled for the acoustic indicators in Table 1 and 90th percentile day using the FAA's Aviation Environmental Design Tool (AEDT) version 3d. The noise was modeled at points spaced every 0.25 nautical mile throughout the potentially affected area.

The noise analysis indicates that the ATMP would not result in any noise impacts that would be "significant" or "reportable" under FAA's policy for the NEPA guidance.[6] Under the ATMP, there are no changes to the number of commercial air tours and the routes are similar as compared to existing conditions. The resultant DNL due to the ATMP is expected to be below DNL 45 dBA and does not cause any reportable noise as there is no expected increase or change in noise from the ATMP.

Because the number of authorized flights under the ATMP would be the same or less than the average number of flights from 2017 to 2019, evaluation of NPS supplemental metrics show that impacts to Section 4(f) resources would be similar to impacts currently occurring:

- On days when commercial air tours will occur, noise levels above 35 dBA (an indicator used by NPS to assess the potential for degradation of the natural sound environment) will occur for less than 75 minutes a day.
- On days when commercial air tours will occur, noise levels above 52 dBA (which is associated with speech interference) are not anticipated to exceed 10 minutes in areas directly beneath and adjacent to the routes. Section 4(f) resources which fall under the 52 dBA noise contour occur in the southern portion of the Park and includes the Under-the-Rim Trail, Dixie National Forest and Grand Staircase-Escalante National Monument.

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In addition, the ATMP limits the operation of commercial air tours to between one hour after sunrise and three hours before sunset any day of the year, or extends operations until one hour before sunset if authorized by the agencies for operators that have converted to quiet technology aircraft. These time restrictions provide times when visitors seeking solitude may experience the Section 4(f) resources without disruptions from commercial air tours. The altitudes required by the ATMP, which increases the minimum altitude as compared to most existing helicopter operations and maintains the minimum altitude as compared to most existing fixed-wing operations, will reduce the maximum noise levels at sites directly below the air tour routes. Collectively, these changes from existing operations and their effect on the Section 4(f) resources will likely result in beneficial impacts to the Section 4(f) resources.

A review of the potential for vibrational impacts on historic buildings, parklands, and forests suggests that the potential for damage resulting from fixed-wing propeller aircraft overflights is minimal, as the fundamental blade passage frequency is well above the natural frequency of these structures. Additionally, the vibration amplitude of these overflights at the altitudes prescribed in the ATMP will be well below recommended limits. A review of potential vibrational impacts on geologic resources at Rainbow Bridge National Monument recommends a minimum helicopter standoff distance of ¼-mile (1,320 ft.) horizontal radius at altitudes less than 500 ft. above the top of the structure to avoid damage to geologic resources associated with the vibrational energy of helicopter blades (Moore, 2018). The Park does not have any documented reports of vibrational impacts or damages on the Park's geologic features. Although the Park currently lacks a vibrational study on specific Bryce Canyon geological features and hoodoos, the ATMP requires commercial air tours to fly at higher altitudes as compared to existing conditions. The ATMP would require helicopters to fly a minimum of 1,000 to 2,600 ft. AGL, and for fixed-wing a minimum of 1,500 to 2,600 ft. AGL depending on terrain. Routes would be shifted to the east away from the main amphitheater area; therefore, flights would not occur directly over the fragile Bryce geologic formations. For these reasons, vibrational impacts to geologic resources within the Park are not anticipated to be significant for the commercial air tour aircraft specified in the ATMP.

As a result, FAA concludes there would be no substantial impairment on Section 4(f) resources in the study area from noise-related effects by the implementation of the ATMP. The ATMP would not result in significant or reportable increase in noise at the Park and the ATMP will likely provide beneficial impacts to Section 4(f) resources. This all supports the FAA's determination that implementation of the Proposed Action would not constitute constructive use of Section 4(f) resources in the study area. This Section 4(f) determination is also consistent with the Section 106 no adverse effect determination at the Park.

Visual Impacts Analysis

The ATMP would not substantially impair Section 4(f) resources within the study area because there would be no measurable change in visual effects from existing conditions. The level of commercial air tour activity under the ATMP will remain substantially similar. Recognizing that some types of Section 4(f) resources may be affected by visual effects of commercial air tours, the FAA and NPS considered the potential for the introduction of visual elements that could substantially diminish the significance or enjoyment of Section 4(f) resources in the study area. Aircraft are transitory elements in a scene and visual impacts tend to be relatively short. The short duration and low number of flights make it unlikely a historic property, forest, or parkland would experience a visual effect from the ATMP. One's perspective of or viewshed from a historic property and natural areas is often drawn to the horizon and aircraft at higher altitudes are less likely to be noticed. Aircraft at lower altitudes may attract visual

attention but are also more likely to be screened by vegetation or topography. The ATMP allows the Park to establish no-fly periods for special events or planned Park management with 15-days advance notice to the operators.

The ATMP limits the annual number of commercial air tours to 515 flights and the routes are similar as are currently flown under existing conditions. Visual impacts to Section 4(f) resources will be similar to impacts currently occurring because the number of authorized flights under the ATMP will be the same as or less than the average number of flights from 2017-2019, and the routes are similar as compared to existing conditions, even though reduced in number and consolidated. The ATMP would not introduce visual elements that would diminish the integrity of a Section 4(f) resource. Therefore, there would be no constructive use from visual impacts of Section 4(f) resources.

Preliminary Finding

The FAA has preliminarily determined the ATMP would not substantially diminish the protected activities, features, or attributes of the Section 4(f) resources in the study area. There is no anticipated change in visual and noise impacts over existing conditions as a result of the ATMP. Moreover, the noise analysis indicated that there would be no significant impact or reportable increase from implementation of the ATMP. The ATMP would not result in substantial impairment of Section 4(f) resources; therefore, based on the analysis above, FAA intends to make a determination of no constructive use of Grand Staircase-Escalante National Monument. We request that you review this information and respond with any concerns or need for further consultation on the FAA's proposed no substantial impairment finding within fourteen days of receiving this letter.

Should you have any questions regarding any of the above, please contact Eric Elmore at 202-267-8335 or eric.elmore@faa.gov and copy the ATMP team at ATMPTeam@dot.gov.

Sincerely,

ERIC M ELMORE

Digitally signed by ERIC M ELMORE
Date: 2022.08.25 07:13:15 -04'00'

Eric Elmore
Senior Policy Advisor
Office of Environment and Energy
Federal Aviation Administration

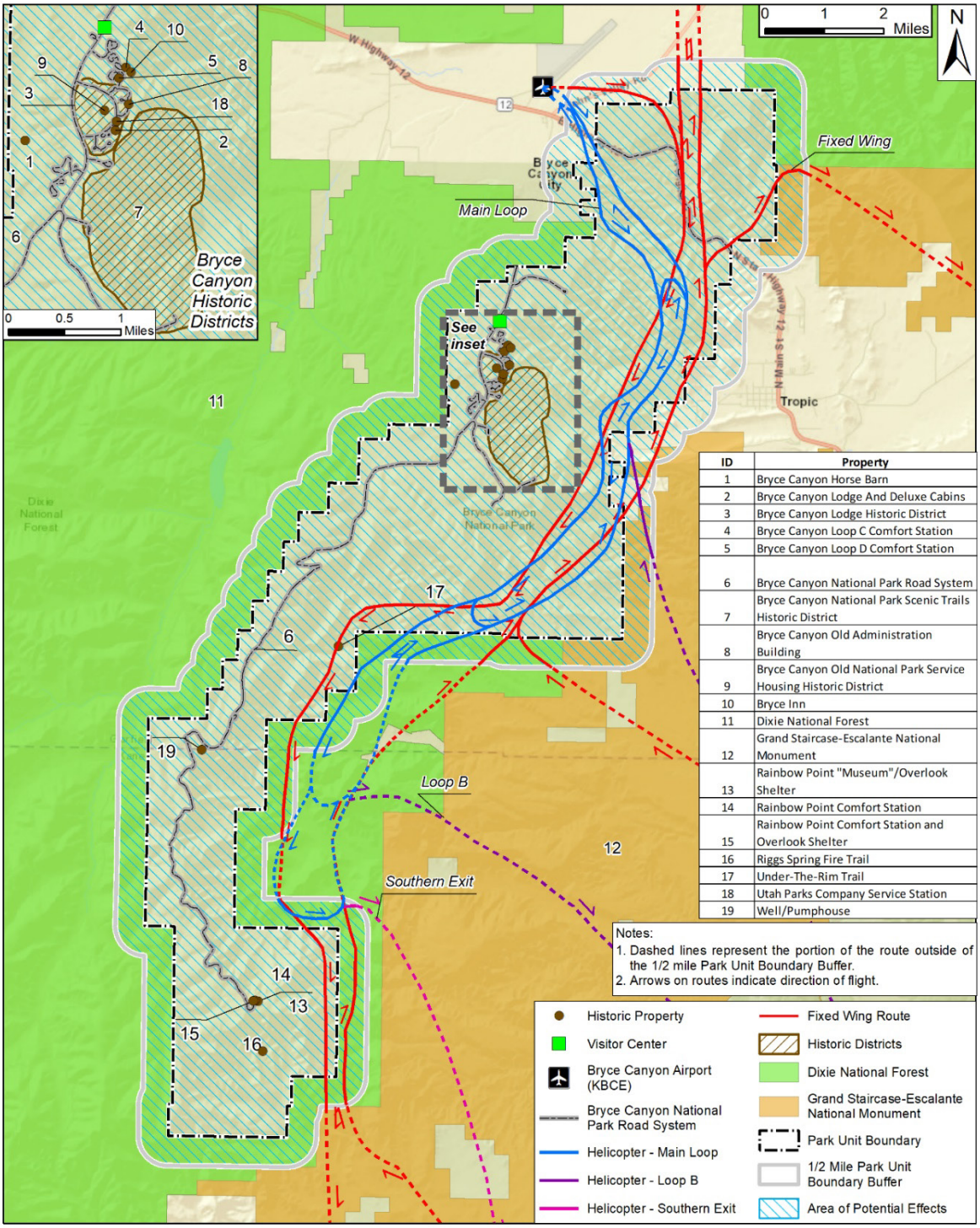
Attachments

A. Map including proposed Commercial Air Tour Routes, Section 4(f) Study Area, and Section 4(f) Resources

ATTACHMENT A

Map of Proposed Commercial Air Tour Routes, Section 4(f) Study Area, and Section 4(f) Resources

Section 4(f) Study Area and Properties for ATMP at Bryce Canyon National Park



ID	Property
1	Bryce Canyon Horse Barn
2	Bryce Canyon Lodge And Deluxe Cabins
3	Bryce Canyon Lodge Historic District
4	Bryce Canyon Loop C Comfort Station
5	Bryce Canyon Loop D Comfort Station
6	Bryce Canyon National Park Road System
7	Bryce Canyon National Park Scenic Trails Historic District
8	Bryce Canyon Old Administration Building
9	Bryce Canyon Old National Park Service Housing Historic District
10	Bryce Inn
11	Dixie National Forest
12	Grand Staircase-Escalante National Monument
13	Rainbow Point "Museum"/Overlook Shelter
14	Rainbow Point Comfort Station
15	Rainbow Point Comfort Station and Overlook Shelter
16	Riggs Spring Fire Trail
17	Under-The-Rim Trail
18	Utah Parks Company Service Station
19	Well/Pumphouse

U.S. Department of Transportation
Federal Aviation Administration

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 26, 2022

Re: Consultation under Section 4(f) of the U.S. Department of Transportation Act (49 U.S.C. § 303) for the development of an Air Tour Management Plan for Bryce Canyon National Park

Kevin Wright
U.S. Forest Service
820 N. Main St.
Cedar City, UT 84721-7769

Dear Kevin Wright:

The Federal Aviation Administration (FAA), in cooperation with the National Park Service (NPS), is developing an Air Tour Management Plan (ATMP) for the Bryce Canyon National Park (Park). The FAA is preparing documentation for the ATMP in accordance with the National Parks Air Tour Management Act (NPATMA) and other applicable laws, including Section 4(f) of the U.S. Department of Transportation Act (Section 4(f)). The purpose of this letter is to coordinate with you on FAA's preliminary findings related to the ATMP's potential impacts to Dixie National Forest, which is a protected property under Section 4(f).

Project Background and Purpose of the Action

NPATMA (Public Law 106-181, codified at 49 U.S.C. § 40128) of 2000, directs the agencies to develop ATMPs for commercial air tour operations over units of the national park system. A commercial air tour operation is defined as "a flight conducted for compensation or hire in a powered aircraft where the purpose of the flight is sightseeing over a national park, within ½ mile outside the boundary of a national park or over tribal lands, during which the aircraft flies below an altitude of 5,000 feet (ft.) above ground level (AGL) or less than 1 mile laterally from any geographic feature within the park (unless more than ½ mile outside the boundary)." When NPATMA was passed in 2000, existing air tour operators were permitted to continue air tour operations in parks until an ATMP was completed. To facilitate this continued use, FAA granted Interim Operating Authority (IOA) to existing air tour operators. IOA set an annual limit of the number of flights per operator for each park. In 2012, NPATMA was amended by Congress to, among other things, require operators to report the number of flights conducted on a quarterly interval each year. On February 14, 2019, Public Employees for Environmental Responsibility and the Hawai'i Coalition Malama Pono filed a petition for writ of mandamus seeking to have the agencies complete air tour management plans or voluntary agreements at seven specified parks, In re Public Employees for Environmental Responsibility, et al., Case No. 19-1044 (D.C. Cir.). On May 1, 2020,

the United States Court of Appeals for the District of Columbia Circuit Court granted the petition and ordered the agencies to file a proposed schedule for bringing twenty-three eligible parks, including Bryce Canyon National Park, into compliance with NPATMA within two years. The agencies submitted a plan to complete all ATMPs to the court on August 31, 2020.

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. Department of Transportation (USDOT) and its operating administrations, including the FAA. Section 4(f) of the Department of Transportation Act (codified at 49 U.S.C. § 303(c)), states that, subject to exceptions for *de minimis* impacts:

> "… the Secretary may approve a transportation program or project…requiring the use of publicly owned land of a public park, recreation area, or wildlife and waterfowl refuge of national, State, or local significance, or land of an historic site of national, State, or local significance (as determined by the Federal, State, or local officials having jurisdiction over the park, area, refuge, or site) only if –
>
> 1. There is no prudent and feasible alternative to using that land; and
> 2. The program or project includes all possible planning to minimize harm to the park, recreation area, wildlife and waterfowl refuge, or historic site resulting from the use."

The term "use" refers to both direct (physical) and indirect (constructive) impacts to Section 4(f) resources. A 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. Under the ATMP, 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.

Description of the Proposed Action

The FAA and the NPS (collectively, the agencies) are developing ATMPs for 24 parks,[1] including the Bryce Canyon National Park. The ATMPs are being developed in accordance with NPATMA. Each ATMP is unique and therefore, each ATMP is being assessed individually under Section 4(f).

Commercial air tours have been operating intermittently over the Park for over 20 years. Since 2005, these air tours have been conducted pursuant to IOA issued by FAA in accordance with NPATMA. IOA does not provide any operating conditions (e.g., routes, altitudes, time of day, etc.) for air tours other than a limit of 3,131 air tours per year. The ATMP will replace IOA.

The FAA and the NPS have documented the existing conditions for commercial air tour operations at the Park. The FAA and the NPS consider the existing operations for commercial air tours to be an average of 2017-2019 annual air tours flown, which is 515 air tours. The agencies decided to use a three-year average because it reflects the most accurate and reliable air tour conditions based on available

[1] On March 4, 2021, the NPS notified the FAA that an air tour management plan was necessary to protect Muir Woods National Monument's resources and values and withdrew the exemption for the that park. The agencies are now proceeding with ATMPs for 24 parks instead of 23.

operator reporting, and accounts for variations across multiple years, excluding more recent years affected by the COVID 19 pandemic.[2]

The proposed action is implementing the ATMP at the Park. The following elements of the ATMP are included for the Park:

- A maximum of 515 commercial air tours are authorized per year on the routes depicted in **Attachment A**;
- The aircraft types authorized to be used for commercial air tours are CE-172-N, CE-182-R, CE-206-206, CE-207-207, CE-207-T207A, CE-208-B, and DHC-6-300 fixed-wing aircraft and AS-350-B3, BHT-206-L1, BHT-206-L3, BELL-206-B, EC-130-B4, EC-130-T2, and MDHS-MD-900 helicopters. Any new or replacement aircraft must not exceed the noise level produced by the aircraft being replaced;
- The ATMP establishes altitude based on aircraft type rather than direction. The ATMP requires helicopters to conduct tours at an altitude of 9,250 ft. MSL and fixed-wing aircraft to conduct tours at an altitude of 9,750 ft. MSL.
- The ATMP limits the operation of commercial air tours to between one hour after sunrise and three hours before sunset any day of the year, or extends operations until one hour before sunset if authorized by the agencies for operators that have converted to quiet technology aircraft. The ATMP allows the Park to establish no-fly periods for special events or planned Park management with 15-days advance notice to the operators;
- The operator is required to install and use flight monitoring technology on all authorized commercial air tours, and to include flight monitoring data in their semi-annual reports to the agencies, along with the number of commercial air tours conducted;
- When made available by Park staff, the operator/pilot will take at least one training course per year conducted by the NPS. The training will include Park information that the operator can use to further their own understanding of Park priorities and management objectives as well as enhance the interpretive narrative for air tour clients and increase understanding of parks by air tour clients;
- At the request of either of the agencies, the Park staff, the FAA Flight Standards District Office (FSDO), and all operators will meet once per year to discuss the implementation of this ATMP and any amendments or other changes to the ATMP. This annual meeting could be conducted in conjunction with any required annual training; and
- For situational awareness when conducting tours of the Park, the operator will utilize frequency 122.9 and report when they enter and depart a route. The pilot should identify their company, aircraft, and route to make any other aircraft in the vicinity aware of their position.

The FAA and the NPS are both responsible for monitoring and oversight of the ATMP.

Section 4(f)

The study area for considering Section 4(f) resources for the ATMP consists of the Park and a ½ mile buffer outside the boundary of the Park. The study area for Section 4(f) resources also corresponds with the Area of Potential Effects (APE) used for compliance with Section 106 of the National Historic

[2] 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.

Preservation Act (NHPA) of 1966 (Section 106) for the Park. See **Attachment A** for a depiction of the Section 4(f) study area. Historic properties were identified as part of the Section 106 consultation process. Parks, recreational areas, and wildlife and waterfowl refuges were identified using public datasets from Federal, State, and local sources, which included the U.S. Forest Service and Bureau of Land Management. Each resource that intersected the study area (i.e., some portion of the property fell within the Park or ½ mile buffer) was included in the Section 4(f) analysis.

Potential Use of Section 4(f) Resources

Evaluating potential impacts to Section 4(f) resources focuses on changes in aircraft noise exposure and visual effects resulting from implementing the ATMP. 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 evaluated the Section 4(f) resources for potential noise (including vibration) and visual impacts to determine if there was substantial impairment to Section 4(f) resources due to the ATMP that might result in a constructive use.

Noise Impacts Analysis

The FAA's noise evaluation is based on Day Night Average Sound Level Average Annual Day (Ldn or DNL), the cumulative noise energy exposure from aircraft. As part of the ATMP noise analysis, the NPS provided supplemental metrics to assess the impact of commercial air tours on visitor experience in quiet settings, including noise sensitive areas of Section 4(f) resources. The metrics and acoustical terminology considered for the Section 4(f) noise analysis are shown in the table below.

Table 1. Metrics and acoustical terminology considered for the Section 4(f) noise analysis

Metric	**Relevance and citation**
Day-night average sound level, 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 ten dB penalty between 10 p.m. and 7 a.m. local time. The FAA's 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.[3]
Equivalent 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 a.m. to 7 p.m. to represent typical daytime commercial air tour operating hours. Note: Both $L_{Aeq,\ 12hr}$ and DNL and characterize: • 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)

[3] FAA Order 1050.1F, *Environmental Impacts: Policies and* Procedures, Exhibit 4-1

	However, DNL takes into account the increased sensitivity to noise at night by including a ten dB penalty between 10 p.m. and 7 a.m. local time. If there are no nighttime events, $L_{Aeq, 12hr}$ will be three dB higher than DNL.
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.
Time Above 35 dBA[4]	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 35 dB degrade experience in outdoor performance venues (ANSI 12.9-2007, Quantities And Procedures For Description And Measurement Of Environmental Sound – Part 5: Sound Level Descriptors For Determination Of Compatible Land Use); Blood pressure increases in sleeping humans (Haralabidis et al., 2008); maximum background noise level inside classrooms (ANSI/ASA S12.60/Part 1-2010, Acoustical Performance Criteria, Design Requirements, And Guidelines For Schools, Part 1: Permanent Schools).
Time Above 52 dBA	The amount of time (in minutes) that aircraft sound levels are above a given threshold (i.e., 52 dBA) This metric represents the level at which one may reasonably expect interference with Park interpretive programs. At this background sound level (52 dB), 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.[5]

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In addition, the ATMP limits the operation of commercial air tours to between one hour after sunrise and three hours before sunset any day of the year, or extends operations until one hour before sunset if authorized by the agencies for operators that have converted to quiet technology aircraft. These time restrictions provide times when visitors seeking solitude may experience the Section 4(f) resources without disruptions from commercial air tours. The altitudes required by the ATMP, which increases the minimum altitude as compared to most existing helicopter operations and maintains the minimum altitude as compared to most existing fixed-wing operations, will reduce the maximum noise levels at sites directly below the air tour routes. Collectively, these changes from existing operations and their effect on the Section 4(f) resources will likely result in beneficial impacts to the Section 4(f) resources.

A review of the potential for vibrational impacts on historic buildings, parklands, and forests suggests that the potential for damage resulting from fixed-wing propeller aircraft overflights is minimal, as the fundamental blade passage frequency is well above the natural frequency of these structures. Additionally, the vibration amplitude of these overflights at the altitudes prescribed in the ATMP will be well below recommended limits. A review of potential vibrational impacts on geologic resources at Rainbow Bridge National Monument recommends a minimum helicopter standoff distance of ¼-mile (1,320 ft.) horizontal radius at altitudes less than 500 ft. above the top of the structure to avoid damage to geologic resources associated with the vibrational energy of helicopter blades (Moore, 2018). The Park does not have any documented reports of vibrational impacts or damages on the Park's geologic features. Although the Park currently lacks a vibrational study on specific Bryce Canyon geological features and hoodoos, the ATMP requires commercial air tours to fly at higher altitudes as compared to existing conditions. The ATMP would require helicopters to fly a minimum of 1,000 to 2,600 ft. AGL, and for fixed-wing a minimum of 1,500 to 2,600 ft. AGL depending on terrain. Routes would be shifted to the east away from the main amphitheater area; therefore, flights would not occur directly over the fragile Bryce geologic formations. For these reasons, vibrational impacts to geologic resources within the Park are not anticipated to be significant for the commercial air tour aircraft specified in the ATMP.

As a result, FAA concludes there would be no substantial impairment on Section 4(f) resources in the study area from noise-related effects by the implementation of the ATMP. The ATMP would not result in significant or reportable increase in noise at the Park and the ATMP will likely provide beneficial impacts to Section 4(f) resources. This all supports the FAA's determination that implementation of the Proposed Action would not constitute constructive use of Section 4(f) resources in the study area. This Section 4(f) determination is also consistent with the Section 106 no adverse effect determination at the Park.

Visual Impacts Analysis

The ATMP would not substantially impair Section 4(f) resources within the study area because there would be no measurable change in visual effects from existing conditions. The level of commercial air tour activity under the ATMP will remain substantially similar. Recognizing that some types of Section 4(f) resources may be affected by visual effects of commercial air tours, the FAA and NPS considered the potential for the introduction of visual elements that could substantially diminish the significance or enjoyment of Section 4(f) resources in the study area. Aircraft are transitory elements in a scene and visual impacts tend to be relatively short. The short duration and low number of flights make it unlikely a historic property, forest, or parkland would experience a visual effect from the ATMP. One's perspective of or viewshed from a historic property and natural areas is often drawn to the horizon and aircraft at higher altitudes are less likely to be noticed. Aircraft at lower altitudes may attract visual

attention but are also more likely to be screened by vegetation or topography. The ATMP allows the Park to establish no-fly periods for special events or planned Park management with 15-days advance notice to the operators.

The ATMP limits the annual number of commercial air tours to 515 flights and the routes are similar as are currently flown under existing conditions. Visual impacts to Section 4(f) resources will be similar to impacts currently occurring because the number of authorized flights under the ATMP will be the same as or less than the average number of flights from 2017-2019, and the routes are similar as compared to existing conditions, even though reduced in number and consolidated. The ATMP would not introduce visual elements that would diminish the integrity of a Section 4(f) resource. Therefore, there would be no constructive use from visual impacts of Section 4(f) resources.

Preliminary Finding

The FAA has preliminarily determined the ATMP would not substantially diminish the protected activities, features, or attributes of the Section 4(f) resources in the study area. There is no anticipated change in visual and noise impacts over existing conditions as a result of the ATMP. Moreover, the noise analysis indicated that there would be no significant impact or reportable increase from implementation of the ATMP. The ATMP would not result in substantial impairment of Section 4(f) resources; therefore, based on the analysis above, FAA intends to make a determination of no constructive use of Dixie National Forest. We request that you review this information and respond with any concerns or need for further consultation on the FAA's proposed no substantial impairment finding within fourteen days of receiving this letter.

Should you have any questions regarding any of the above, please contact Eric Elmore at 202-267-8335 or eric.elmore@faa.gov and copy the ATMP team at ATMPTeam@dot.gov.

Sincerely,

ERIC M ELMORE

Digitally signed by ERIC M ELMORE
Date: 2022.08.25 07:12:17 -04'00'

Eric Elmore
Senior Policy Advisor
Office of Environment and Energy
Federal Aviation Administration

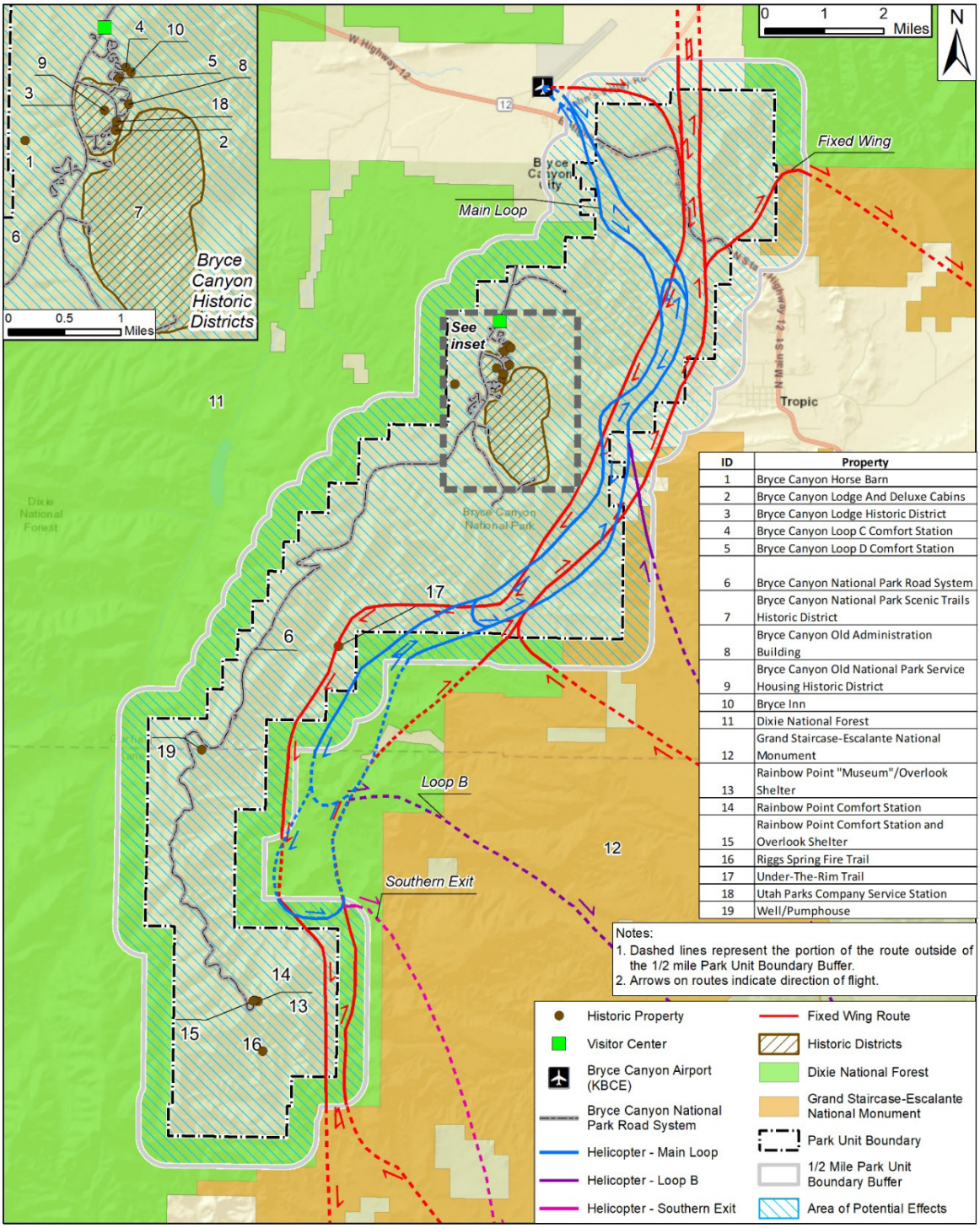
Attachments

A. Map including proposed Commercial Air Tour Routes, Section 4(f) Study Area, and Section 4(f) Resources

ATTACHMENT A

Map of Proposed Commercial Air Tour Routes, Section 4(f) Study Area, and Section 4(f) Resources

Section 4(f) Study Area and Properties for ATMP at Bryce Canyon National Park



ID	Property
1	Bryce Canyon Horse Barn
2	Bryce Canyon Lodge And Deluxe Cabins
3	Bryce Canyon Lodge Historic District
4	Bryce Canyon Loop C Comfort Station
5	Bryce Canyon Loop D Comfort Station
6	Bryce Canyon National Park Road System
7	Bryce Canyon National Park Scenic Trails Historic District
8	Bryce Canyon Old Administration Building
9	Bryce Canyon Old National Park Service Housing Historic District
10	Bryce Inn
11	Dixie National Forest
12	Grand Staircase-Escalante National Monument
13	Rainbow Point "Museum"/Overlook Shelter
14	Rainbow Point Comfort Station
15	Rainbow Point Comfort Station and Overlook Shelter
16	Riggs Spring Fire Trail
17	Under-The-Rim Trail
18	Utah Parks Company Service Station
19	Well/Pumphouse

From: Wright, Kevin - FS
To: ATMPTeam
Cc: Elmore, Eric <FAA>
Subject: RE: Section 4(f) Consultation - Air Tours at Bryce Canyon National Park - Dixie National Forest
Date: Friday, September 2, 2022 1:14:59 PM
Attachments: image001.png
image002.png
image003.png
image004.png

The Dixie National Forest has reviewed the attached letter and has no concerns and needs no further consultation on the FAA's proposed no substantial impairment finding.

Please let me know if you need anything else. Thanks!

Kevin Wright
Forest Supervisor
Forest Service
Dixie National Forest
p: [redacted]
c: [redacted]
820 N Main St
Cedar City, UT 84721
www.fs.fed.us

Caring for the land and serving people

From: ATMPTeam <ATMPTeam@dot.gov>
Sent: Friday, August 26, 2022 6:56 AM
To: Wright, Kevin - FS <kevin.wright@usda.gov>
Cc: Elmore, Eric <FAA> <eric.elmore@faa.gov>; ATMPTeam <ATMPTeam@dot.gov>
Subject: Section 4(f) Consultation - Air Tours at Bryce Canyon National Park - Dixie National Forest

Dear Kevin Wright,

The Federal Aviation Administration (FAA), in cooperation with the National Park Service (NPS), is developing an Air Tour Management Plan (ATMP) for the Bryce Canyon National Park (Park). The

FAA is preparing documentation for the ATMP in accordance with the National Parks Air Tour Management Act (NPATMA) and other applicable laws, including Section 4(f) of the U.S. Department of Transportation Act (Section 4(f)). The purpose of the attached letter is to coordinate with you on FAA's preliminary findings related to the ATMP's potential impacts to Dixie National Forest, which is a protected property under Section 4(f).

We request that you review the attached letter and respond with any concerns or need for further consultation on the FAA's proposed no substantial impairment finding within fourteen days of receiving this email.

Should you have any questions regarding any of the above, please contact Eric Elmore at 202-267-8335 or eric.elmore@faa.gov and copy the ATMP team at ATMPTeam@dot.gov.

APPENDIX E

Endangered Species Act: Section 7 Compliance Documentation

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

U.S. Department of Transportation
Federal Aviation Administration

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

The U.S. Fish and Wildlife Service concurs with your determination that the proposed action *may affect, and is not likely to adversely affect*:

Species: Mexican spotted owl
California Condor
Southwestern willow flycatcher
Western yellow-billed cuckoo

Critical Habitat: N/A

The proposed action is expected to be:

Insignificant: X Discountable: X Beneficial: ____

_____

U.S. Fish and Wildlife Utah Field Supervisor

Office Code: 06E23000 Project Code: 2022-0066258

NATIONAL PARKS AIR TOUR MANAGEMENT PROGRAM

July 8, 2022

Yvette Converse – Field Supervisor
U.S. Fish and Wildlife Service
2369 West Orton Circle, Suite 50
West Valley City, Utah 84119

Re: Informal Section 7 Consultation for Bryce Canyon National Park Air Tour Management Plan

Dear Field Supervisor Converse,

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 Bryce Canyon National Park (the Park). The agencies are preparing documentation for the ATMP in accordance with the National Parks Air Tour Management Act (NPATMA) and other applicable laws. This letter is a request for informal consultation with your office by the agencies pursuant to Section 7 of the Endangered Species Act (the Act). We are seeking your concurrence that the proposed action in the ATMP will not adversely affect threatened and endangered species occurring within the Park.

Project Background and Purpose of the Action

NPATMA of 2000, directs the agencies to develop ATMPs or voluntary agreements for national park system units over which more than fifty commercial air tours occur annually, 49 U.S.C. § 40128. A commercial air tour operation is defined as "a flight conducted for compensation or hire in a powered aircraft where the purpose of the flight is sightseeing over a national park, within ½ mile outside the boundary of a national park or over tribal lands[1], during which the aircraft flies below an altitude of 5,000 feet (ft.) above ground level (AGL) or less than 1 mile laterally from any geographic feature within the park (unless more than ½ mile outside the boundary)." When NPATMA was passed in 2000 it required the FAA to grant Interim Operating Authority (IOA) to existing air tour operators who were permitted to continue air tour operations over parks until an ATMP was completed. IOA includes only an annual cap on the number of commercial air tours that may be conducted by an operator, but does not represent the actual number of air tours conducted and does not designate the route(s), time-of-day, or altitude(s) of such tours. In 2012, NPATMA was amended by Congress to require operators to report the number of commercial air tours conducted on a quarterly interval each year.

[1] Defined by NPATMA as" ...Indian country (as that term is defined in section 1151of title 18) that is within or abutting a national park."

On February 14, 2019, Public Employees for Environmental Responsibility and the Hawai'i Coalition Malama Pono filed a petition for writ of mandamus seeking to have the agencies complete air tour management plans or voluntary agreements at seven specified parks, *In re Public Employees for Environmental Responsibility, et al*., Case No. 19-1044 (D.C. Cir.). On May 1, 2020, the United States Court of Appeals for the District of Columbia Circuit granted the petition and ordered the agencies to file a proposed schedule for bringing twenty-three eligible parks, including Bryce Canyon National Park, into compliance with NPATMA by August 31, 2022. The agencies submitted that plan, which was approved by the court.

Past and Current Commercial Air Tour Activity

Table 1 lists the current commercial air tour activity over the Park along with the average number of flights typically flown, based on data reported to the NPS and FAA. Based on reported data from 2017-2019, the average annual number of commercial air tours over the Park is 515. Under IOA, the total number of flights conducted each year varies, but could include a maximum of 3,131 flights annually. The flights currently conducted over the Park are flown at altitudes ranging from 300 ft. to 3,000 ft. above ground level (AGL) depending on location over the Park. Details regarding the proposed action, which is implementation of an ATMP for the Park, are described in the following sections.

Table 1 Current Commercial Air Tour Activity

IOA	Current Altitudes AGL	Average Total Annual Flights (2017-2019)
3,131	Varies from 300 ft. – 3,000 ft.	515

No impacts to threatened and endangered species have been noted or observed by the agencies under current operating conditions which allow existing flights and potential flights up to IOA (noted in Table 1) in the absence of an ATMP.

Action Area and Description of Proposed Action

The action area includes the area over the Park and the area within a ½-mile outside the Park boundary depicted in Figures 1 and 2. This area encompasses all of the effects of the proposed action. The ATMP applies to all commercial air tours over the Park and commercial air tours within ½-mile outside the boundary of 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, during which the aircraft flies:

> (1) Below 5,000 ft. 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).

The proposed action is implementation of an ATMP for the Park which establishes the following conditions for the management of commercial air tour operations.

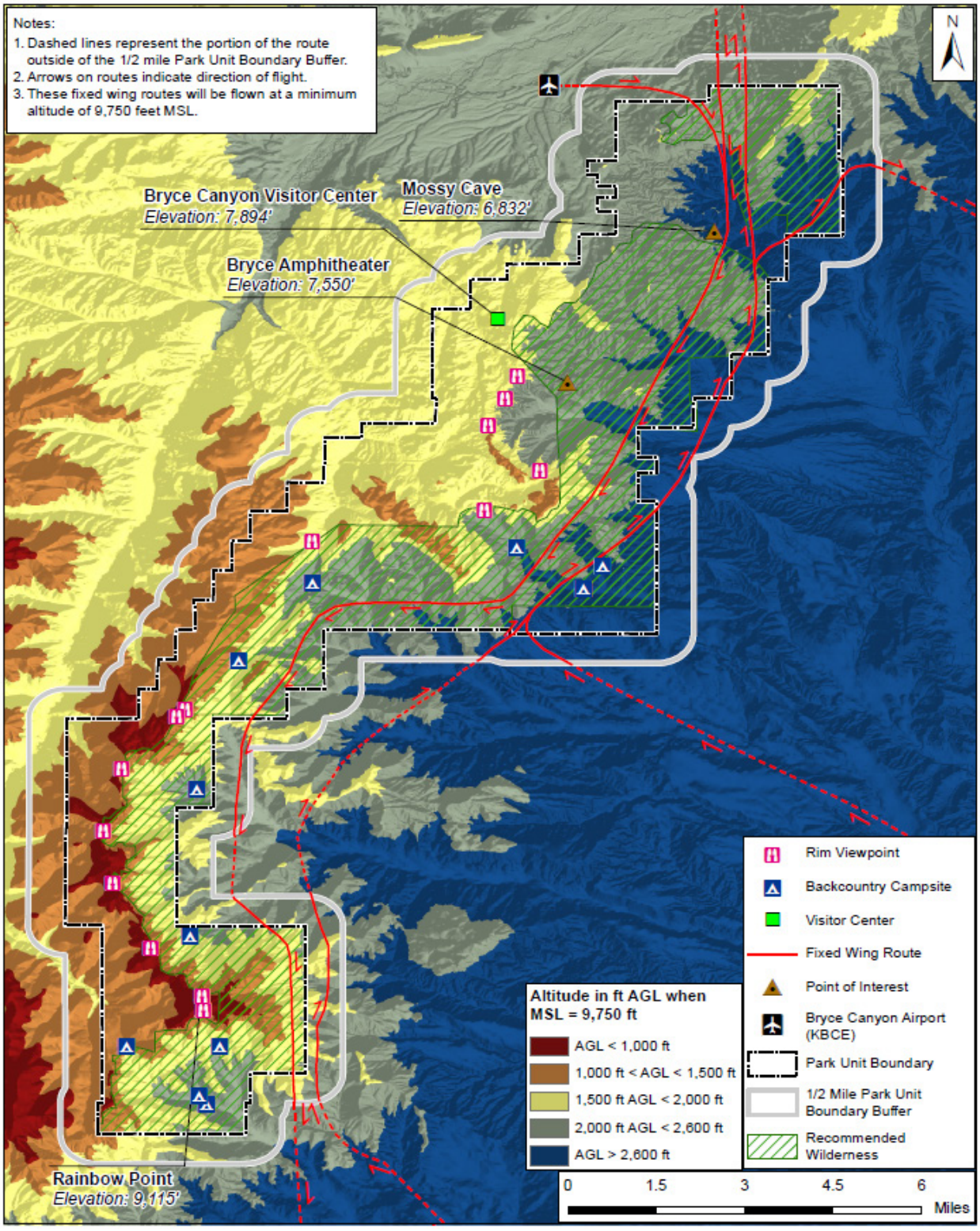


Figure 1. Proposed Action Fixed-wing Commercial Air Tour Routes at Bryce Canyon National Park

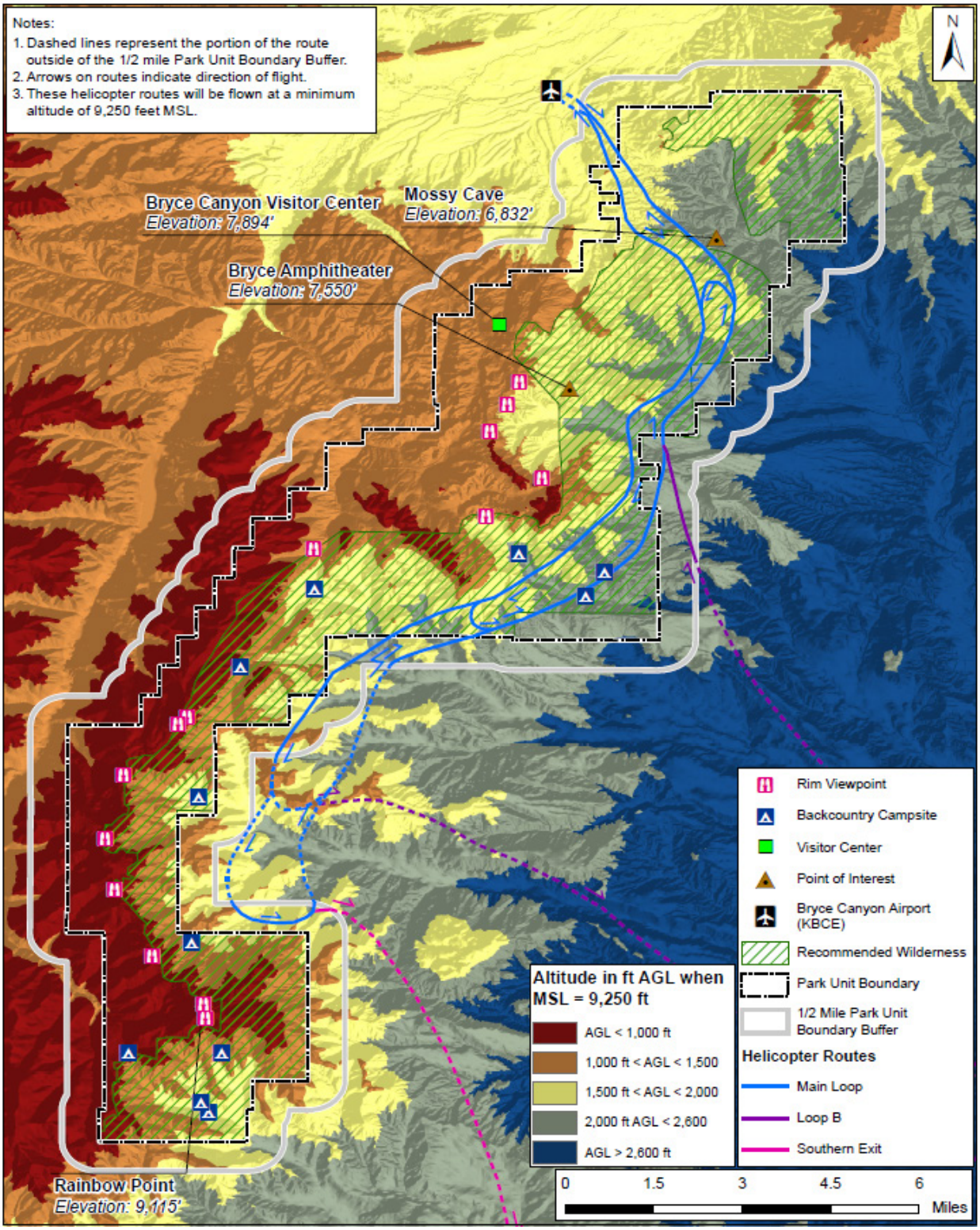


Figure 2. Proposed Action Helicopter Commercial Air Tour Routes at Bryce Canyon National Park

Commercial Air Tours Authorized

The ATMP authorizes 515 commercial air tours per year. As described above, this number is the same as the three-year average number of flights that occurred from 2017-2019. The ATMP will remain in effect until amended, at which time the agencies would reinitiate consultation pursuant to 50 CFR § 402.16.

Commercial Air Tour Routes and Altitudes

Commercial air tours authorized under the ATMP shall be conducted on the routes in Figures 1 and 2 above. 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 mean sea level (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. Fixed-wing air tours will fly no lower than 1,500 ft. AGL, and helicopter air tours will fly no lower than 1,000 ft. AGL. Except when necessary for takeoff or landing, or in an emergency or to avoid unsafe conditions, or unless otherwise authorized for a specified purpose, operators may not deviate from these routes and altitudes.

Day/Time

Under the proposed action, unless an operator implements quiet technology aircraft, commercial air tours may operate beginning one hour after sunrise or ending three hours before sunset, as defined by the National Oceanic and Atmospheric Administration (NOAA).[2] This proposed window of operation would provide additional protection to wildlife during critical dusk/dawn periods that are prime times of day for foraging, mating, and communication.

Required Reporting

As part of the ATMP, commercial air tour operators are required to equip all aircraft used for commercial air tours with flight monitoring technology and to submit these tracking data to the agencies. Operators are also required to submit semi-annual reports confirming the number of commercial air tours conducted over the Park and implementation of the ATMP flight parameters.

Quiet Technology Incentives

The ATMP incentivizes the adoption of quiet technology aircraft by commercial air tour operators conducting commercial air tours over the Park. On all days that flights are authorized, if the operator has converted to quiet technology aircraft, the operator will be allowed to conduct tours beginning one hour after sunrise or ending one hour before sunset on all days that flights are authorized.

[2] Sunrise and sunset data is available from the NOAA Solar Calculator, https://www.esrl.noaa.gov/gmd/grad/solcalc/

Additional Conservation Measures

California condors have not been identified in the Park and is not a current resource condition requiring active mitigation. However, condor habitat exists in the Park, and protective measures are necessary should a condor be identified. The ATMP includes the following protective measures for condors:

- Air tour operators are required to report visual identification of condors to the NPS, with an optional notification to USFWS, within 24 hours of initial sighting.
- Once NPS becomes aware of the presence of condor nests, notification and coordination will be conducted between the Park staff, the NPS Intermountain Region Wildlife Biologist and T&E Coordinator, the local USFWS field office, the air tour operator(s), and the flight standards district office (FSDO), as necessary, to determine the best avoidance measures for operators to take. Generally, operators will be required to avoid identified nesting areas, feeding areas, or other known areas of congregation by 1 mile vertically or laterally if other natural or cultural resources are not impacted or affected (as determined by the NPS) or such avoidance measures would not result in operating conditions deemed unsafe by the FAA.
- The agencies may temporarily restrict use of air tour routes over these sensitive areas while: 1) working with operators to modify air tour routes (i.e., 1 mile shifts away from sensitive condor areas); and 2) assessing the natural, cultural, and safety impacts of any changes.

Listed Species Evaluated for Effects

The U.S. Fish and Wildlife Service's Information Planning and Consultation (IPaC) tool was used to assess the potential for any federally listed species or designated critical habitat to 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.

Species with No Effect Determination

Table 2 Listed Species with No Effect Determination

Mammals Common name	Mammals Scientific Name	Mammals Status (Federal)	Mammals Critical Habitat (Y/N)	Mammals Occurrence in the Park[3]
Utah Prairie Dog	*Cynomys parvidens*	Threatened	N	Present
Flowering Plants Common name	**Flowering Plants Scientific Name**	**Flowering Plants Status (Federal)**	**Flowering Plants Critical Habitat (Y/N)**	**Flowering Plants Occurrence in the Park[3]**
Kodachrome Bladderpod	*Lesquerella tumulosa*	Endangered	N	Unknown
Ute Ladies'-tresses	*Spiranthes diluvialis*	Threatened	N	Unknown

[3] Based on NPS species list, https://irma.nps.gov/NPSpecies/Search/SpeciesUst

The proposed action does not involve ground-disturbing activities or other activities with the potential to impact aquatic or terrestrial habitat. Therefore, flowering plants and mammal species will not be impacted by commercial air tours. Although Utah prairie dogs could be exposed to noise, the frequency and magnitude of noise exposure at ground level where they occur would not be expected to elicit a biologically meaningful response from this species. The closest prairie dog habitat is greater than ½ mile from the routes.

The conservation measures included in the proposed action, such as the requirement to fly on a designated route and the establishment of required minimum altitudes, will reduce noise impacts and will ensure that the intensity of the noise associated with commercial air tours is limited. Therefore, the agencies have determined the proposed action would have ***No Effect*** on the species listed in Table 2.

California Condor *(Gymnogyps californianus)*

California condor (condor) are federally listed as endangered under the Act. The USFWS began reintroducing condors to the wild in 1992 (USFWS 1996). In 1996, a non-essential experimental population was established in Northern Arizona (61 *Federal Register* (FR) 54043-54060) with no specific management requirements (Rodriguez 2012). The Condor Recovery Plan was revised for the third time in 1996 (USFWS 1996). An experimental nonessential population of condors was designated on October 16, 2006 that included parts of northern Arizona and Southern Utah (61 FR 54044). Currently (2019 Annual Population Status), there are approximately 337 condors living in the wild in California, Arizona, and Baja Mexico, with 98 of those in the Vermillion Cliffs of Arizona and southern Utah (USDI 2019).

Condors require large areas of remote country for foraging, roosting, and nesting. Condors roost on large trees or snags, or on isolated rocky outcrops and cliffs. Nests are located in shallow caves and rock crevices on cliffs where there is minimal disturbance. Foraging habitat includes open grasslands and oak savanna foothills that support populations of large mammals such as deer and cattle. Condors are known to fly 150 miles a day in search of food (USFWS 1996). While potentially suitable foraging habitat exists along large open areas at the Park, NPS does not have documented sightings of condor presence, nesting or roosting within the Park.

Mexican Spotted Owl *(Strix occidentalis lucida)*

Mexican spotted owl (MSO) is listed as a federally threatened species under the Act. The 2012 recovery plan notes MSO commonly nest, roost, forage, and disperse in a diverse array of biotic communities throughout most of the range. These include: pine-oak, canyons, and mixed-conifer forests. In general, the mixed-conifer forests are dominated by Douglas-fir (*Pseudotsuga menziesii*) and/or white fir, (*Abies concolor*) with co-dominant species including southwestern white pine (*Pinus strobiformis*), limber pine (*P. flexilis*), and ponderosa pine (*P. ponderosa*). The recovery plan also notes that species distribution of the MSO historically is unknown. However, present population size and distribution are thought to be similar to historical ranges. Most owls occur within the 11 National Forests of Arizona and New Mexico. It is unknown why Colorado and Utah support fewer owls.

The NPS has not conducted an inventory of MSO at the Park. However, suitable habitat does exist. There is designated critical habitat for MSO on approximately 3.5 million hectares (ha) (8.6 million acres (ac)) in Arizona, Colorado, New Mexico, and Utah on Federal Lands. Within the critical habitat

boundaries, critical habitat includes only protected and restricted habitats as defined in the original Recovery Plan (USDI FWS 1995). Similarly, the primary constituent elements of critical habitat were listed as those habitat features recognized in the 1995 Recovery Plan as associated with Mexican spotted owl occupancy as follows:

- Forest structure
- Maintenance of Adequate Prey Species
- Canyon Habitat

NPS lands that contain critical habitat for MSO include 751,261 ac (304,015 ha) in Arizona at Grand Canyon National Park, 30,817 ac (12,471 ha) in New Mexico, and 720,727 ac (696,331 ha) in Utah (for a total of 2,502,805 ac (1,012,816 ha)). No critical habitat for MSO is located within the Park.

Southwestern Willow Flycatcher *(Empidonax traillii extimus)*

The U.S. Fish and Wildlife Service listed the southwestern willow flycatcher as a federally endangered species in 1995. The 2002 USFWS recovery plan for the southwestern willow flycatchers notes the species is a neotropical migrant that breeds in patches of riparian habitat throughout the American southwest. Their breeding habitat currently ranges from southern California, through southern Nevada, southern Utah, Arizona, New Mexico, southwestern Colorado, and historically included western Texas and extreme northwestern Mexico. Southwestern willow flycatchers require moist microclimatic and vegetative conditions, and breed only in dense riparian vegetation near surface water or saturated soil. While wet conditions are uniformly required, the structure and species of vegetation in which they nest vary by region and availability. The birds frequently build nests in nonnative tamarisk (*Tamarix spp.*), as well as in native willow (*Salix spp.*), typically in vegetation stands of 4–7 m in height. Nesting habitat patches can range widely in size, from as small as 0.6 ha to as much as 200 ha, although the majority of patches tend towards the smaller end of the range. They typically avoid narrow, linear patches less than 10 m wide. Patches of riparian habitat are commonly used by willow flycatchers during migration, but may be smaller in size, with shorter, sparser vegetation structure than those used for nesting. In the winter, willow flycatchers use a variety of habitats, but appear to prefer semi-open brushy areas that are near water. The NPS has documented the species at the park with suitable riparian habitat that supports breeding and foraging. No critical habitat occurs within the Park.

Yellow-billed Cuckoo *(Coccyzus americanus)*

Yellow-billed cuckoos breed in large blocks of riparian habitats (particularly woodlands with cottonwoods (*Populus fremontii*) and willows (*Salix spp.*). Dense understory foliage appears to be an important factor in nest site selection, while cottonwood trees are an important foraging habitat in areas where the species has been studied in California. The NPS has documented the species at the park with suitable riparian habitat that supports breeding and foraging.

Determination of Effects to Evaluated Species

Impacts to the California condor, Mexican spotted owl, southwestern willow flycatcher, and the yellow-billed cuckoo were analyzed using the best site-specific data available for species locations and distributions within, or near the boundaries of the Park. The following section describes potential

effects to these species and the agencies determination. No critical habitat occurs within the Park for any of these species.

California Condor *(Gymnogyps californianus)*

Noise impacts and direct strikes are potential impacts to the condor from commercial air tours. Although direct collisions with aircraft are possible, the probability is low. Bird strikes most often occur during the approach and landing of airplanes (FAA Frequently Asked Questions, Airport Wildlife Hazard Mitigation program, http://wildlife-mitigation.tc.faa.gov/wildlife /FAQ.aspx#q1). There is one airfield located within 5 miles of the Park where commercial air tours depart and land. However, no take off or landings will occur within the Park. There is no reference of condor strikes in the FAA Wildlife Strike Database since reintroduction in 1996. While the potential for collisions exists, pilots should be able to avoid most interactions with condors, since the birds are large and highly visible.

The USFWS *Utah Field Office Guidelines for Raptor Protection from Human and Land Use Disturbances (USFWS, 2002)* recommends a seasonal buffer zone to protect individual nest sites and territories to ensure successful breeding and to maintain high use areas by raptors, including California condor. The guidance defines buffer zones as seasonal or spatial areas of inactivity in association with individual nests or nesting territories. The buffer recommendation for condors is 1-mile from February 1 through November 30 to reduce impacts.

Condors have not been identified in the Park and is not a current resource condition requiring active mitigation. However, condor habitat exists in the Park, and protective measures are necessary should a condor be identified. The ATMP includes the following protective measures for condors:

- Air tour operators are required to report visual identification of condors to the NPS, with an optional notification to USFWS, within 24 hours of initial sighting.
- Once NPS becomes aware of the presence of condor nests, notification and coordination will be conducted between the Park staff, the NPS Intermountain Region Wildlife Biologist and T&E Coordinator, the local USFWS field office, the air tour operator(s), and the flight standards district office (FSDO), as necessary, to determine the best avoidance measures for operators to take. Generally, operators will be required to avoid identified nesting areas, feeding areas, or other known areas of congregation by 1 mile vertically or laterally if other natural or cultural resources are not impacted or affected (as determined by the NPS) or such avoidance measures would not result in operating conditions deemed unsafe by the FAA.
- The agencies may temporarily restrict use of air tour routes over these sensitive areas while: 1) working with operators to modify air tour routes (i.e., 1 mile shifts away from sensitive condor areas); and 2) assessing the natural, cultural, and safety impacts of any changes.

Avoidance measures will remain in effect for as long as the condors are observed by park staff to be present. Cumulative effects include the effects of future State, Tribal, local, or private actions that are reasonably certain to occur in the action area. Currently there are no known planned Federal or Tribal actions that would affect condors. Similarly, the agencies are not aware of any proposed non-Federal action that may affect species or critical habitats considered in this consultation. The impacts from ongoing Federal actions unrelated to the proposed action are considered part of the baseline condition

since they are covered under separate consultation pursuant to Section 7 of the Act. Therefore, there are no cumulative effects associated with the proposed action.

Based on implementation of the measures described above, any potential impact resulting from direct strikes would be discountable[4] and impacts from noise would be insignificant[5]. Therefore, the agencies determined the proposed action ***may affect, but is not likely to adversely affect*** California condor.

Mexican Spotted Owl *(Strix occidentalis lucida)*

Noise impacts and direct strikes are potential impacts to MSO. The possibility of direct strikes is low and not expected because owls are nocturnal and all commercial air tours will occur during daylight hours only. MSOs are not soaring birds and remain within forested locations with steep-walled canyons, further reducing the likelihood of aircraft strikes (USFWS 2012a). Noise from air tours may impact wildlife in a number of ways: 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., 2015; Kunc et al., 2016; Kunc & Schmidt, 2019).

Infrequent, noise-producing activities are generally assumed to have relatively little long-term impact on MSO. However, owls will react to noise disturbances by changing behavior and/or flushing from their perches (Delaney et al. 1999a; Swarthout and Steidl 2001, 2003). These behavioral responses may alter nesting and roosting activities, thus increasing vulnerability to predators and heat-related stress (USFWS 2012a). The MSO recovery plan notes that MSOs were more sensitive to disturbance by chainsaws than by helicopter overflights at comparable distances, and chainsaw operation caused most owls to flush from their perches when chainsaws were operated <60 m (197 ft.) from a roosting MSO. Owl response decreased with increasing distance to noise source for both chainsaw operation and helicopter overflights, and Delaney et al. (1999b) suggested that a buffer zone of 105 m (344 ft.) would minimize impacts of helicopter overflights on MSO. The MSO recovery plan recommends these breeding-season restrictions should be considered if noise levels are estimated to exceed 69 dBA (A-weighted noise level) (~80 dBO [owl-weighted noise level, Delaney et al. 1999b]) consistently (i.e., >twice/hour) or for an extended period of time (>1 hr.) within 50 m (165 ft.) of nesting sites (if known) or within entire protective activity centers (PAC) if nesting sites are not known. The recommendation is based in part on Delaney et al. (1999a, b), Delaney and Grubb (2003), and Pater et al. (2009). As indicated in the Noise Technical Analysis (See Appendix 1), while noise levels would vary along the route depending on terrain and other environmental factors, the maximum sound level or Lmax would not exceed 65 dBA (See Figure 7). Therefore, the proposed action would not exceed the noise levels, frequency or duration thresholds recommended in the MSO recovery plan.

Currently there are no known planned Federal or Tribal actions that would affect MSO. Similarly, the agencies are not aware of any proposed non-Federal action that may affect species or critical habitats considered in this consultation. The impacts ongoing Federal actions unrelated to the proposed action are considered part of the baseline condition since they are covered under separate consultation

[4] Discountable effects are those extremely unlikely to occur.

[5] Insignificant effects relate to the size of the impact and include those effects that are undetectable, not measurable, or cannot be evaluated.

pursuant to Section 7 of the Act. Therefore, there are no cumulative effects associated with the proposed action.

Based on implementation of the measures described above, any potential impact resulting from direct strikes would be discountable and impacts from noise would be insignificant. Therefore, the agencies have determined the proposed action ***may affect, but is not likely to adversely affect*** MSO.

Southwestern Willow Flycatcher *(Empidonax traillii extimus)* and Yellow-billed Cuckoo *(Coccyzus americanus)*

Noise impacts and direct strikes are potential impacts to southwestern willow flycatcher and yellow-billed cuckoo. The agencies determined that where potentially suitable habitat exists for these species the altitude of the routes is greater than 1,800 ft. AGL (see figure 3). Generally, these species do not fly at altitudes where bird strikes could occur as they prefer lower elevation riparian habitats (USFWS, 2002). Therefore, the possibility of direct strikes is low and not expected. Commercial air tours do have the potential to generate noise that could be audible to these species. As indicated in the Noise Technical Analysis (See Appendix 1), while noise levels would vary along the route depending on terrain and other environmental factors, the maximum sound level or Lmax would not exceed 65 dBA and the average sound levels over a 12-hour period (LAeq, 12hr) would most likely be less than 40 dBA (See Figure 6 and 7) minimizing noise impacts.

Based on implementation of the measures described above, any potential impact resulting from direct strikes would be discountable and impacts from noise would be insignificant. Therefore, the agencies have determined the proposed action ***may affect, but is not likely to adversely affect*** southwestern willow flycatcher and yellow-billed cuckoo.

Bryce Canyon National Park
Updated Fixed-Wing and Helicopter Routes

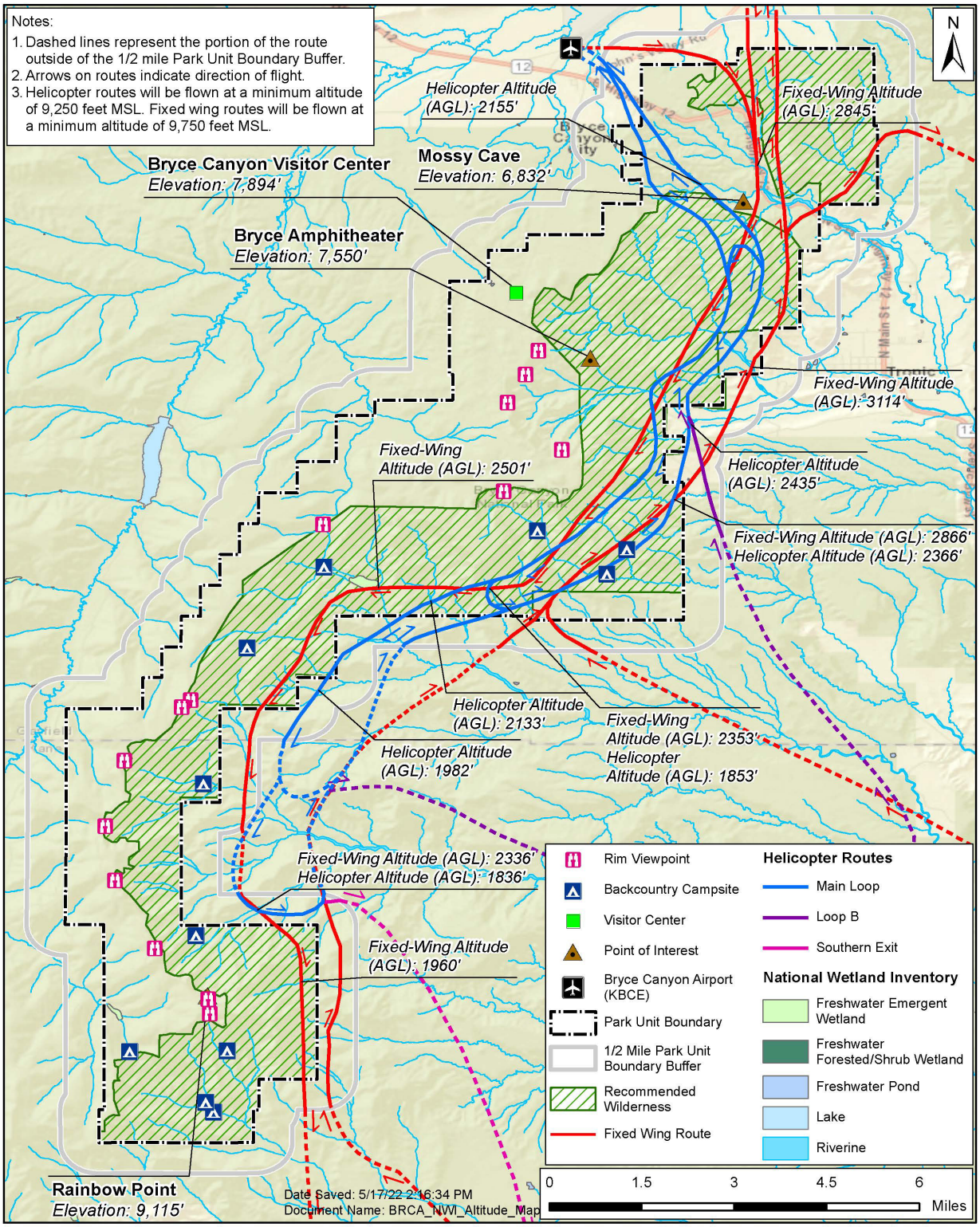


Figure 3. Proposed Action Potential Riparian Habitat

Conclusion

The proposed action implements the designated routes, required minimum altitudes, and limits in the number of air tours that may be conducted each year described above. In addition, the proposed action implements the avoidance measures recommended for California condor in accordance with the 2002 USFWS raptor guidelines. The measures explained above incorporated into the ATMP will serve to avoid and minimize possible effects listed species. Therefore, based on the analysis that all effects of the proposed action will be insignificant and/or discountable, the agencies have determined that the proposed project ***may affect, but is not likely to adversely affect*** California condor, Mexican spotted owl, southwestern willow flycatcher, and the yellow-billed cuckoo.

Thank you very much for your help and support. If you have questions or need more information, please contact Brett Cockrell, Brett_Cockrell@nps.gov Chief of Resources for Bryce Canyon National Park or Michelle Carter, Michelle_Carter@nps.gov at the NPS who is helping coordinate overall Section 7 consultations for ATMPs on behalf of the agencies.

Sincerely,

JAMES IRELAND Digitally signed by JAMES IRELAND Date: 2022.07.11 07:00:49 -06'00'

Jim Ireland, Superintendent for Bryce Canyon National Park

KEVIN W. WELSH Digitally signed by KEVIN W. WELSH Date: 2022.07.08 16:07:14 -04'00'

Kevin Welsh, Executive Director, Office of Environment and Energy, Federal Aviation Administration

Attachments

- Appendix 1 Technical Noise Analysis
- References

Appendix 1 Noise Technical Analysis

This section describes the agencies' noise analysis for the proposed action. Specific impacts to species evaluated for effects are described in the following section.

The agencies conducted noise modeling of the proposed action using the FAA's Aviation Environmental Design Tool (AEDT) version 3d and specified aircraft operating conditions for a representative commercial air tour at the Park. Overall, noise impacts associated with commercial air tours over the Park are not expected to measurably change, since the ATMP authorizes the same number of annual flights as the existing three-year average, and will require commercial air tours maintain the altitudes listed in the proposed action. The increase in altitude from the minimum altitudes listed in Table 1 under current conditions will reduce the maximum noise levels at sites directly below the commercial air tour routes. It should be noted that when the altitude of an aircraft is increased, the total area exposed to the noise from that aircraft may also increase depending on the surrounding terrain. However, because increases in altitude also reduce aircraft noise in areas nearby the flight track, the beneficial effects of increasing the altitude of commercial air tours will outweigh any potential increase in the area exposed to the noise.

For the FAA's indicators of significant impacts[6] using the day-night average sound level (DNL), the resultant DNL due to the ATMP is well below 65 dBA[7] within the Park boundary and ½-mile buffer. As noted below, contours are for $L_{Aeq,\ 12\ hr}$ (Equivalent Sound Level over 12 hours) as the average sound levels were below 35 dBA for the proposed action modeled at the Park; and DNL because it will be arithmetically three dBA lower than $L_{Aeq,\ 12hr}$ as there are no nighttime events at the Park.

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 primary metrics are shown in Table 3.

Table 3 Primary metrics used for the noise analysis.

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 35 dB degrade experience in outdoor performance venues (American National Standards Institute (ANSI) 2007; Blood pressure increases in sleeping humans (Haralabidis et al., 2008); maximum

[6] FAA Order 1050.1F, Exhibit 4-1

[7] dBA (A-weighted decibels): Sound is measured on a logarithmic scale relative to the reference sound pressure for atmospheric sources, 20 µPa. The logarithmic scale is a useful way to express the wide range of sound pressures perceived by the human ear. 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 in order 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.

Metric	Relevance and Citation
	background noise level inside classrooms (ANSI/Acoustical Society of America S12.60/Part 1-2010).
Time Above 52 dBA[8]	The amount of time (in minutes) that aircraft sound levels are above a given threshold (i.e., 52 dBA) This metric represents the level at which one may reasonably expect interference with Park interpretive programs. At this background sound level (52 dB), 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).
Equivalent 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 a.m. – 7 p.m. to represent typical daytime commercial air tour operating hours.
Day-night average sound level, L_{dn} (or DNL)	The logarithmic average sound levels, in dBA, over a 24-hour day, DNL takes into account the increased sensitivity to noise at night by including a ten dB penalty between 10 p.m. and 7 a.m. local time. Note: Both $L_{Aeq, 12hr}$ and L_{dn} characterize: • 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 L_{dn}) If there are no nighttime events, then $L_{Aeq, 12hr}$ is arithmetically three dBA higher than L_{dn}. The FAA's (2015 Exhibit 4-1) 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.
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.

In order to provide a conservative evaluation of potential noise effects produced by commercial air tours under the proposed action, the analysis is based on a characterization of a peak day of commercial air tour activity. For the busiest year of commercial air tour activity from 2017-2019 based on the total number of commercial air tour operations and total flight miles over the Park, the 90th percentile day

[8] As required by FAA policy, the FAA typically represents yearly conditions as the Average Annual Day (AAD). However, because ATMP operations in the park occur at low annual operational levels and are highly seasonal in nature it was determined that a peak day representation of the operations would more adequately allow for disclosure of any potential impacts. A peak day has therefore been used as a conservative representation of assessment of AAD conditions.

was identified for representation of a peak day 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 at the Park. For the Park, the 90th percentile day was identified as three flights on the M3 route using a Bell 206 B III aircraft, one flight on the M1 route using a Bell 206 B III aircraft, and one flight on the M3 route using an EC130 aircraft. Altitudes were modeled at 9,250 ft. MSL.

Noise contours for the following acoustic indicators were developed using the Federal Aviation AEDT version 3d and are provided below. A noise contour presents a graphical illustration or "footprint" of the area potentially affected by the noise. Noise contours are provided in Figures 4-5 below.
On days when commercial air tours may occur, the noise levels at the Park would be as follows:

- Time above 35 dBA would occur for less than 70 minutes (see Figure 4)
- Time above 52 dBA (minutes) would be less than 10 minutes (see Figure 5).
- Equivalent Sound Level or $L_{Aeq,\ 12hr}$ would be less than 40 dBA (see Figure 6). Contours are not presented for L_{dn} (or DNL) as it is arithmetically three dBA lower than $L_{Aeq,\ 12hr}$ if there are no nighttime events, which is the case for the ATMP modeled at the Park.
- The maximum sound level or L_{max} would not exceed 65 dBA (See Figure 7).

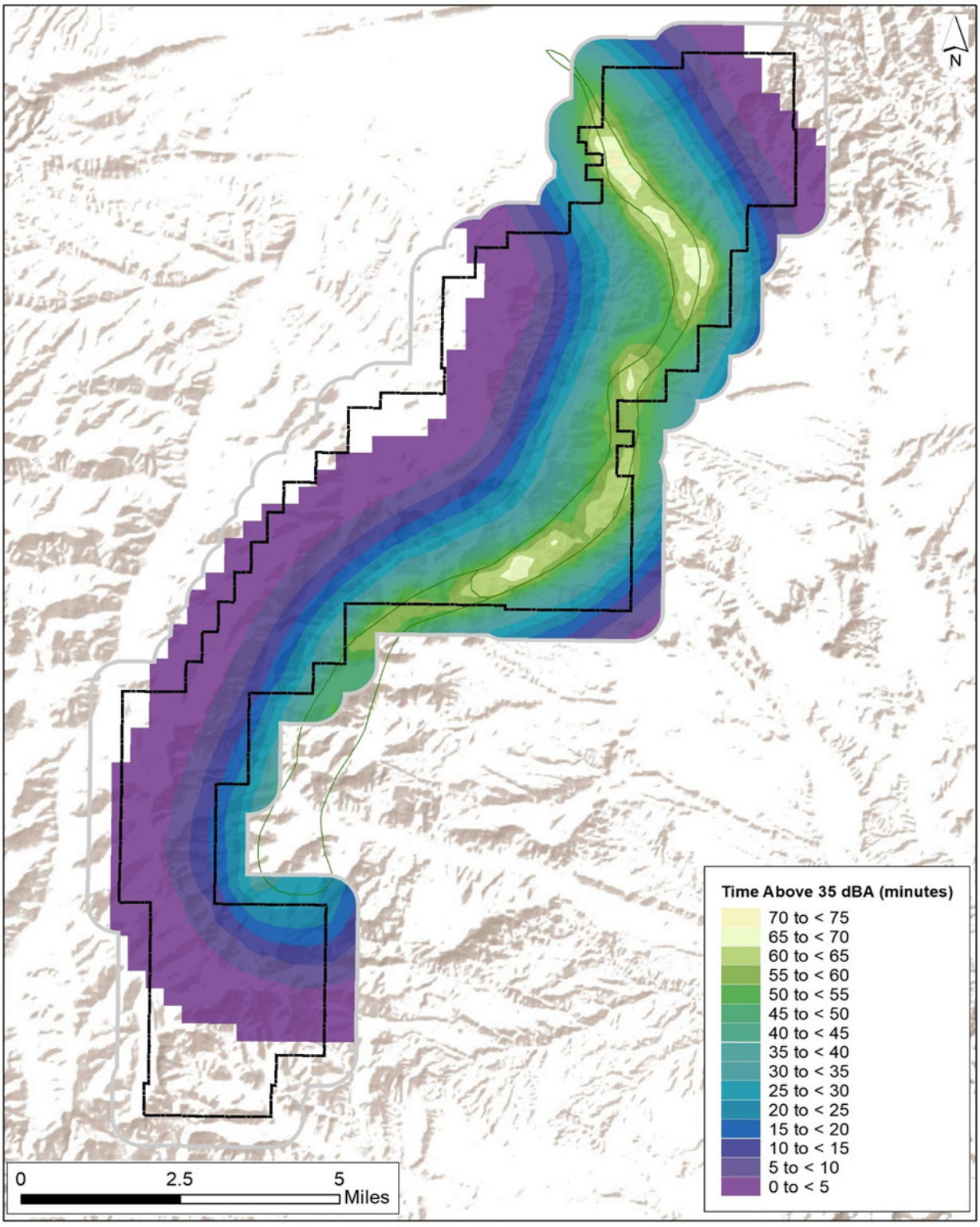


Figure 4. Noise Contour Results for Time above 35 dBA at Bryce Canyon National Park

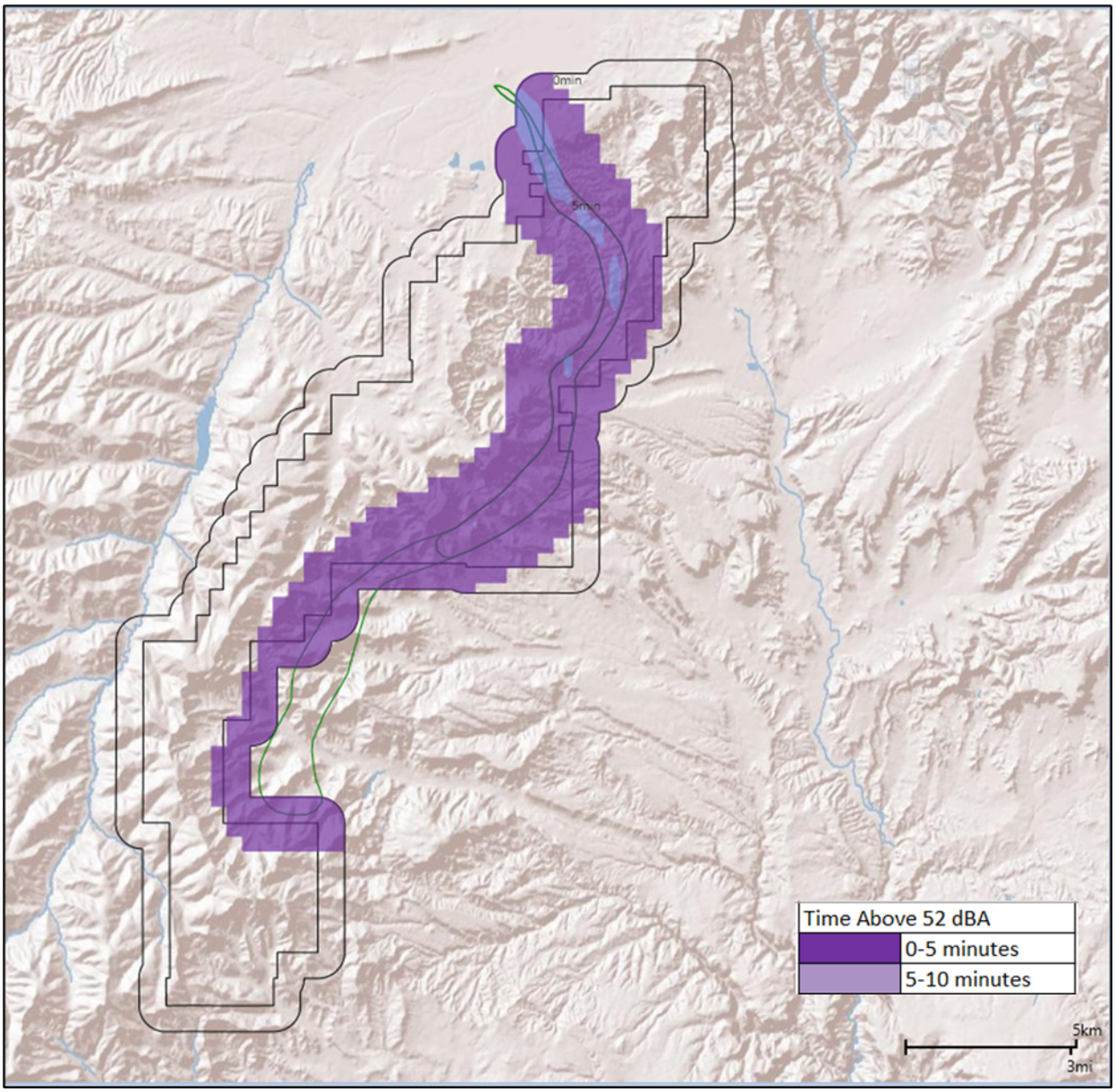


Figure 5. Noise Contour Results for Time above 52 dBA at Bryce Canyon National Park

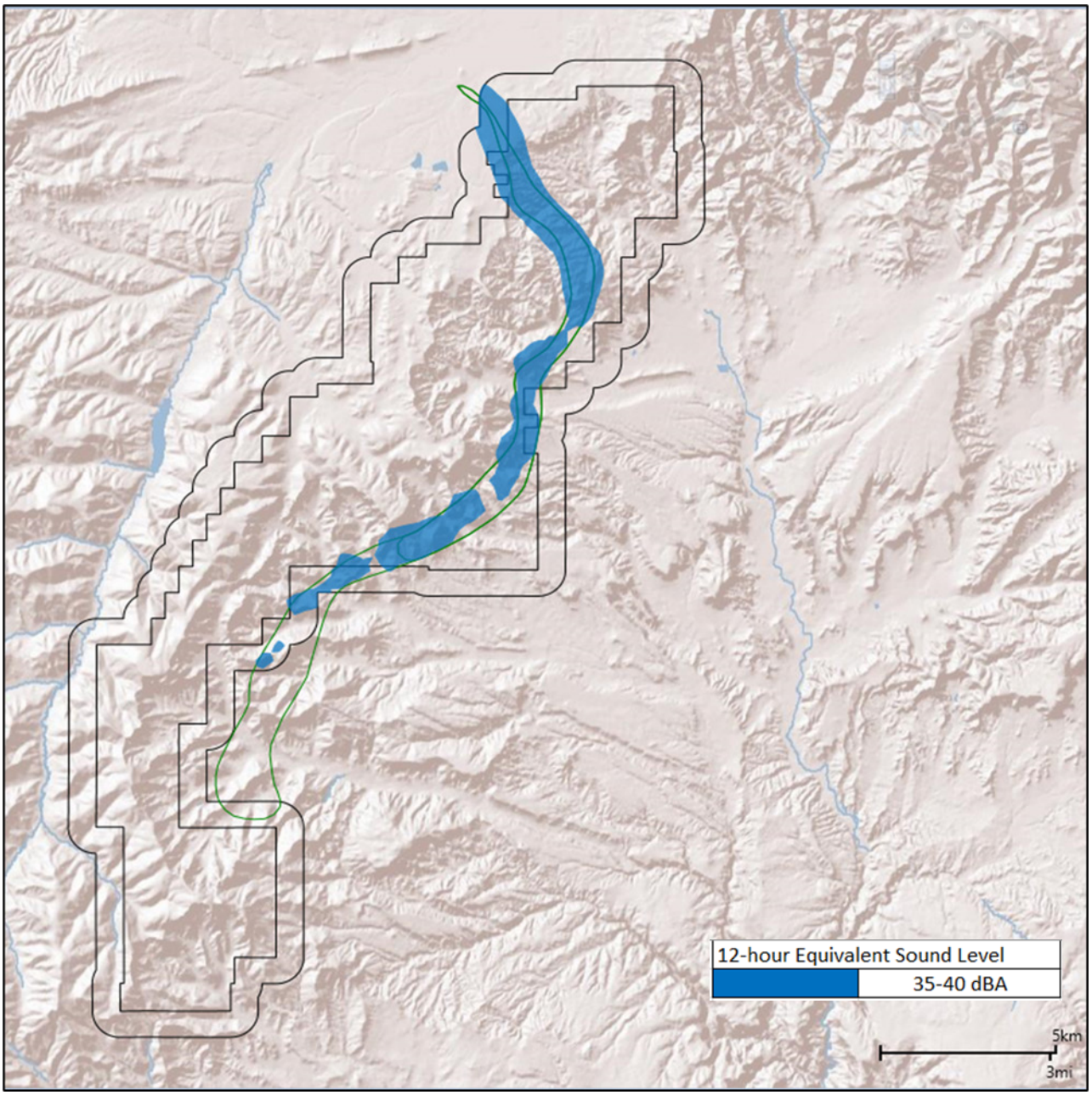


Figure 6. Noise Contour Results for Equivalent Sound Level or $L_{Aeq, 12hr}$ Sound Levels at Bryce Canyon National Park

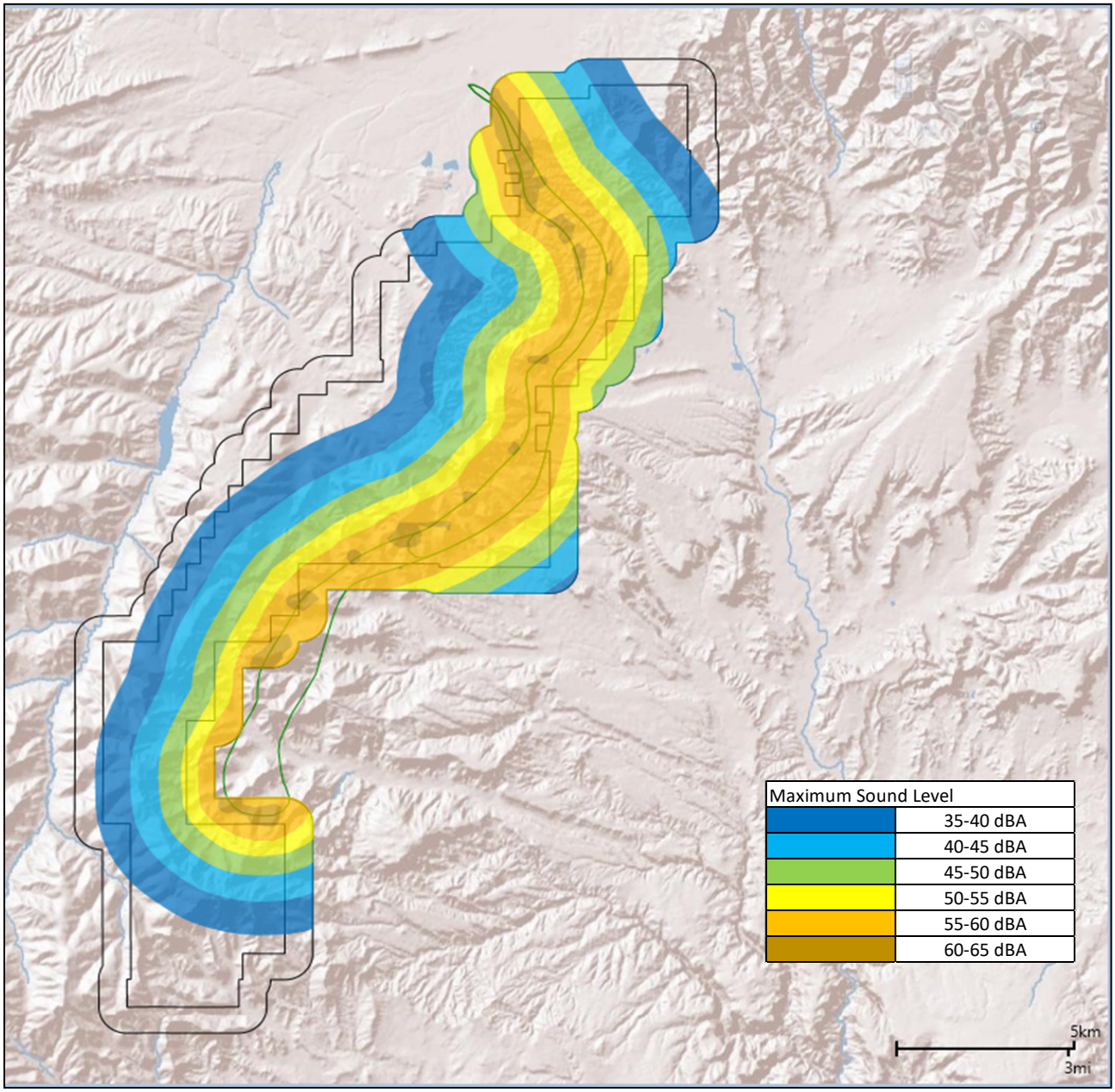


Figure 7. Noise Contour Results for Maximum Sound Levels at Bryce Canyon National Park

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APPENDIX F

National Historic Preservation Act: Section 106 Compliance Documentation

U.S. Department of Transportation
Federal Aviation Administration

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 5, 2022

Re: Section 106 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 Bryce Canyon National Park (Project #: 21-0762)

Savanna Agardy
Compliance Archaeologist
Utah Division of State History
300 Rio Grande Street
Salt Lake City, UT 84101

Dear Savanna Agardy:

Introduction

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) for Bryce Canyon National Park (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 describes the undertaking, including: changes that have occurred since the draft ATMP was issued to the public; the Area of Potential Effects (APE); a description of steps taken to identify historic properties; a description of affected historic properties in the APE and the characteristics that qualify them for the National Register of Historic Places (NRHP); and an explanation of why the criteria of adverse effect are inapplicable. 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 March 29, 2021. In a follow-up letter dated August 27, 2021, we described the proposed undertaking in more detail, proposed a preliminary APE, and provided our initial list of historic properties identified within the APE. FAA conducted additional identification efforts and provided a revised list of historic properties in our most recent correspondence dated January 27, 2022. Similar letters were sent to all consulting parties; Section 106 consultation with tribes is described below. Public involvement for this undertaking was integrated with the National Parks Air Tour Management Act (NPATMA) process. We published a notice

of availability of the draft ATMP in the Federal Register on September 3, 2021. The public comment period on the draft ATMP was September 3, 2021, through October 3, 2021. A public meeting was held September 27, 2021.

The FAA and the NPS received a few public comments about potential visual effects from commercial air tours. However, none of those commenters expressed specific concerns regarding such effects to historic properties. Many comments were submitted about potential noise effects from commercial air tours. Three of those comments referenced potential impacts to cultural resources in general. One commenter referenced the mission of the NPS, citing Director's Order 47, which the commenter contends the preservation of the natural soundscapes that are inherent components of the scenery and the natural and historic objects and the wildlife protected by the NPS Organic Act. A second commenter generally encourages the agencies to protect the immediate airspace above the parks from disruptive, unnecessary noise and protect the cultural significance, wilderness and habitat, and natural experience of the parks. A third commenter referenced the 1994 Report to Congress on Effects of Aircraft Overflights on the National Park System which the commenter contends explains the adverse impacts of aircraft overflight noise on Park resources and values.[1] Chapter 4 of that report is dedicated to "Effects on Cultural and Historic Resources, Sacred Sites, and Ceremonies."

The FAA and the NPS received seven comments from the public related to tribal concerns. Commenters stated that the ATMP needs to incorporate Native American information on cultural landscapes and make route and flight changes to protect these values and that air tours need to be designed to always protect cultural resources and related cultural landscapes and ethnographic resources, such as views that are important to Native American Tribes.

One commenter generally noted that national parks contain Native American cultural and sacred sites. Five other commenters generally encouraged the agencies to conduct government-to-government consultation with Native American Tribes and to incorporate Native American information on cultural landscapes and sites. Another commenter noted the story of *Angka-ku-wass-a-wits* (Red Painted Faces), or *oohdoos* [also known as hoodoos], and expressed the importance of consulting with tribes. The agencies have been consulting with tribes, as described within this letter.

The FAA and the NPS received a few public comments about potential effects on historic properties from commercial air tours. Two comments generally encouraged the agencies to comply with Section 106 of the NHPA. A third commenter referenced the 1916 Organic Act and 1978 Redwoods Amendment to the 1970 General Authorities Act and stated that the purpose of the National Parks System is to conserve the Park resources and values.

Description of the Undertaking

The FAA and the NPS are developing ATMPs for multiple parks, including Bryce Canyon National Park. The ATMPs are being developed in accordance with NPATMA. Each ATMP is unique and therefore, each ATMP is being assessed individually under Section 106.

Commercial air tours have been operating over Bryce Canyon National Park for over 20 years. Since 2005, these air tours have been conducted pursuant to interim operating authority (IOA) that the FAA was required to grant under NPATMA. IOA does not provide any operating conditions (e.g., routes, altitudes, time of day, etc.) for air tours other than an annual limit of 3,131 air tours per year. The ATMP will replace IOA.

[1] https://www.nonoise.org/library/npreport/intro.htm

The FAA and the NPS have documented the existing conditions for commercial air tour operations over the Park. The FAA and the NPS consider the existing operations for commercial air tours to be an average of 2017-2019 annual air tours flown, which is 515 air tours. The agencies decided to use a three-year average because it reflects the most accurate and reliable air tour conditions based on available operator reporting, and accounts for variations across multiple years, excluding more recent years affected by the COVID 19 pandemic. Commercial air tours currently are provided by six different operators and are conducted using CE-172-N, CE-182-R, CE-206-206, CE-207-207, CE-207-T207A, CE-208-B, and DHC-6-300 fixed-wing aircraft and AS-350-B3, BHT-206-L1, BHT-206-L3, BELL-206-B, EC-130-B4, EC-130-T2, and MDHS-MD-900 helicopters. The vast majority of commercial air tours over Bryce Canyon National Park are helicopter tours. Under existing conditions, commercial air tours are conducted on the routes shown in **Attachment A**. Commercial air tour operations presently fly between 300 ft. and 3,000 ft. above ground level (AGL) depending on the location over the Park.[2]

Under existing conditions, commercial air tours over the Park are generally flown on 16 different routes shown in **Attachment A**, though they are not required to fly on any particular route.

After release of the draft ATMP for public review, the FAA and NPS consolidated air tour routes from 16 to 4 and adjusted how the altitude of the routes was defined. The routes were consolidated over the eastern side of the Park, where base elevations are lower, to allow air tour operations to fly at higher AGLs and to assist with resource protection. Due to safety considerations, the agencies lowered altitudes that the commercial air tours are required to maintain. The undertaking would result in commercial air tours being conducted along the routes shown in **Attachment B**. The routes authorized by the ATMP are substantially similar to the existing routes but have been reduced in number and consolidated for the protection of the Park's natural resources as well as for aviation safety reasons. These routes fly over the Park and ½ mile buffer for between approximately 22 and 28 miles. The ATMP will require operators to fly the 4 designated routes depicted in **Attachment B**. As noted above, under existing conditions, operators adhere to the 16 routes depicted in **Attachment A** but are not obligated to do so.

The undertaking for purposes of Section 106 is implementing the ATMP that applies to all commercial air tours over the Park and within ½ mile outside the boundary of 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 of a commercial air tour above are not subject to NPATMA and are thus outside the scope of the ATMP.

[2] 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.

The undertaking was previously described in detail in our Section 106 consultation letter dated August 27, 2021. The following elements of the ATMP have remained unchanged since the issuance of the draft ATMP to the public, a copy of which is available at: https://parkplanning.nps.gov/document.cfm?parkID=34&projectID=103148&documentID=114723.

- A maximum of 515 commercial air tours are authorized per year;
- The aircraft types authorized to be used for commercial air tours are CE-172-N, CE-182-R, CE-206-206, CE-207-207, CE-207-T207A, CE-208-B, and DHC-6-300 fixed-wing aircraft and AS-350-B3, BHT-206-L1, BHT-206-L3, BELL-206-B, EC-130-B4, EC-130-T2, and MDHS-MD-900 helicopters. Any new or replacement aircraft must not exceed the noise level produced by the aircraft being replaced;
- The NPS may establish temporary no-fly periods that apply to commercial air tours for special events or planned Park management. Absent exigent circumstances or emergency operations, the NPS will provide a minimum of 15 days written notice to the operators for any restrictions that temporarily restrict certain areas or certain times of day, or 60 days written notice to the operators for any full-day restrictions in advance of the no-fly period. Events may include tribal ceremonies or rituals as determined by affected tribes;
- Operators would submit semi-annual reports to the FAA and the NPS regarding the number of commercial air tours conducted by the operators over the Park;
- When made available by Park staff, the operators/pilots will take at least one training course per year conducted by NPS staff;
- At the request of either of the agencies, the Park staff, the local FAA Flight Standards District Office (FSDO), and all operators will meet once per year to discuss the implementation of the ATMP and any amendments or other changes to the ATMP;
- For situational awareness when conducting tours of the Park, the operators will utilize frequency 122.9 and report when they enter and depart a route. The pilot should identify their company, aircraft, and route to make any other aircraft in the vicinity aware of their position.

In order to address comments received from participating tribes and other consulting parties through the Section 106 process and from members of the public submitted through the draft ATMP public review specific to potential noise and visual effects to cultural, as well as biological, resources, the following changes to the undertaking at the Park have been made:

- The routes authorized by the ATMP, while substantially similar to the routes in the draft ATMP, have been reduced in number and consolidated for the protection of the Park's natural resources as well as for aviation safety reasons. The routes are designated based on aircraft type rather than the operator.
- A new subsection was added to prohibit aircraft hovering in place.
- The minimum altitudes required have been changed for safety reasons due to the Park's high elevation. The draft ATMP proposed minimum altitudes for all aircraft types of 13,500 feet (ft.) MSL for aircraft between easterly headings 000-179, and altitudes of 12,500 ft. MSL for aircraft between westerly headings 180-359. This would have resulted in all aircraft flying above 2,600 ft. AGL. The revised ATMP would require helicopters to conduct tours at an altitude of 9,250 ft. MSL and fixed-wing aircraft to conduct tours at an altitude of 9,750 ft. MSL. Due to the Park's uneven terrain, flying the designated altitudes MSL means that helicopters will generally maintain altitudes from 1,500 ft to 2,600 ft. AGL, though for a few small segments altitudes AGL

will be from 1,000 ft. to 1,500 ft. Flying the designated altitude MSL means that fixed wing aircraft will generally maintain altitudes from 2,000 ft. to 2,600 ft. AGL, with a small segment in the southern area of the Park where the aircraft will be flying altitudes from 1,500 ft. to 2,000 ft. AGL.

- The provision identifying the time of day during which commercial air tours may operate was revised. The draft ATMP authorized commercial air tours to operate from two hours after sunrise and two hours before sunset. The revised language states commercial air tours may operate from one hour after sunrise until three hours before sunset, as defined by the National Oceanic and Atmospheric Administration (NOAA).[3]
- A new subsection was added in response to questions and comments regarding the transferability of air tour allocations, or the assumption of allocations of commercial air tours by a successor corporation. The added language makes clear that annual allocations of air tour operations are not transferrable between operators, though they may be assumed by a successor purchaser. Conditions are included to ensure that the agencies have sufficient time to review the transaction to avoid an interruption of service and the successor operator must acknowledge and agree to the comply with the ATMP. This language is excerpted below:

  > Annual operations under the ATMP are non-transferable. An allocation of annual operations may be assumed by a successor purchaser that acquires an entity holding allocations under the ATMP in its entirety. In such case the prospective purchaser shall notify the FAA and the NPS of its intention to purchase the operator at the earliest possible opportunity to avoid any potential interruption in the authority to conduct commercial air tours under the ATMP. This notification must include a certification that the prospective purchase has read and will comply with the terms and conditions in the ATMP. The FAA will consult with the NPS before issuing new or modified operations specifications or taking other formal steps to memorialize the change in ownership.

- The agencies revised some of the language related to the quiet technology incentive, but not the incentive itself, in order to clarify that applications for the incentive will be analyzed on a case-by-case basis. The revised language is below:

  > The ATMP incentivizes the use of quiet technology aircraft by commercial air tour operators. Operators that have converted to quiet technology aircraft, or are considering converting to quiet technology aircraft may request to be allowed to extend air tours an additional two hours (i.e., up to one hour before sunset on all days that flights are authorized). Because aviation technology continues to evolve and advance and FAA updates its noise certification standards periodically, the aircraft eligible for this incentive will be analyzed on a case-by-case basis at the time of the operator's request to be considered for this incentive. The NPS will periodically monitor Park conditions and coordinate with FAA to assess the effectiveness of this incentive. If implementation of this incentive results in unanticipated effects on Park resources or visitor experience, further agency action may be required to ensure the protection of Park resources and visitor experience;

[3]Sunrise and sunset data is available from the NOAA Solar Calculator, https://www.esrl.noaa.gov/gmd/grad/solcalc/

- Minor edits were made to clearly state in various subsections that the ATMP applies not only to the area within the Park boundary, but also to areas ½ mile outside the Park boundary.
- In Section 5.0[4] Compliance, edits were made to make clear that the public may report suspected instances of noncompliance with the ATMP's terms, and that the applicable Flight Standards District Office would respond to written reports of noncompliance, consistent with FAA guidance.
- Clarifying edits were made to Section 8.0 Adaptive Management to make clear that adaptive management actions may occur in response to input received from tribes.
- In Section 9.0 Amendment, the agencies clarified that additional environmental review would be required in order to increase the number of authorized commercial air tours per year above the 515 authorized in the ATMP. The revised language is below:

  > Increases to the total number of air tours authorized under the ATMP resulting from accommodation of a new entrant application or a request by an existing operator will require an amendment to the ATMP and additional environmental review. Notice of all amendments to this ATMP will be published in the Federal Register for notice and comment.

Area of Potential Effects

The APE for the undertaking was proposed in the Section 106 consultation letter dated August 27, 2021. 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 over the Park or adjacent tribal lands. 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 noise levels that may result in alteration of the characteristics of historic properties qualifying them as eligible for listing in the NRHP.

The APE for the undertaking comprises the area of the Park and a ½ mile outside the boundary of the Park, as depicted in **Attachment B** below. The FAA requested comments from all consulting parties including federally recognized tribes. Your office concurred with the APE in your January 31, 2022 letter to the FAA. We received no further comments from consulting parties regarding the APE. The changes to the undertaking described above do not have the potential to cause any additional effects to historic properties. The FAA has determined the delineated APE as initially proposed adequately captures potential effects from the undertaking on historic properties and remains unchanged.

Identification of Historic Properties

Preliminary identification of historic properties relied upon data submitted by NPS Park staff about known historic properties within the Park. Section 106 consultation efforts involved outreach to tribes, the Utah State Historic Preservation Office, operators, and other consulting parties including local governments and neighboring federal land managers. Public comments submitted as part of the draft ATMP public review process also informed identification efforts.

The FAA, in cooperation with the NPS, coordinated with Park staff to identify known historic properties located within the APE. The FAA also accessed the Utah State Division of History database "The Hub," as well as the University of Utah's "Exploring Utah's National Historic Landmarks and Register of Historic Places" GIS application to collect GIS data for previously identified properties both inside and outside the Park, and consulted with the tribes listed in **Attachment C** regarding the identification of any other

[4] Section 5.0 in the draft ATMP is Section 4.0 in the revised ATMP.

previously unidentified historic properties that may also be located within the APE. In addition to the historic properties previously identified, the Moapa Band of Paiute Indians of the Moapa River Indian Reservation in Nevada have informed FAA there are TCPs located 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 NRHP 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, outdoor spaces designed for meditation or contemplation, and certain TCPs. 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).

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 identification of 18 historic properties. All historic properties identified within the APE are listed in **Attachment D** and shown in the APE map provided in **Attachment B**.

Summary of Section 106 Consultation with Tribes

The FAA contacted 19 federally recognized tribes via letter on March 26, 2021 and one additional federally recognized tribe via letter on June 1, 2021, inviting them to participate in Section 106 consultations and requesting their expertise regarding historic properties, including TCPs that may be located within the APE. The tribes whom the FAA has contacted as part of this undertaking are included in the list of consulting parties is enclosed as **Attachment C**. In response to the March 26, 2021 letter, the Moapa Band of Paiute Indians of the Moapa River Indian Reservation, Nevada, sent an email dated April 26, 2021, in which they accepted the invitation to consult. On August 27, 2021, the FAA sent the identified 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.

On December 3, 2021 and December 9, 2021, the FAA sent follow-up emails to tribes that did not respond to our prior Section 106 consultation, once again inviting them to participate in Section 106 consultations. On December 15, 2021, and December 21, 2021, the FAA followed up with phone calls to those tribes that did not respond to our prior Section 106 consultation requests. The FAA received a response from the Kaibab Band of Paiute Indians of the Kaibab Indian Reservation asking to opt out of additional Section 106 consultation for the undertaking. The Confederated Tribes of the Goshute and the Paiute Indian Tribe of Utah asked the FAA to resend Section 106 consultation materials.

The FAA received comments from the Cultural Manager of the Moapa Band of Paiute Indians of the Moapa River Indian Reservation, Nevada in an email dated January 28, 2022. In those comments, the tribe noted the existence of TCPs for both the Moapa Band of Paiute Indians and other tribes within the area where air tours are expected to take place. The FAA responded in a letter dated April 15, 2022, thanking the Moapa Band of Paiute Indians for their comments pertaining to the undertaking and noted that the presence of TCPs has been added to the list of historic properties within the APE.

The FAA received comments from THPO Stewart B. Koyiyumptewa of the Hopi Cultural Preservation Office in a letter dated February 14, 2022. In those comments, submitted for the Southeast Utah Group Parks (Arches National Park, Canyonlands National Park, and Natural Bridges National Monument), the Hopi Tribe expressed support for the identification and avoidance of ancestral sites, indicating the tribe

considers prehistoric archaeological sites to be "footprints" and TCPs. The Hopi Tribe also requested consultation on any proposal in Utah with the potential to affect prehistoric sites. For that reason, the FAA acknowledges their comments here. The Hopi Tribe determined that air tours will adversely affect cultural resources and TCPs significant to the Hopi Tribe that were identified within the Southeast Utah Group Parks. The FAA determined many of the comments from the Hopi Tribe were outside the scope of the undertaking. The FAA responded in a letter dated April 26, 2022, thanking the Hopi Tribe for their comments pertaining to the undertaking and indicating their additional concerns had been referred to the National Park Service for further consideration.

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 NRHP. The characteristics of the historic properties within the APE that qualify them for inclusion in the NRHP are described in **Attachment D**. 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

The undertaking would not alter the characteristics of historic properties within the APE because there would be no measurable change in audible effects from existing conditions. To assess the potential for the introduction of audible elements, including changes in the character of aircraft noise, the FAA and NPS 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.

Following public review of the ATMP, the FAA and the NPS consolidated the routes and adjusted how the altitude of the routes was defined in response to public comments and feedback received. The proposed routes are consolidated along the eastern edge of the Park and would not move air tours closer to any historic properties. The consolidated routes are further from 16 of the 18 historic properties, as well as the Bryce Canyon Historic Districts, which are clustered along the Bryce Canyon National Park Road System on the western and central areas of the Park. See **Attachments A and B**. Lateral consolidation of the routes would not likely affect noise modeling results, except for a potential negligible decrease in the size of the noise footprint.

The ATMP authorizes the same number of annual flights as the average number of flights from 2017-2019 and maintains routes similar to what is currently flown under existing conditions; therefore, any changes to overall noise impacts associated with commercial air tours over the Park are expected to be minimal in both character and decibel level. Likewise, the ATMP authorizes the use of the CE-172-N, CE-182-R, CE-206-206, CE-207-207, CE-207-T207A, CE-208-B, and DHC-6-300 fixed-wing aircraft and AS-350-B3, BHT-206-L1, BHT-206-L3, BELL-206-B EC-130-B4, EC-130-T2, and MDHS-MD-900 helicopters. Any new or replacement aircraft must not exceed the noise level produced by the aircraft being replaced.

The ATMP increases the minimum altitude as compared to most existing helicopter operations and maintains the minimum altitude as compared to most existing fixed-wing operations. The change will reduce maximum noise levels at sites directly below the commercial air tour routes. It should be noted that when the altitude of an aircraft is increased, the total area exposed to the noise from that aircraft may also increase depending on the surrounding terrain. Although the area exposed to noise might increase, this would not meaningfully affect the acoustic environment because attenuation of noise

from the higher altitude would most likely reduce noise levels depending on terrain and the transient nature of the impacts.

For purposes of assessing noise impacts from commercial air tours on the acoustic environment of the Park under the National Environmental Policy Act (NEPA), the FAA noise evaluation is based on Yearly[5] 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 FAA's policy for NEPA.[6]

As part of the ATMP noise analysis, the NPS provided supplemental metrics to further assess the impact of commercial air tours in quiet settings. **Attachment E** provides further information about the supplemental noise metrics and presents the noise contours (i.e., graphical illustration depicting noise exposure) from the modeling.

Attachment E presents noise contours for the Time Above 35 dBA (the amount of time in minutes that aircraft sound levels are above 35 dBA) and time above 52 dBA. Noise related to commercial air tours is modeled to be greater than 35 dBA for less than 75 minutes a day within the APE and greater than 52 dBA for less than 10 minutes a day within the APE. There are no historic properties where the duration above 35 dBA is between 70 and 75 minutes on days when commercial air tours would occur. The majority of historic properties are clustered in areas where the duration above 35 dBA is less than 10 minutes on days when commercial air tours would occur. One historic property (Under-The-Rim Trail) is in an area where the duration above 35 dBA is between 25 and 30 minutes, and the Bryce Canyon Historic Districts are in areas where the duration above 35 dBA is between 5 and 40 minutes on days when commercial air tours would occur. Because noise is modeled using conservative assumptions (see **Attachment E**) and implementing the ATMP would result in limiting the number of flights to be consistent with the three-year average of flights flown from 2017-2019 using the similar routes and the same aircraft to fly at higher altitudes, noise impacts are not expected to measurably change under the ATMP. Because the ATMP would result in minimal changes to noise levels on historic properties compared to existing conditions, the undertaking would not diminish the integrity of any historic property's significant historic features.

Assessment of Visual Effects

The undertaking would not alter the characteristics of historic properties within the APE because there would be no measurable change in visual effects from existing conditions. The level of commercial air tour activity under the ATMP is expected to improve or remain the same. The ATMP sets the number of commercial air tours consistent with the three-year average from 2017-2019 and implements limits on the number of flights and times of day during which commercial air tours are able to operate. These limits do not currently exist.

Recognizing that some types of historic properties may be affected by visual effects of commercial air tours, the FAA and NPS considered the potential for the introduction of visual elements that could alter

[5] Yearly conditions are represented as the Average Annual Day (AAD)

[6] 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.

the characteristics of a historic property that qualifies it for inclusion in the NRHP. Aircraft are transitory elements in a scene and visual impacts tend to be relatively short. The short duration and low number of flights make it unlikely a historic property would experience a visual effect from the undertaking.

The FAA and NPS also considered the experience of tribal members who may be conducting ceremonies or practices that could involve looking toward the sky. The ATMP includes a provision for the NPS to establish temporary no-fly periods for special events, such as tribal ceremonies or other similar events, with a minimum of 15 days' notice to the operator. This represents an improvement over existing conditions where no such provision exists.

The ATMP limits the annual number of commercial air tours to 515 tours on routes that are substantially the same as the existing routes. Reporting data indicate that in the 2017-2019 reporting period, commercial air tours occurred on as many as 228 days. On days with peak air tour activity (defined as a 90th percentile day), as many as 4-5 commercial air tours occurred, leaving the Park free of commercial air tours a majority of the time on those days.

The ATMP limits the annual number of commercial air tours to 515 tours and designates and consolidates parallel routes onto a single alignment similar to what is flown under existing conditions. The consolidated routes move commercial air tours further from 16 of the 18 historic properties, as well as the historic districts, which are clustered along the Bryce Canyon National Park Road System on the western and central areas of the Park. Therefore, visual effects to historic properties are expected to slightly decrease compared to impacts currently occurring because the number of authorized flights under the ATMP will be the same or less than the average number of flights from 2017-2019, and portions of the routes have been consolidated in order to limit audible and visual effects to historic properties. As a result of provisions in the ATMP such as the increase in the minimum altitude of some flights, consolidation of route alignments, and limits to the time-of-day flights can operate, the undertaking would not introduce visual elements that would alter the characteristics of any historic property that qualifies it for inclusion in the NRHP.

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 is located in the airspace above historic properties and would not result in any alteration or physical modifications to these resources. 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 as there would be minimal change 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. As you may be aware, the agencies are preparing this ATMP under court supervision. We request that you review the information and respond whether you concur with the proposed finding within thirty 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,

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

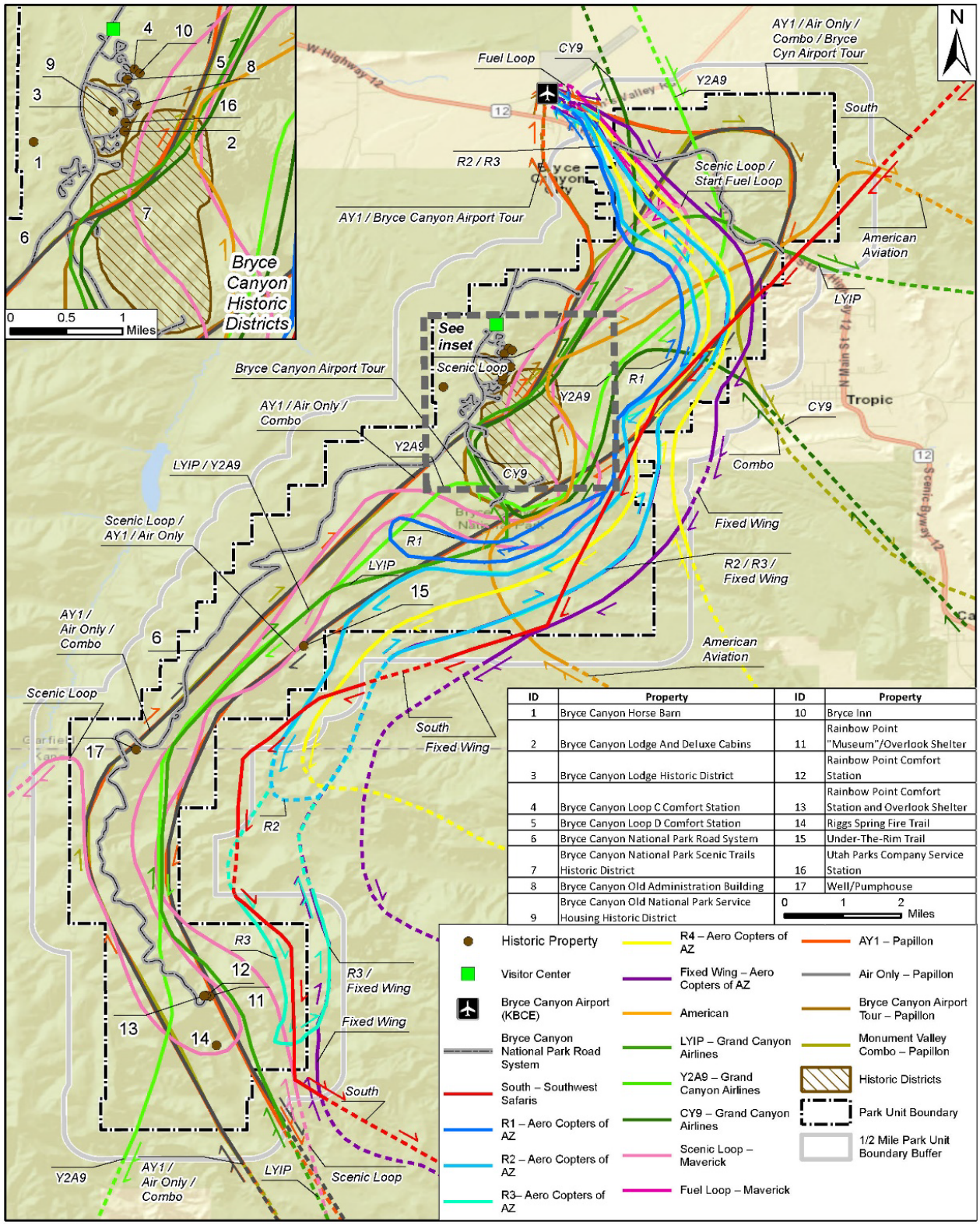
Attachments

A. Map of Existing Commercial Air Tour Routes
B. APE Map including proposed Commercial Air Tour Routes
C. List of Consulting Parties
D. List of Historic Properties in the APE and Description of Historic Characteristics
E. Methodology of NEPA Technical Noise Analysis

ATTACHMENT A

Map of Existing Commercial Air Tour Routes
Including
Historic Properties within the APE

Existing Air Tour Routes with Historic Properties for ATMP at Bryce Canyon National Park

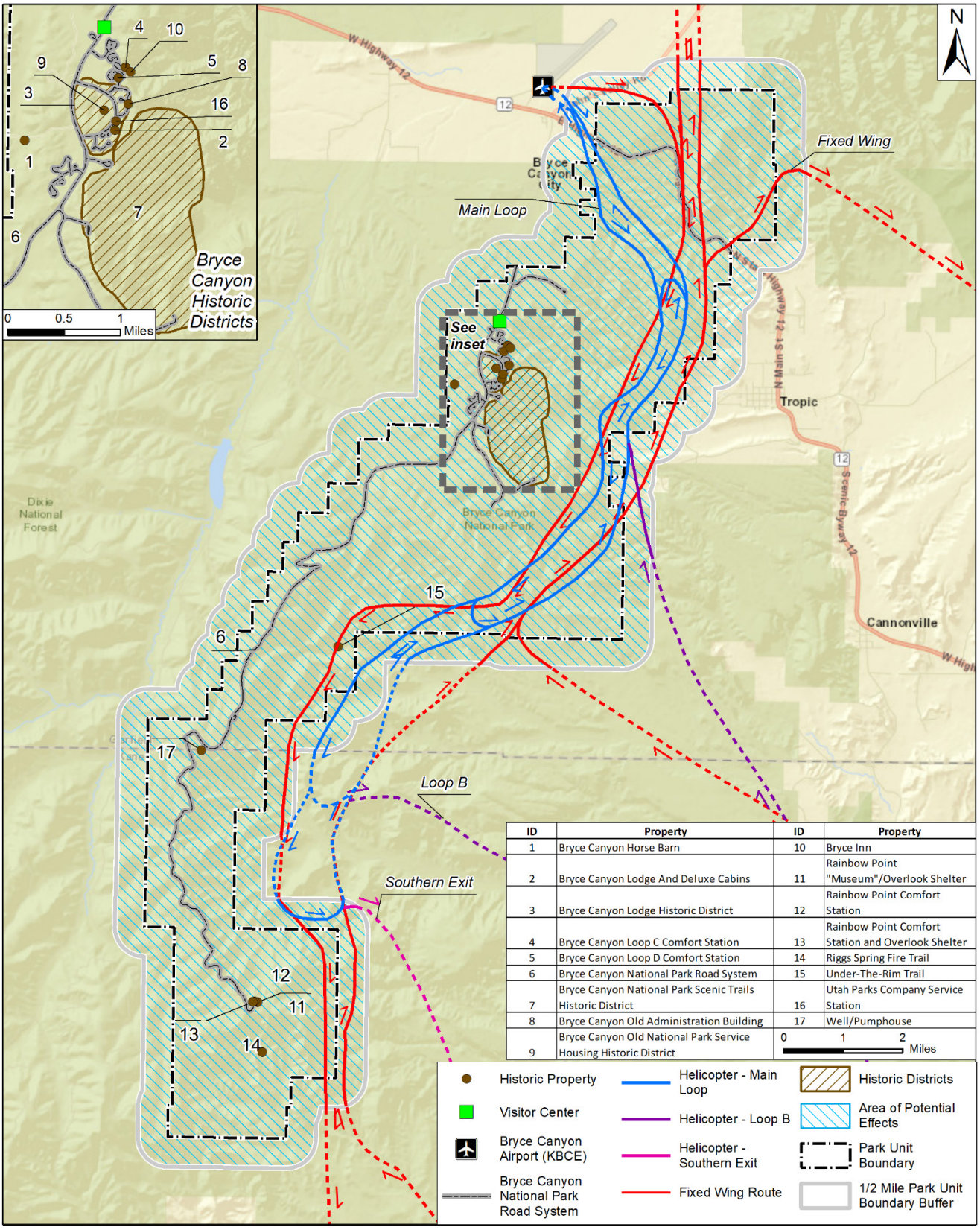


ID	Property	ID	Property
1	Bryce Canyon Horse Barn	10	Bryce Inn
2	Bryce Canyon Lodge And Deluxe Cabins	11	Rainbow Point "Museum"/Overlook Shelter
3	Bryce Canyon Lodge Historic District	12	Rainbow Point Comfort Station
4	Bryce Canyon Loop C Comfort Station	13	Rainbow Point Comfort Station and Overlook Shelter
5	Bryce Canyon Loop D Comfort Station	14	Riggs Spring Fire Trail
6	Bryce Canyon National Park Road System	15	Under-The-Rim Trail
7	Bryce Canyon National Park Scenic Trails Historic District	16	Utah Parks Company Service Station
8	Bryce Canyon Old Administration Building	17	Well/Pumphouse
9	Bryce Canyon Old National Park Service Housing Historic District		

ATTACHMENT B

Area of Potential Effects Map
Including
Proposed Commercial Air Tour Routes

Area of Potential Effects for ATMP at Bryce Canyon National Park



ID	Property	ID	Property
1	Bryce Canyon Horse Barn	10	Bryce Inn
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6	Bryce Canyon National Park Road System	15	Under-The-Rim Trail
7	Bryce Canyon National Park Scenic Trails Historic District	16	Utah Parks Company Service Station
8	Bryce Canyon Old Administration Building	17	Well/Pumphouse
9	Bryce Canyon Old National Park Service Housing Historic District		

ATTACHMENT C

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

Adams, Bruce M. (Southwest Safaris)
Advisory Council on Historic Preservation
Aero-Copters of Arizona, Inc. (Helivision, Canyon Airlines, Bryce Canyon Helicopters, Bryce Canyon Airlines)
American Aviation (Frog Air, American Air Charter)
Bryce Canyon City
Chemehuevi Indian Tribe of the Chemehuevi Reservation, California
Confederated Tribes of the Goshute
Dixie National Forest
Garfield County
Grand Canyon Airlines, Inc. (Grand Canyon Airlines, Scenic Airlines, Grand Canyon Scenic Airlines)
Hopi Tribe of Arizona
Indian Peaks Band of Paiute Indians[2]
Kaibab Band of Paiute Indians of the Kaibab Indian Reservation[1]
Kane County
Kanosh Band of Paiute Indians[2]
Koosharem Band of Paiute Indians[2]
Las Vegas Tribe of Paiute Indians of the Las Vegas Indian Colony, Nevada
Maverick Helicopters, Inc.
Moapa Band of Paiute Indians of the Moapa River Indian Reservation, Nevada
National Trust for Historic Preservation
Navajo Nation, Arizona, New Mexico & Utah
Northwestern Band of Shoshone Nation
Paiute Indian Tribe of Utah
Papillon Airways, Inc. (Papillon Grand Canyon Helicopters, Grand Canyon Helicopters)
Public Lands Policy and Coordination Office
San Juan Southern Paiute Tribe of Arizona
Shivwits Band of Paiute Indians
Skull Valley Band of Goshute Indians of Utah

Southern Ute Indian Tribe of the Southern Ute Reservation, Colorado
Utah Professional Archaeological Council
Utah State Historic Preservation Office
Ute Indian Tribe of the Uintah & Ouray Reservation, Utah
Ute Mountain Tribe of the Ute Mountain Reservation, Colorado, New Mexico & Utah
White Mesa Ute Community
Zuni Tribe of the Zuni Reservation, New Mexico

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

[2]Consulting party is covered by the Paiute Indian Tribe of Utah.

ATTACHMENT D

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

Property Name	Property Type	Eligibility Status	Significant Characteristics
Bryce Canyon Horse Barn	Building	Listed	Significant as an example of National Park Service (NPS) rustic building design. The period of significance is 1929, which is the date of development of the building plan from the Branch of Plans and Design.
Bryce Canyon Lodge And Deluxe Cabins	Building	Listed NHL	Bryce Lodge and deluxe cabins are the work of master architect Gilbert Stanley Underwood and are excellent pieces of the type of rustic architecture encouraged by the NPS and built by the railroads. From the Park Service point of view the buildings provided a necessary visitor service—in this instance lodging—in structures that were highly compatible with the surrounding landscape in materials, scale, massing, and design. From the railroad' s point of view, the buildings provided visitor services, but did so with a definite style that created a strong image and a strong sense of place.
Bryce Canyon Lodge Historic District	District	Listed	The Bryce Canyon Lodge Historic District is associated with the development of concessioner's facilities between 1924-1944. The district also reflects Gilbert Stanley Underwood's approach to rustic building design. This lodge complex represents the UPC's first and primary visitor lodging/dining complex within the Park
Bryce Canyon Loop C Comfort Station	Building	Listed	The building continues to serve the function for which it was originally designed. This building is included in the property types defined as "Resources Associated with NPS Administrative Development". Review of the General Development Master Plan of 1938 reveals that both loops C and D had been constructed by 1938. The two Comfort Stations located within the Loop C and D, possess both historical and architectural significance and are constructed in a simple rustic style that is typical of the building

Property Name	Property Type	Eligibility Status	Significant Characteristics
			styles originating from the NPS Branch of Plans and Design during the 1930s.
Bryce Canyon Loop D Comfort Station	Building	Listed	The building continues to serve the function for which it was originally designed. This building is included in the property types defined as "Resources Associated with NPS Administrative Development". Review of the General Development Master Plan of 1938 reveals that both loops C and D had been constructed by 1938. The two Comfort Stations located within the Loop C and D, possess both historical and architectural significance and are constructed in a simple rustic style that is typical of the building styles originating from the NPS Branch of Plans and Design during the 1930s.
Bryce Canyon National Park Road System	Landscape	Eligible	The UPC (Utah Parks Company) planned their building complex at Bryce Canyon on the assumption that the company's touring cars and buses would carry most of the tourists who visited Bryce Canyon and the other parks on the loop. In the spring of 1925 the Utah Public Utilities Commission granted the UPC permission to operate touring cars. The UPC had refused to invest any money in highway improvements, but secured financial support from the USFS, the NPS, and the State of Utah to build and improve the roads on the southern Utah park circuit.
Bryce Canyon National Park Scenic Trails Historic District	District	Listed	The nominated Bryce Canyon National Park (BRCA) Scenic Trails District consists of five structures including the Navajo Loop Trail, the Queen's Garden Trail, the Peekaboo Loop Trail, the Fairyland Trail, and the Rim Trail. Upon completion of the Rim Trail and Fairyland Trail in the mid-1930s, the scenic trails system within the Park was complete. Except for the first trail constructed by the USFS, the remaining trails construction took place under the direct supervision of the Park engineer and landscape architect. Thus, the scenic trails system, represents a local application of NPS design principles.

Property Name	Property Type	Eligibility Status	Significant Characteristics
Bryce Canyon Old Administration Building	Building	Listed	The Administration Building represents the first NPS facility constructed within the Park to house the administrative activities of NPS personnel. It's placement adjacent to the rim established an administrative presence in an area heavily used by Park visitors, and prior to its establishment, controlled by the UPC. This building continues to provide the only NPS presence in the Sunrise Point area. This building is an excellent example of the rustic design preferred by NPS managers for much of the historical period and produced by architects working in the Branch of Plans and Design.
Bryce Canyon Old National Park Service Housing Historic District	District	Listed	This district represents the first housing development within the Park specifically designed to house NPS employees. All the plans for the buildings in the district originated from the NPS Branch of Plans and Design. Areas of significance include architecture, government, and recreation.
Bryce Inn	Building	Listed	This building is associated with the development of recreational and administrative infrastructure within BRCA, specifically with concessioner development. Bryce Inn represents the last major improvement designed by Gilbert Stanley Underwood for the UPC.
Rainbow Point "Museum"/Overlook Shelter	Building	Listed	Historic contexts with which the Rainbow Point buildings are associated include: 1) the development of recreation and administrative facilities within BRCA; and 2) the development of NPS rustic architecture. The NPS constructed the buildings at Rainbow Point towards the end of the New Deal era. Rainbow Point, located at the southern end of the rim road, was the last area of the Park to be developed for public use prior to the end of the historical period.
Rainbow Point Comfort Station	Building	Listed	Historic contexts with which the Rainbow Point buildings are associated include: 1) the development of recreation and administrative facilities within BRCA; and 2) the development of NPS rustic architecture. The NPS constructed the buildings at Rainbow Point towards the end of the New Deal era. Rainbow

Property Name	Property Type	Eligibility Status	Significant Characteristics
			Point, located at the southern end of the rim road, was the last area of the Park to be developed for public use prior to the end of the historical period.
Rainbow Point Comfort Station and Overlook Shelter	Building	Listed	Historic contexts with which the Rainbow Point buildings are associated include: 1) the development of recreation and administrative facilities within BRCA; and 2) the development of NPS rustic architecture. The NPS constructed the buildings at Rainbow Point towards the end of the New Deal era. Rainbow Point, located at the southern end of the rim road, was the last area of the Park to be developed for public use prior to the end of the historical period.
Riggs Spring Fire Trail	Landscape	Listed	The Riggs Spring Fire Trail has local significance under National Register Criterion A for its association with the development of NPS infrastructure in BRCA, and the involvement of the Civilian Conservation Corps (CCC) in such undertakings. The Riggs Spring Fire Trail represents the last segment of administrative fire trail constructed by CCC enrollees from Camp NP-3, during the 1936 field season. This segment of trail provided access to the southern-most backcountry areas of the Park, and supplemented the access provided by the major administrative trail, the Under-the-Rim Trail.
Traditional Cultural Properties (TCPs)	TCP	Eligible	The Moapa Band of Paiute Indians have informed the FAA of multiple TCPs present within the APE.
Under-The-Rim Trail	Landscape	Listed	The Under-the-Rim Trail was constructed specifically for administrative purposes, namely, to provide access to the timbered areas of the Park located below the rim of the plateau. Although planned as early as 1932, construction of this fire trail was not undertaken until the combination of the availability of Emergency Conservation Work funding and CCC labor made the project feasible. CCC enrollees from camp NP-3 constructed the main trail and the connecting trails during 1934 and 1935.
Utah Parks Company (UPC) Service Station	Building	Listed	This building represents the last major improvement constructed by the UPC within BRCA, and was aimed at upgrading their

Property Name	Property Type	Eligibility Status	Significant Characteristics
			facilities and extending the range of services to tourists within the Park. The presence of a service station within BRCA mirrors the development in other western parks, wherein the range of services demanded by Park visitors expanded to include not only gas stations but full-service facilities
Well/Pumphouse	Building	Listed	The building is a contributing element of the Bryce Canyon Lodge and Deluxe Cabins Historic District. Bryce Canyon Lodge and the associated deluxe cabins, as well as the other outbuildings included in the district, are the work of master architect Gilbert Stanley Underwood, and are excellent examples of the rustic architecture encouraged by the NPS and built by the railroads in their effort to develop destination resorts in the parks

ATTACHMENT E

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**
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 ten dB penalty between 10 p.m. and 7 a.m. local time. Note: Both $L_{Aeq, 12hr}$ and L_{dn} characterize: • 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 L_{dn}) If there are no nighttime events, then $L_{Aeq, 12hr}$ is arithmetically three dBA higher than L_{dn}. The FAA's 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[7].
Equivalent 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 a.m. to 7 p.m. to represent typical daytime commercial air tour operating hours. Note: Both LAeq, 12hr and Ldn characterize: • Increases in both the loudness and duration of noise events • The number of noise events during specific time period (12 hours for LAeq, 12hr and 24-hours for Ldn) However, DNL takes into account the increased sensitivity to noise at night by including a ten dB penalty between 10 p.m. and 7 a.m. local time. If there are no nighttime events, LAeq, 12hr will be three dB higher than DNL.

[7] FAA Order 1050.1F, Exhibit 4-1

Time Above 35 dBA [8]	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 35 dB degrade experience in outdoor performance venues (ANSI 12.9-2007, Quantities And Procedures For Description And Measurement Of Environmental Sound – Part 5: Sound Level Descriptors For Determination Of Compatible Land Use); Blood pressure increases in sleeping humans (Haralabidis et al., 2008); maximum background noise level inside classrooms (ANSI/ASA S12.60/Part 1-2010, Acoustical Performance Criteria, Design Requirements, And Guidelines For Schools, Part 1: Permanent Schools).
Time Above 52 dBA	The amount of time (in minutes) that aircraft sound levels are above a given threshold (i.e., 52 dBA) This metric represents the level at which one may reasonably expect interference with Park interpretive programs. At this background sound level (52 dB), 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.[9]
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.

For aviation noise analyses under the National Environmental Policy Act (NEPA), the FAA determines the cumulative noise energy exposure of individuals resulting from aviation activities in terms of an Average Annual Day (AAD). However, because ATMP operations in the Park occur at low annual operational levels and are highly seasonal in nature it was determined that a peak day representation of the operations would more adequately allow for disclosure of any potential impacts. A peak day has therefore been used as a conservative representation of assessment of AAD conditions required by FAA policy.

The 90th percentile day was identified for representation of a peak day and derived from the busiest year of commercial air tour activity from 2017-2019, based on the total number of commercial air tour operations and total flight miles over the Park. It was 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 at the Park.

For the Park, the 90th percentile day was identified as the following:

[8] dBA (A-weighted decibels): Sound is measured on a logarithmic scale relative to the reference sound pressure for atmospheric sources, 20 µPa. The logarithmic scale is a useful way to express the wide range of sound pressures perceived by the human ear. 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 in order 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.

[9] Environmental Protection Agency. Information on Levels of Noise Requisite to Protect the Public Health and Welfare with an Adequate Margin of Safety, March 1974.

BRYCE CANYON – three flights on the M3 route using a Bell 206 B III aircraft, one flight on the M1 route using a Bell 206 B III aircraft, and one flight on the M3 route using an EC130 aircraft. Altitudes were modeled at 9,250 ft. MSL.

Noise contours for the acoustic indicators were developed using the Federal Aviation Administration's Aviation Environmental Design Tool (AEDT) version 3d and are provided below. A noise contour presents a graphical illustration or "footprint" of the area potentially affected by the noise.

- Time above 35 dBA (minutes) – see Figure 1
- Time above 52 dBA (minutes) – see Figure 2
- Equivalent sound level, $L_{Aeq,\ 12hr}$ – see Figure 3
- Maximum sound level or L_{max} – see Figure 4

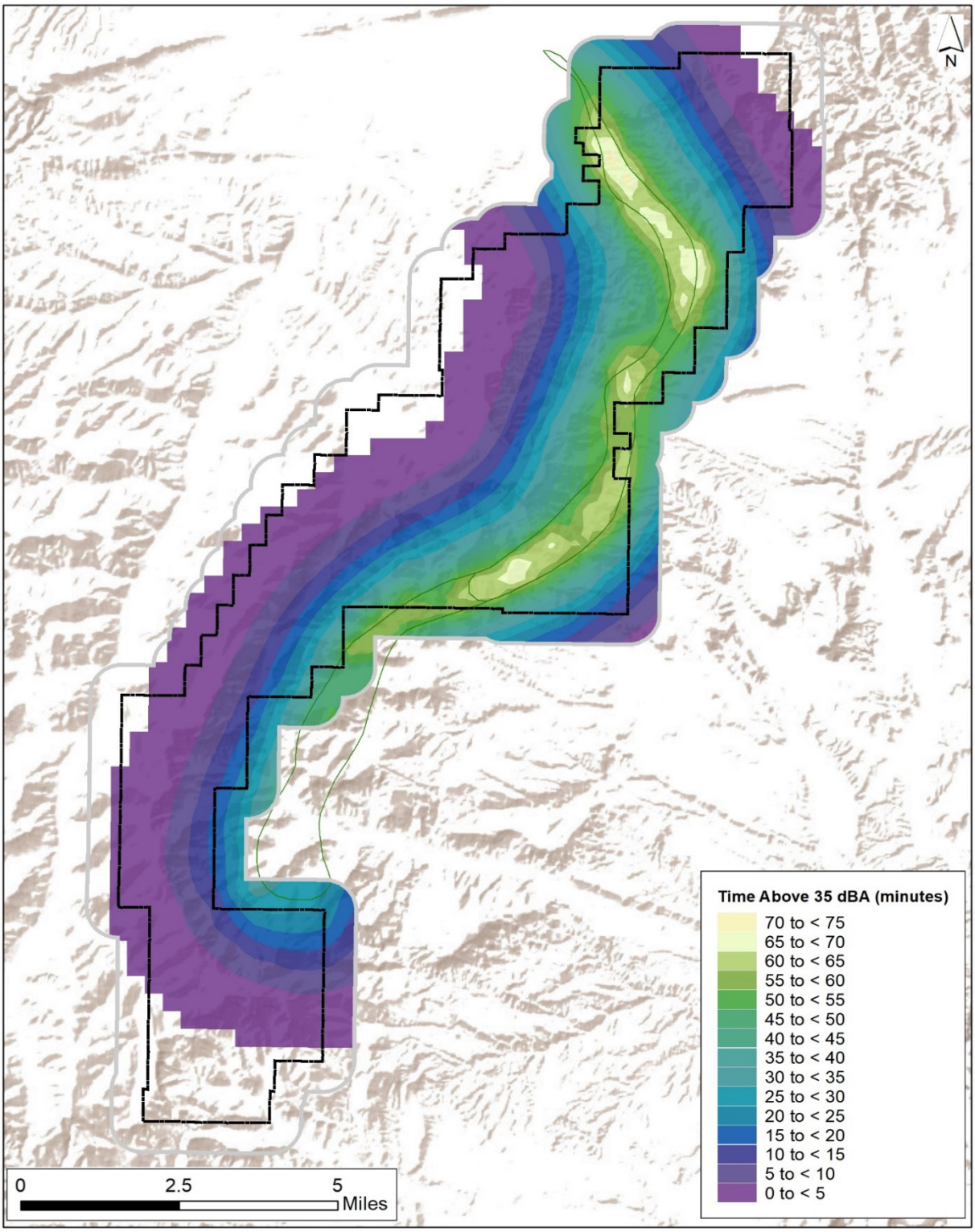

Figure 1. Noise contour results for Time Above 35 dBA

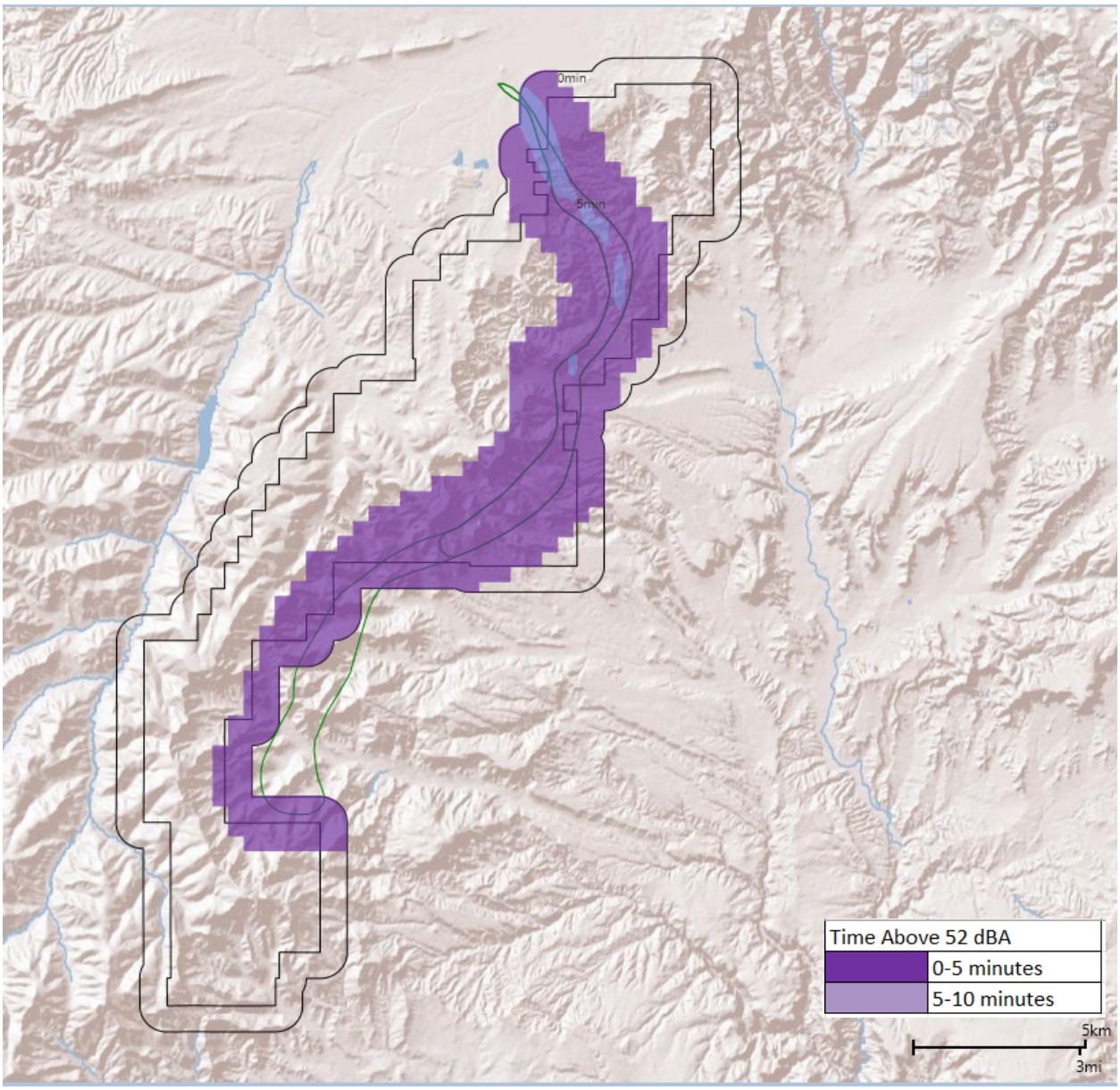

Figure 2. Noise contour results for Time Above 52 dBA

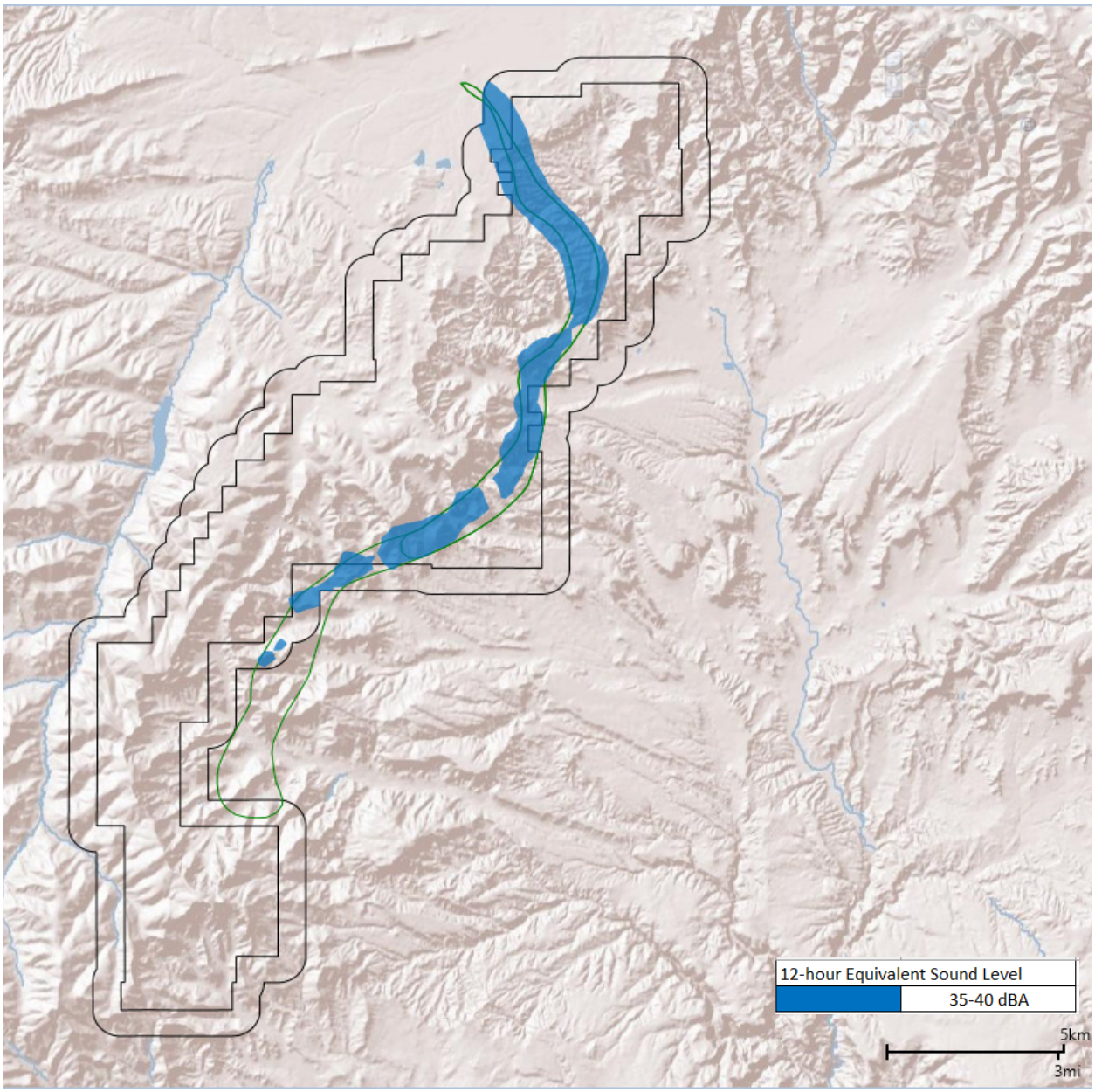

Figure 3. Noise contour results for equivalent sound level, $L_{Aeq, 12hr}$

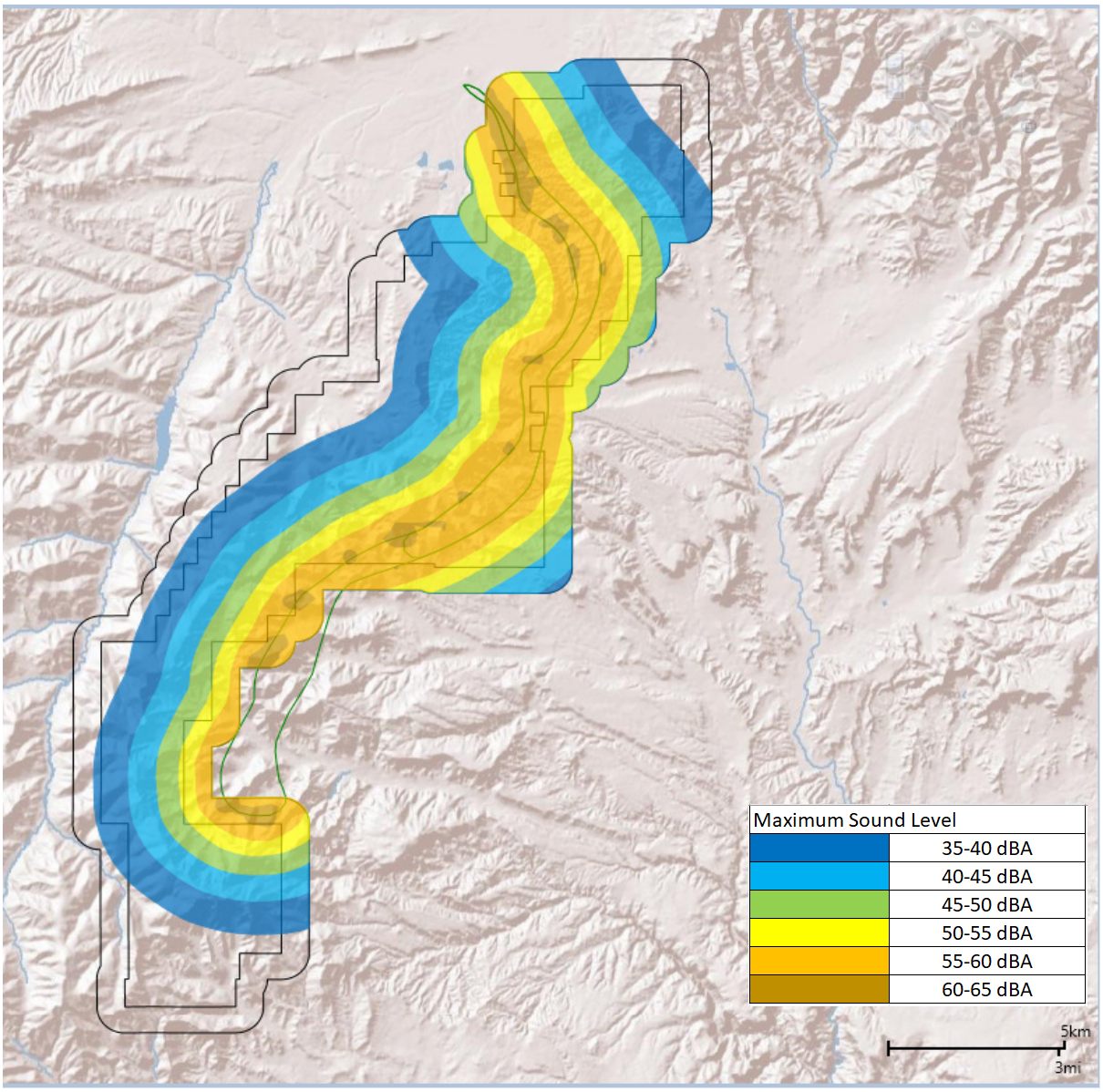

Figure 4. Noise contour results for L_{max}

Spencer J. Cox
Governor

Deidre M. Henderson
Lieutenant Governor

Jill Remington Love
Executive Director
Utah Department of Cultural and Community Engagement

Utah SHPO

Christopher Merritt
State Historic Preservation Officer
Utah State Historic Preservation Office

August 10, 2022

Judith Walker
Federal Preservation Officer
U.S. Department of Transportation
Federal Aviation Administration

RE: Section 106 Consultation and Finding of No Adverse Effect for the development of an Air Tour Management Plan for Bryce Canyon National Park (Project #: 21-0762)

For future correspondence, please reference Case No. 22-1439

Dear Federal Preservation Officer Walker,

The Utah State Historic Preservation Office received your submission and request for our comment on the above-referenced undertaking on August 05, 2022.

We concur with your determination of "No Adverse Effect" for this undertaking.

This letter serves as our comment on the determinations you have made within the consultation process specified in §36CFR800.4. If you have questions, please contact me at 801-245-7246 or by email at sagardy@utah.gov.

Sincerely,

Savanna Agardy
Compliance Archaeologist

APPENDIX G

NPS Statement of Compliance

APPENDIX G

NATIONAL PARK SERVICE STATEMENT OF COMPLIANCE

Bryce Canyon National Park Air Tour Management Plan

Compliance with NPS Management Policies Unacceptable Impact and Non-Impairment Standard

As described in National Park Service (NPS or Service) 2006 Management Policies, § 1.4.4, the National Park Service Organic Act prohibits the impairment of park resources and values. *Guidance for Non-Impairment Determinations and the NPS NEPA Process* (September 2011) provides guidance for completing non-impairment determinations for NPS actions requiring preparation of an environmental assessment (EA) or environmental impact statement (EIS) pursuant to the National Environmental Policy Act (NEPA). The applicable NPS guidance does not require the preparation of a non-impairment determination where a categorical exclusion (CE) is applied because impacts associated with CEs are generally so minimal they do not have the potential to impair park resources. Nonetheless, out of an abundance of caution, the NPS has completed a non-impairment analysis for the Bryce Canyon National Park (Park) Air Tour Management Plan (ATMP) and determined that it will not result in impairment of Park resources, or in unacceptable impacts as described in § 1.4.7.1 of the 2006 NPS Management Policies.

Sections 1.4.5 and 1.4.6 of Management Policies 2006 further explain impairment. Section 1.4.5 defines impairment as an impact that, in the professional judgment of the responsible NPS manager, would harm the integrity of park resources or values, including the opportunities that otherwise would be present for the enjoyment of those resources or values. Section 1.4.5 goes on to state:

> An impact to any park resource or value may, but does not necessarily, constitute an impairment. An impact would be more likely to constitute impairment to the extent that it affects a resource or value whose conservation is
>
> - necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the park, or
> - key to the natural or cultural integrity of the park or to opportunities for enjoyment of the park, or
> - identified in the park's general management plan or other relevant NPS planning documents as being of significance.

Section 1.4.6 of Management Policies 2006 identifies the park resources and values that are subject to the no-impairment standard. These include:

- the park's scenery, natural and historic objects, and wildlife, and the processes and conditions that sustain them, including, to the extent present in the park: the ecological, biological, and physical processes that created the park and continue to act upon it; scenic features; natural visibility, both in daytime and at night; natural landscapes; natural

soundscapes and smells; water and air resources; soils; geological resources; paleontological resources; archeological resources; cultural landscapes; ethnographic resources; historic and prehistoric sites, structures, and objects; museum collections; and native plants and animals;

- appropriate opportunities to experience enjoyment of the above resources, to the extent that can be done without impairing them;
- the park's role in contributing to the national dignity, the high public value and integrity, and the superlative environmental quality of the national park system, and the benefit and inspiration provided to the American people by the national park system; and
- any additional attributes encompassed by the specific values and purposes for which the park was established.

NPS non-impairment analysis normally does not include discussion of impacts to visitor experience, socioeconomics, public health and safety, environmental justice, land use, Park operations, wilderness, etc., as these do not constitute impacts to Park resources and values subject to the non impairment standard under the Organic Act. *See* Management Policies § 1.4.6.

Non-Impairment Determination for the Bryce Canyon National Park ATMP

The purposes of Bryce Canyon National Park, along with Park significance statements and a description of the Park's fundamental resources and values, are described in the *Foundation Document for Bryce Canyon National Park* (Foundation Document), 2014:

> Bryce Canyon National Park protects and conserves resources integral to a landscape of unusual scenic beauty exemplified by highly colored and fantastically eroded geological features, including rock fins and spires, for the benefit and enjoyment of the people. (Foundation Document, page 7).

The Park's significance statements highlight some resources that may be impacted by commercial air tours, including natural quiet, air quality, cultural resources and the outstanding views within the Park. *See,* Foundation Document, page 8. Commercial air tours under the ATMP do not impact the geologic features and processes integral to the Park. *See,* Moore Jr., 2018. Additionally, wildlife habitat is also listed as a fundamental resource and value of the Park which is potentially impacted by air tours (Foundation Document, page 11).

As a basis for evaluating the potential for impairment or unacceptable impacts on Park resources, the NPS relied on the environmental analysis in the Environmental Screening Form (ESF) (Appendix B to the Record of Decision (ROD), the Section 7 documentation for the Endangered Species Act (Appendix E to the ROD), and the Section 106 documentation for the National Historic Preservation Act (Appendix F to the ROD). The ESF includes analysis of impacts to air quality; biological resources including wildlife, wildlife habitat, and special status species; cultural resources including cultural landscapes, ethnographic resources, prehistoric and historic structures; soundscapes; lightscapes; wilderness; visitor experience; and viewsheds. The ESF considers both the change from current conditions as well the impact from the commercial air tours authorized under the ATMP. *See* ESF, Appendix B to the ROD.

The ATMP would result in ongoing impacts to the Park's natural and cultural soundscapes. Acoustic conditions in the Park were measured in 2009 and 2010 (National Park Service, 2011). At the locations nearest commercial air tour routes, the existing ambient (L_{50})[1]sound level was reported to be 22– 42 decibels, while the natural ambient (L_{nat}) sound level was reported to be 22–39 decibels. These metrics confirm that the natural acoustic environment at these sites are relatively intact and are not dramatically affected by noise. To determine the severity of the effect and potential for impairment of the soundscape, the NPS considered not just the presence of noise and potential for disturbance, but also the duration, frequency, and amplitude of noise. Noise modeling for the ATMP discloses the amount noise expected from 515 annual commercial air tours. The modeling used a busy day, defined as a 90th percentile day (*See* ESF, Appendix B to the ROD), which was comprised of a total of 5 flights. Most areas of the Park affected by air tour noise would experience noise above 35 decibels, a level at which quieter natural sounds would be masked, less than 20 minutes on a peak day; a smaller area would experience noise at or above 35 decibels for up to 20 – 50 minutes on a peak day; and an even smaller area would experience noise at or above 55 decibels on a peak day. Only areas near or directly below an air tour route would experience noise above 35 decibels for up to 75 minutes on a peak day. This is because the air tour routes are loops with the inbound and outbound sections of the loops relatively close creating two pass bys on a single air tour. These same areas would experience noise above 52 decibels between 5–10 minutes on a peak day. At 52 decibels a visitor may reasonably expect interference with Park interpretive programs. Noise may reach 65 decibels in a few areas directly below the designated routes (ESF, Figures 1., 2. and 4. Noise Technical Analysis, Appendix B to the ROD). This analysis demonstrates that there will be opportunities to experience the Park's natural and cultural soundscape at different times throughout the day every day. Noise from air tours will not be continuous. Finally, air tour routes were specifically routed to limit noise at the Southern and Western areas of the Park to focus noise away from the Park's visitor and educational centers and limit impacts on recommended wilderness. In conclusion, the natural and cultural soundscapes of the Park remain unimpaired and without unacceptable impacts under the ATMP since noise impacts are limited to only 515 instances per year, those instances are unlikely to exceed 5 times per day, noise only exceeds 52 decibels for up to 10 minutes on a peak day, and roughly half of the Park will not experience noise above 45 decibels from air tours. Some days there would not be any air tour noise. The noise is short in duration at any one location, with the loudest noise focused near or beneath the designated routes, leaving the Park's natural and cultural soundscape available for the enjoyment by present and future generations.

ATMP impacts to wildlife occur from noise generated by low flying tour aircraft. The analysis in the ESF discloses that noise would likely be heard by wildlife near the route. *See* Appendix B to the ROD. Generally, noise from commercial air tours may impact wildlife in a number of ways: altered vocal behavior, breeding relocation, changes in vigilance and foraging behavior, predator avoidance, reproductive success, and impacts on individual fitness and the structure of ecological communities to name a few (Shannon et al., 2016; Kunc et al., 2016; Kunc and Schmidt, 2019).

[1] Noise metrics referenced in this document are discussed in detail on pages 9–10 and 16–18 of the ESF.

To determine the severity of the effect and potential for impairment, the NPS considered not just the presence of noise and potential for disturbance, but also the duration, frequency, and amplitude of noise. The analysis demonstrates that the 515 commercial air tours would impact the Park at levels above 35 decibels for less than 20 minutes on a peak day in most of the Park. Noise would be audible for a longer near the route. The minimum altitude of 1,500 ft above ground level (AGL) for helicopters and 2,000 AGL for fixed-winged operators limits noise exposure to wildlife in the Park, including the Park's threatened and endangered species. The NPS concluded, with concurrence from the U.S. Fish and Wildlife Service, that the commercial air tours authorized by the ATMP may affect but are not likely to adversely affect threatened and endangered species in the Park[2] (Section 7 Consultation under the Endangered Species Act for Bryce Canyon National Park Air Tour Management Plan, Appendix E to the ROD). In conclusion, the ATMP will not impair the Park's wildlife or their habitat because the impacts from the commercial air tours do not individually rise above 35 decibels for more than 20 minutes on a peak day in most of the park (up to 75 minutes below the route) and on most days would only occur no more than 5 times a day. Some days would not experience noise. As documented through this analysis, and in the ESF, impacts to wildlife, either individually or cumulatively, would occur on an individual level and would not affect wildlife on the population level. These impacts do not impair the functioning of the Park's unique ecosystems and the wildlife within. Consistent with the may affect, not likely to adversely affect determination, wildlife, including threatened and endangered species, will persist in the Park without a loss of integrity and visitors will continue to enjoy wildlife and their habitats.

Impacts to the Park's cultural resources would be similar in frequency and duration to those described above for wildlife. The analysis in the ESF evaluated the impacts from commercial air tours on ethnographic resources, archeological sites, and historic resources. The option for no fly days will potentially eliminate impacts to ethnographic resources. Additionally, because of the limited number and time commercial air tours occur, and the location of the routes, noise impacts to these resources will be limited. Acting as lead agency for the purposes of compliance with Section 106 of the National Historic Preservation Act with respect to the ATMP, the FAA concluded, in coordination with the NPS, that there would be no adverse effects on historic properties from the 515 commercial air tours authorized under the ATMP. The Utah State Historic Preservation Officer concurred with that determination. The consultation materials documented that the ATMP would not diminish the Park's cultural landscape's integrity of location, design, setting, materials, workmanship, feeling, or association. Additionally, the determination documented that commercial air tours authorized under the ATMP do not adversely affect those elements of ethnographic resources that make them significant to traditionally associated groups, nor does the ATMP interfere with the use of ethnographic resources by these groups. Finally, the analysis documented that the ATMP does not adversely affect the feeling and setting of archaeological sites or historic structures that make those sites and structures eligible for listing on the National Register of Historic Properties. *See* Appendices B and F to the ROD. Since there are no adverse effects on these resources and impacts on these

[2] "May affect, but not likely to adversely affect" means that all effects are beneficial, insignificant, or discountable.

resources are limited, these resources would maintain their integrity and purpose and therefore remain unimpaired for the enjoyment of future generations under the ATMP.

As disclosed in the ESF, the ATMP may have limited impacts on the Park's viewshed, especially from the Park's Amphitheatre viewpoints. The Park's views are a fundamental resource. As noted in the ESF, aircraft are not typically included in viewshed analyses because they are transitory. They are most noticeable because of the noise associated with them. Noise from air tours is unlikely to last longer than 10–15 minutes on a peak day at the busiest viewpoints, e.g. Sunrise Point, Sunset Point, and Inspiration Point. Visitors are unlikely to see air tours from viewpoints near Yovimpa Point. Thus, as noted above, due to the short duration of the effects as well as the limited frequency, impacts to the Park's viewshed will be limited. As a result, visitors will continue to be able to enjoy the Park's beautiful views everyday unimpaired.

The NPS completed an air quality analysis and determined that the 515 commercial air tours authorized under the ATMP contributes a minimal amount of emissions to the local air quality and would not have a regional impact (*See* ESF, Air Quality Technical Analysis, Appendix B to the ROD). Because the amount of emissions is so small the ATMP does not affect the integrity of the Park's air quality, leaving it unimpaired for future enjoyment.

As demonstrated here and in the analysis referenced above, the impacts to these resources, neither individually nor cumulatively, would preclude the NPS from achieving the purpose of the Park or desired conditions for resources; and would not unreasonably interfere with Park programs or activities, another appropriate use, the overall atmosphere of peace and tranquility or the natural soundscape, or NPS concessioner or contractor operations or services. As a result, there will not be impairment of or unacceptable impacts to the Park's natural and cultural resources or visitor experience. Impacts to other resources potentially affected were considered so small and insignificant that they did not warrant a written analysis here.

The ATMP sections on adaptive management and amending the plan will allow Park managers to ensure that unanticipated or unacceptable impacts do not occur and the requirement for implementing flight tracking technologies included in the ATMP will better enable the NPS to monitor and enforce the restrictions in the ATMP.

Compliance with NPS Management Policies Regarding Appropriate Uses

A separate written appropriate use analysis is not required under NPS 2006 Management Policies. In recognition of comments suggesting that the NPS consider whether commercial air tours are an appropriate use over the Park, for this ATMP the NPS has decided to briefly address the issue of appropriate use below.

NPS 2006 Management Policies § 1.5 state:

> An "appropriate use" is a use that is suitable, proper, or fitting for a particular park, or to a particular location within a park. Not all uses are appropriate or allowable in units of the national park system, and what is appropriate may vary from one park to another and from one location to another within a park."

Section 8.1.2 of Management Policies further explain:

> The fact that a park use may have an impact does not necessarily mean it will be unacceptable or impair park resources or values for the enjoyment of future generations. Impacts may affect park resources or values and still be within the limits of the discretionary authority conferred by the Organic Act. In these situations, the Service will ensure that the impacts are unavoidable and cannot be further mitigated.

In determining whether a use is appropriate, the NPS evaluates:

- consistency with applicable laws, executive orders, regulations, and policies;
- consistency with existing plans for public use and resource management;
- actual and potential effects on park resources and values;
- total costs to the Service;
- whether the public interest will be served.

Parks may allow uses that are appropriate even if some individuals do not favor that particular use. The National Park Air Tour Management Act (NPATMA) contemplates that commercial air tours may be an acceptable use over National Park System units so long as protections are in place to protect park resources from significant impacts of such tours, if any. Therefore, commercial air tours are authorized by law, though not mandated, and generally may be appropriate where they do not result in significant impacts or cause unacceptable impacts on park resources and values.

Bryce Canyon National Park ATMP – consistency with NPS Management Policies for Appropriate Uses

The NPS relied on the mitigations in the ATMP (Appendix A to the ROD), the analysis in the ESF (Appendix B to the ROD), Section 7 documentation for the Endangered Species Act (Appendix E to the ROD), the Section 106 documentation for the National Historic Preservation Act (Appendix F to the ROD), the unacceptable impact and non-impairment analysis above, and the language in NPATMA as a basis for finding that the ATMP's authorization of 515 commercial air tours over Bryce Canyon National Park is an appropriate use.

- The ATMP for Bryce Canyon National Park is consistent with applicable laws, executive orders, regulations, and policies. NPATMA specifically provides that air tours may be allowed over National Park System units where they do not result in significant impacts. Commercial air tours are not prohibited in applicable laws, regulations, or policies.
- The ATMP's authorization of 515 commercial air tours over the Park is consistent with the Park's existing management plans. No existing management plans preclude commercial air tours, though the Park may set different management direction in the future. Mitigations, including limiting the number of commercial air tours per year, restricting commercial air tours to the designated routes, and setting minimum altitudes, limit impacts to visitor experience and other resources.
- The effects of the 515 commercial air tours authorized in the ATMP on Park resources was evaluated in the materials referenced above and unacceptable impact and non-

impairment discussion above. While air tours may occur every day, on most days there will be no more than 5 air tours. Roughly half the Park will not experience any noise from air tours. The commercial air tours are short in duration and do not rise to the level of an unacceptable impact nor impair Park resources. The NPS does not interpret § 8.1.1 to require the NPS to contemplate mitigating Park uses to the point that the use no longer has any impact or no longer can occur. Rather, this section requires the NPS to consider whether there are mitigations that can reduce impacts to Park resources and whether the impacts of those uses, after applying mitigations, result in unacceptable impacts or impairment. In this case, the NPS evaluated the impacts of 515 commercial air tours and included specific mitigations in the ATMP to minimize impacts to Park resources. The NPS acknowledges that prohibiting commercial air tours entirely would avoid all impacts to Park resources, but the elimination of commercial air tours is not required to avoid unacceptable impacts or impairment of Park resources. The NPS believes the mitigations in the ATMP are sufficient to protect Park resources and that additional mitigations are not required because the impacts associated with the ATMP are not significant and do not result in unacceptable impacts or impairment.

- The cost to the NPS from implementing the ATMP includes yearly compiling of operator reported commercial air tours and aircraft monitoring data which is done in coordination with the Federal Aviation Administration. These activities would occur anyway, because they are required under NPATMA, regardless of whether the Park has an ATMP because commercial air tours are currently authorized under interim operating authority (IOA). This is done by the NPS's Natural Sounds and Night Skies Division which also provides noise monitoring, modeling, and planning support to parks across the country.
- While some visitors may not like commercial air tours, others appreciate the opportunity to view the Park from a commercial air tour. Commercial air tours, as contemplated in NPATMA, serve the public in this way.

Additional commercial air tours and commercial air tours on other routes may not be appropriate. However, the NPS has determined that because the ATMP authorizes 515 commercial air tours, because those commercial air tours are restricted to designated routes, are relatively short in duration, limits impacts to backcountry and recommended wilderness areas and interpretive centers, and are at acceptable altitudes, the ATMP is adequately protective of Park resources and the commercial air tours it authorizes are an appropriate use of the Park at this time.

Compliance with NPS Management Policies for Soundscape Management

A separate written compliance analysis for Soundscape Management is not required under NPS 2006 Management Policies. In recognition of comments suggesting that the NPS consider whether the ATMP complies with NPS soundscape policies and guidance, the NPS has opted to briefly discuss the issue with respect to this ATMP.

Management Policies § 4.9 states, "The National Park Service will preserve, to the greatest extent possible, the natural soundscapes of parks." Section 5.3.1.7 similarly addresses cultural and historic resource sounds.

Section 8.4 specifically addresses overflights, including commercial air tours, which notes

> Although there are many legitimate aviation uses, overflights can adversely affect park resources and values and interfere with visitor enjoyment. The Service will take all necessary steps to avoid or mitigate unacceptable impacts from aircraft overflights.
>
> Because the nation's airspace is managed by the Federal Aviation Administration (FAA), the Service will work constructively and cooperatively with the Federal Aviation Administration and national defense and other agencies to ensure that authorized aviation activities affecting units of the National Park System occur in a safe manner and do not cause unacceptable impacts on park resources and values and visitor experiences.

Director's Order #47 gives further guidance for the management of natural and cultural soundscapes, requiring the consideration of both the natural and existing ambient levels.

Bryce Canyon National Park ATMP – consistency with NPS Management Policies for Soundscape Management.

Consistent with § 8.4, the NPS worked constructively and collaboratively with FAA to develop the ATMP. The NPS relied on the mitigations in the ATMP (Appendix A to the ROD), the analysis in the ESF (Appendix B to the ROD), the Section 7 documentation for the Endangered Species Act (Appendix E to the ROD), the Section 106 documentation for the National Historic Preservation Act (Appendix F to the ROD), and the unacceptable impact and non-impairment analysis above as a basis for finding that the ATMP complies with the policies and guidance for management of natural and cultural soundscapes.

Consistent with Management Policies § 4.9, the ATMP eliminates some noise, or moves the Park closer to natural ambient conditions, by limiting commercial air tours to 515 per year, which is a reduction from the current authorized number (3,131) under IOA. In addition, the ATMP includes quiet technology incentives which could help reduce noise (*See* ATMP, Appendix A to the ROD). When developing the ATMP, the NPS considered the commercial air tour routes and evaluated the potential for noise to reach the most sensitive resources in the Park, including some recommended wilderness areas, visitor and interpretive centers and the Park's Amphitheatre viewpoints. The commercial air tours occur along designated routes, which limits impacts to these areas from the intermittent, and short duration noise effects of commercial air tours.

Management Policies § 5.3.1.7 prohibits excessive noise and § 1.4.7.1 prohibits actions that unreasonably interfere with "the atmosphere of peace and tranquility, or the natural soundscape maintained in wilderness and natural, historic, or commemorative locations within the park." Acoustic conditions in the Park were measured in 2009 and 2010 (National Park Service, 2011). At the locations nearest commercial air tour routes, the existing ambient (L_{50})[3]sound level was reported to be 22–42 decibels, while the natural ambient (L_{nat}) sound level was reported to be 22–39 decibels. These metrics confirm that the natural acoustic environment at these sites are

[3] Noise metrics referenced in this document are discussed in detail on pages 9-10 and 16-18 of the ESF.

relatively intact and are not dramatically affected by noise. When determining the severity of the impacts, results from the noise modeling for the ATMP were considered against both the natural soundscape and existing soundscape. As discussed above under the non-impairment discussion, the noise from commercial air tours is limited in intensity and temporally. Routes were specifically designed to avoid recommended wilderness and interpretive centers. Therefore, the noise from commercial air tours is neither excessive nor does it unreasonably interfere with the peace and tranquility of the Park, wilderness character, or natural or historic or commemorative locations. In conclusion, the ATMP complies with § 8.4, § 4.9, and § 5.3.1.7 of the Management Policies, because the NPS has successfully collaborated with the FAA and developed an ATMP that will not result in unacceptable impacts to natural or cultural soundscapes or impairment of Park resources.

Compliance with NPS Management Policies for Wilderness Preservation and Management

A separate written compliance analysis for Wilderness Preservation and Management is not required under NPS Management Policies. In recognition of comments suggesting that the NPS consider whether the ATMP complies with NPS wilderness policies and guidance, the NPS has elected to briefly discuss the issue with respect to this ATMP.

Management Policies for wilderness preservation and management do not specifically address commercial air tours. However, § 7.3 of Director's Order #41 notes that commercial air tours are inconsistent with preservation of wilderness character and requires the NPS to consider ways to further prevent or minimize impacts of commercial air tours on wilderness character.

The ATMP does not allow commercial air tours to take off or land within wilderness. Therefore, § 4(c) of the Wilderness Act and § 6.4 of Director's Order #41 do not apply and a minimum requirements analysis is not required. While the NPS did not complete a minimum requirements analysis, the NPS did analyze and report on the impacts of commercial air tours on wilderness character and minimized those impacts.

Bryce Canyon National Park ATMP – consistency with NPS Management Policies for Wilderness Preservation and Management.

The NPS relied on the mitigations in the ATMP (Appendix A to the ROD), the analysis in the ESF (Appendix B to the ROD), the unacceptable impact and non-impairment analysis above, and soundscape management analysis above as a basis for finding that the ATMP complies with the policies and guidance for Wilderness Preservation and Management.

Approximately 58% of the Park (20,810 acres) is recommended wilderness, which is managed as designated wilderness by the NPS, pursuant to the 2006 NPS Management Policies. All of the commercial air tour routes authorized in the ATMP fly over areas managed as wilderness. Thus, the NPS considered the impact of 515 commercial air tours on wilderness character. The ESF acknowledges noise from aircraft could impact wilderness character although the analysis demonstrates that the altitude requirements and route designations limit potential impacts compared to current conditions. Most of the recommended wilderness areas in the Southern

section of the Park will not experience noise above 35 decibels for more than 15 minutes on a peak day. Most of this same area will not experience noise that exceeds 52 decibels on any day. As described in detail above and in the ESF, noise from commercial air tours over recommended wilderness will be infrequent and short. Wilderness character will remain unimpaired under the ATMP since a Park visitor will have the opportunity to hear the sounds of nature and experience the primeval character of the Park's recommended wilderness, and the natural and cultural soundscape will remain largely unmarred by air tour noise the vast majority of time.

Consistent with Director's Order #41, § 7.3, the ATMP includes mitigations which minimize impacts to wilderness character including limiting commercial air tours to 515 per year, requiring helicopters to fly above 1,500 ft above ground level (AGL) and fixed-winged aircraft at 2,000 AGL, and requiring the 515 commercial air tours to stay on designated routes (*See* ATMP, § 5.0, Appendix A to the ROD).

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The Wilderness Act, (1964), Public Law 88-577 (16 U.S.C. §§ 1131-1136) 88th Congress, Second Session (As amended).

APPENDIX H

Summary of Public Comments and Comment Analysis on the Draft Air Tour Management Plan for Bryce Canyon National Park

US Department of Transportation
Federal Aviation Administration

US Department of the Interior
National Park Service

Bryce Canyon National Park

Summary of Public Comments and Comment Analysis of the Draft Air Tour Management Plan

July 2022

CONTENTS

INTRODUCTION

An Air Tour Management Plan (ATMP) would provide the terms and conditions for commercial air tours conducted over Bryce Canyon National Park (Park) pursuant to the National Parks Air Tour Management Act (Act) of 2000. The Act requires that the Federal Aviation Administration (FAA) in cooperation with the National Park Service (NPS) (collectively, the agencies) establish an ATMP or voluntary agreement for each National Park System unit for which one or more applications to conduct commercial air tours has been submitted, unless that unit is exempt from this requirement because 50 or fewer commercial air tour operations are conducted over the Park on an annual basis, 49 U.S.C. § 40128(a)(5).

The objective of establishing an ATMP for the Park is to develop acceptable and effective measures to mitigate or prevent the significant adverse impacts, if any, of commercial air tours on natural and cultural resources, visitor experiences and tribal lands.

A notification of the public review period for the draft ATMP was announced in the Federal Register, and the draft ATMP was provided for public review and comment from September 3 through October 3, 2021. In addition, the agencies held a virtual public meeting for the Park's draft ATMP on September 27, 2021. The draft ATMP was published on the NPS Planning, Environment, and Public Comment (PEPC) website.

Any comments entered into PEPC by members of the general public, as well as any written comments mailed or emailed to the NPS, were considered and included in the overall project record. This *Public Comment Summary Report* provides a summary of the substantive comments submitted during the public comment period.

COMMENT ANALYSIS METHODOLOGY

Comment analysis is a process used to compile and correlate similar comments into a usable format for the agencies' decision-makers and the program team. Comment analysis assists the agencies in organizing, clarifying, and addressing information and aids in identifying the topics and issues to be evaluated and considered throughout the ATMP planning process.

The process includes five main components:

- developing a coding structure
- employing a comment database for comment management
- reviewing and coding of comments
- interpreting and analyzing the comments to identify issues and themes
- preparing a comment summary.

A coding structure was developed to help sort comments into logical groups by topic and issue. The coding structure was designed to capture the content of the comments rather than to restrict or exclude any ideas.

The NPS PEPC database was used to manage the public comments received. The database stores the full text of all correspondence and allows each comment to be coded by topic and category. All comments were read and analyzed, including those of a technical nature, opinions, suggestions, and comments of a personal or philosophical nature. Under each code, all comments were grouped by similar themes, and those groups were summarized with concern statements.

CONTENT ANALYSIS TABLES

In total, 448 correspondences were received providing 557 comments. The term "correspondence," as used in this report, refers to each submission offered by a commenter. The term "comment," as used in this report, refers to an individual issue and/or concern raised by a commenter that the agency coded by topic and category. A single commenter may have raised multiple comments within a correspondence. Similarly, multiple commenters raised many of the same comments. Of the correspondences received, one was identified as a form letter, to which there were 367 signatories. The form letter expressed opposition to air tours and requested National Environmental Policy Act (NEPA) analyses with a suite of alternatives including a no air tour option. This letter noted that several of these national park units hold Native American cultural and sacred sites, and that the majority of the parks are either federally designated or proposed wilderness that should be managed for natural quiet and wilderness values.

The following table was produced by the NPS PEPC database and provides information about the numbers and types of comments received, organized by code, including form letters.

Code	Description	Comments	Percentage
ADV100	Adverse Impacts: Soundscape impacts	60	10.79%
ADV200	Adverse Impacts: Wildlife/biological impacts	4	0.72%
ADV300	Adverse Impacts: Endangered species impacts	7	1.26%
ADV400	Adverse Impacts: Wilderness character impacts	22	3.96%
ADV500	Adverse Impacts: Cultural resource impacts	1	0.18%
ADV510	Adverse impacts: Visual impacts	2	0.36%
ADV520	Adverse Impacts: Equity	0	0%
ADV530	Adverse Impacts: Climate change / greenhouse gases / air quality	7	1.26%
ADV600	Adverse Impacts: Other	33	5.94%
ELE100	ATMP Elements: Annual number of air tours	41	7.37%
ELE200	ATMP Elements: Routes and altitudes	37	6.65%
ELE300	ATMP Elements: Aircraft type	10	1.80%
ELE400	ATMP Elements: Day/time	6	1.08%
ELE500	ATMP Elements: Other	43	7.73%
FAV100	Benefits of air tours	12	2.16%
NS100	Non-substantive comment: Support air tours	7	1.26%
NS150	Non-substantive comment: Other	44	7.91%
NS200	Non-substantive comment: Oppose air tours continuing	11	1.98%
NS300	Non-substantive comment: Oppose air tours introduction	39	7.01%
PRO100	Process Comments: Impact analysis	60	10.79%
PRO200	Process Comments: Public review	6	1.08%
PRO300	Process Comments: Alternatives considered	28	5.04%
PRO400	Process Comments: Other	40	7.19%
PRO500	Process Comments: NEPA	30	5.40%
TRIBE	Tribal concerns	7	1.26%

SUMMARY OF COMMENTS

The following text summarizes the comments received during the comment period and is organized by code. The summarized text is formatted into concern statements to identify the thematic issues or concerns represented by comments within the code. The focus on coding comments is on those comments with substantive content. Substantive comments raise, debate, or question a point of fact, or

analysis of the impacts associated with the ATMP, or elements of the ATMP. Comments that merely support or oppose the ATMP are not considered substantive.

ADV100 Adverse Impacts: Soundscape Impacts

1. Commenters noted concern that air tours would impact soundscapes and the solitude and natural sounds in the Park and impact ecological and biodiversity value. One commenter stated adopting this draft ATMP would result in air tour noise audible throughout the entire Park on a typical fair-weather day. Commenters suggested that each park develop a soundscape management plan to identify maximum aircraft noise levels to protect soundscapes and that air tours then maintain those sound levels. Commenters referenced the Organic Act; NPS Director's Order #47 regarding soundscape protection; Natural Resource Technical Report NPS/BRCA/NRTR-2011/421; and the Bryce Canyon National Park Foundation Document.
2. One commenter noted that high altitude jets provide the most common aircraft noise and noted aircraft flying under 2,000 feet elevation could register sound at 80 decibels (dB) or more. The commenter also noted that acoustic studies conducted at the Park found backcountry areas average natural sounds audible for time periods of 2.4 minutes in the summer and 3.2 minutes in the winter with a few peaks of noise from aircraft reaching 55 dB with most measurement in the range of 35 to 40 dB. The natural background was 17 to 30 dB. The commenter provided the following reference, noting Figure 16: Ambrose, Skip and Chris Florian. 2008. Draft, Acoustic Measurements in Arches National Park, Canyonlands National Park, Hovenweep National Monument, and Natural Bridges National Monument, 2001-2007. Sandhill Company.
3. One commenter interpreted a statement made by NPS in an NPR report to mean that degradation of Park values will be permitted in order to promote a commercial use of the Park. The commenter started this is not supported by the legal obligations that NPS must follow and the objectives given for this decision. The commenter referenced: https://www.kuer.org/sports-recreation/2021-09-22/national-park-services-latest-balancing-act-commercial-air-tours-vs-the-environment.
4. One commenter noted the availability of the NPS Natural Sounds Office, Natural Sounds Acoustic Monitoring Reports for many of the Parks required to issue ATMPs (https://www.nps.gov/subjects/sound/acousticmonitoring_reports.htm). The commenter stated that none of the draft ATMPs issued contain any such analysis even though NPS has baseline data for ambient sound levels at many of the parks. The commenter added that the draft ATMPs provide no explanation for why such information has been omitted. The commenter referenced: Journal of Forestry in 2016 titled, A Framework to Assess the Effects of Commercial Air Tour Noise on Wilderness at https://doi.org/10.5849/jof.14-135; Landres et al. 2008, p. 7- 8; Watson et al. 2015; Barber et al. 2010; NPS 2006, Marin et al. 2011; Miller 2008, Lynch et al. 2011; Mace et al. 2013, Rapoza et al. 2014.
5. One commenter referenced the adverse impacts of aircraft overflight noise on park resources and values contained in the 1994 Report to Congress on Effects of Aircraft Overflights on the National Park System (https://www.nonoise.org/library/npreport/intro.htm#TABLE OF CONTENTS).
6. Commenters provided the following general references related to soundscapes: Buxton, R.T., McKenna, M.F., Mennitt, D., Fristrup, K., Crooks, K., Angeloni, L. and Wittemyer, G., 2017. Noise pollution is pervasive in US protected areas. Science, 356(6337), pp.531-533. https://sites.warnercnr.colostate.edu/soundandlightecologyteam/wp-content/uploads/sites/146/2020/11/science2017.pdf; Buxton et al. (2017); A. Rapoza, E.

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ADV200 Adverse Impacts: Wildlife/Biological Impacts

1. Commenters expressed general concern that noise from air tours would impact wildlife including eagles and peregrine falcons.

ADV300 Adverse Impacts: Endangered Species Impacts

1. Commenters expressed general concern about the impacts of air tour noise on endangered and threatened species of wildlife, including the Mexican spotted owl and California condor.
2. Several commenters noted that California condor have been observed at the Park. Commenters requested this be acknowledged in the draft ATMP.
3. One commenter asked why the agencies initiated informal consultation with the United States Fish and Wildlife Service (USFWS) and why the agencies recommend a determination of not likely to adversely affect raptors and migratory bird species.
4. One commenter questioned what studies have been conducted to confirm air tours would not impact the Utah prairie dog which is threatened in Utah.

ADV400 Adverse Impacts: Wilderness Character Impacts

1. Commenters noted that commercial air tours and aircraft overflights negatively affect wilderness character, that the ATMP does not acknowledge compliance with the Wilderness Act. Commenters referenced various sources: NPS Management Policies; NPS Director's Order # 41 Wilderness Stewardship (DO-41), Section 6.2; Foundation Document. https://www.science.org/doi/full/10.1126/science.aah4783 A Framework to Assess the Effects of Commercial Air Tour Noise on Wilderness; Landres et al. 2008, p. 7- 8; Watson et al. 2015; Barber et al. 2010; NPS 2006, Marin et al. 2011; Miller 2008, Lynch et al. 2011; Mace et al. 2013, Rapoza et al. 2014; https://www.nps.gov/orgs/1981/upload/Interagency-2020-Vision_508.pdf.
2. One commenter stated 14 CFR Part 93 determines that aircraft noise impacts are eliminated by mandating that aircraft not overfly urban communities, and this same approach should be applied to National Park designated wilderness areas, citing https://www.faa.gov/regulations_policies/rulemaking/media/NYNShoreHelicopterFinalRule.pdf; https://www.planenoise.com/docs/12-1335-1446255.pdf.
3. One commenter stated that the objective of the draft ATMP should be to improve resource conditions by reducing the ambient level of air tour noise, especially in areas managed as wilderness. The commenter provided the following references: https://www.science.org/doi/full/10.1126/science.aah4783; a synthesis of two decades of research documenting the effects of noise on wildlife; Graeme Shannon et al; 26 June 2015. https://onlinelibrary.wiley.com/doi/10.1111/brv.12207; https://www.faa.gov/documentLibrary/media/Advisory_Circular/AC_91-36D.pdf.

ADV500 Adverse Impacts: Cultural Resource Impacts

1. One commenter noted there are over 50 structures listed on the National Register of Historic Places in the Park including historic resources built by the Civilian Conservation Corps, the Bryce Inn, and the Bryce Canyon Lodge and Deluxe Cabins. The commenter noted that the draft ATMP does not acknowledge compliance with the Section 106 of the National Historic Preservation Act (NHPA) requires consultation with Tribal Historic Preservation Office (THPO), Tribes, and Native Hawaiian Organizations when undertakings may affect historic properties.

ADV510 Adverse Impacts: Visual Impacts

1. Commenters noted concern air tours would cause visual impacts. One commenter noted that the majority of visitor experiences take place at the top of amphitheaters, putting visitors in close proximity to air tours.

ADV520 Adverse Impacts: Equity

1. No comments were received regarding equity concerns.

ADV530 Adverse Impacts: Climate Change, Greenhouse Gasses, and Air Quality

1. Commenters noted that air tours produce pollution and contribute to climate change, and that there is no mention of the carbon footprint associated with air tours in the draft ATMP. One commenter also noted that the Park is a Class 1 area under the Clean Air Act.

ADV600 Adverse Impacts: Other

1. Commenters stated that air tours benefit only a very small percentage of the population that can afford them.
2. Several commenters noted the draft ATMP is discriminatory and deprives disabled individuals from experiencing air tours.
3. Commenters noted an economic study should be conducted to evaluate the economic harm to the air tour industry.
4. One commenter noted that the draft ATMP should include feedback from the National Parks Overflights Advisory Group (NPOAG) to address safety concerns.
5. One commenter was concerned that the presence of aircraft will further degrade an experience already diminished by overcrowding and historic levels of visitation.
6. Commenters raised concern about the risk of aircraft failure and crash events which could endanger passengers and visitors along with impacting rock formations.

ELE100 ATMP Elements: Annual Number of Air Tours

1. Commenters requested reductions or limitations in the number of tours including keeping the flights to a minimum; no more than one per day; no more than two per day out of the total annual authorization; and no more than 3 flights per day from April through October.
2. One commenter suggested the authorized number of air tours should be no more than the lesser of actual usage in 2000 or the recited recent three-year window average to maintain consistency with the Act's legislative history, which provided that: In determining the number of authorizations to issue to provide commercial air tour operations over a national park, the Administrator, in cooperation with the Director, shall take into consideration the provisions of the air tour management plan, the number of existing commercial air tour operators and current level of

service and equipment provided by any such operators, and the financial viability of each commercial air tour operation. The commenter referenced 106th Congress, H.R. 717, H.Rept. 106-273.

3. One commenter noted that in Section 9.0, of the draft ATMP, there should be no ability to amend the ATMP to increase the total number of annual air tours.
4. Commenters stated that there was no due process in the taking of Interim Operating Authority (IOA) by the government which was not fair or equitable and fails to pass the reasonable and necessary test of regulation, and that operators were not informed that IOA was a use or lose proposition, and the operators are denied the chance to return to earlier days of profitability during different economic times. The commenter requested that the justification section of the draft ATMPs reference the authority to revoke IOA originally granted by Congress to air tour operators.
5. One commenter stated that one of the primary findings from the Government Accountability Office (GAO) was that the FAA and the Park Service lack a mechanism to verify the number of air tours conducted over national park units, both historically and under interim operating authority. The commenter asked why the GAO's recommendation that a sturdy monitoring program be implemented as an integral part of any ATMP was ignored in this proposal.
6. One commenter noted that provisions in the draft ATMP seems to leave open the possibility of additional flights without a NEPA analysis. The commenter requested the draft ATMP include the annual number of total flights.
7. One commenter noted the agencies' decision to limit air tours seems arbitrary and is not supported by data contained in the draft ATMP. The commenter noted that the agencies have focused on air tours while ignoring general vehicle traffic.
8. Commenters stated that the proposed number of air tours based on the three-year average is arbitrary and misleading because it includes years when the airport was under construction for a runway expansion, there was low international visitation, and when operators limited their flights due to medical issues. Commenters stated that the flight numbers do not adequately reflect the current market, public interest in air tours, or reflect the capability, interest and needs of operators. Commenters suggested calculating flight averages for the previous 20 or 30 years which would more accurately reflect market fluctuations caused by the strength of the US dollar, recessions, fuel prices, and even pandemics; that 2021 would reflect a normal operating year; and suggested use of the maximum number of flights for specific years.
9. Commenters expressed concern that operating authority based on the average of annual overflights between 2017, 2018, and 2019 does not take into account the actual carrying capacity for noise at the Park, and that any reduction of operating authority should center around resource protection and be justified by sound studies and modeling. The commenter referenced: Mace, Britton. 2011. Soundscapes of Bryce Canyon National Park: A Multi-method Analysis of Aircraft Overflights. Southern Utah University, Department of Psychology; National Park Service. 2010. Zion National Park Soundscape Management Plan.
10. Commenters stated that the agencies do not provide enough justification to allow air tours in the Park. Commenters stated that allowing 515 annual flights with no justification communicates a lack of prioritization of the Park's natural and cultural resources. Commenters stated that the ATMP should focus on restoring and protecting natural sounds, a resource the NPS is mandated to protect, and all management decisions need to consider limiting aircraft use to levels that achieve this goal.

11. Commenters stated that NPS did not do due diligence to determine current conditions in the Park with IOA used to determine the impacts to resources, and questioned what previous negative effects to the Park were caused by air tours to incur this reduction. Commenters stated that if the NPS cannot document specific negative impacts caused by the high number of flights which occurred in the 1990s and 2000s, there is no reason to reduce flights, and that taking away allocations must be based on demonstrable negative impact of aircraft noise. Commenters stated that basing the number of flights on three years is without empirical or economic justification, and it lacks effort to consider the impact of denying the public equal access to the Park experience by air.
12. One commenter referenced transportation flights from Page, Arizona that land at Bryce Canyon Airport for a three-hour ground hold while customers visit the Park. The commenter asked what provisions there are for this flight to ensure operators do not have to alter the flight path.

ELE200 ATMP Elements: Routes and Altitudes

1. One commenter stated that the minimum above ground level (AGL) altitude is insufficient to prevent disruption on the ground; it should be at least the 5,000 ft. recited in Section 2.0(1) of the draft ATMP and with the qualifications on no deviations as discussed there. The commenter also stated that there is no reason to adopt varying altitude requirements for various parts of the Park, as all parts of the Park should be valued and protected. The commenter also stated the exception listed in Section 2.0(1) should be replaced with requirements that (a) flights will operate at all times at the stated minimum altitude over any part of the terrain, and (b) flights will not operate or, if in operation, will discontinue operations where cloud cover or other conditions are expected to require them to deviate below the stated altitude.
2. Regarding Section 3.2 of the draft ATMP, first sentence (authorized route), one commenter questioned the basis for this specific route, whether to maximize the scenic opportunities of the commercial air passengers and profit of the operator, or to minimize actual ground disruptions to the natural habitat and visitor experience. The commenter stated that it should be the latter, and if not, then the approved route should be modified to that effect.
3. One commenter stated that the minimum flight altitude over the Park should be based on minimum altitudes above the valleys, not the peaks, and recommended that all planes should be required to fly 2,000 ft. over the visitor center and use 80% of cruise power unless climbs are necessary, which would bring the ATMP into alignment with the flights being conducted by all other general aviation aircraft.
4. One commenter stated there are potential safety concerns with excessively high routes, and referred to FAA regulations that require commercial pilots to be on oxygen whenever flying above 10,000 ft. for more than thirty minutes, and that oxygen must be available for passengers.
5. One commenter stated that the justification for the 2,900 foot minimum AGL altitude in Section 4.0 is not sufficient. The commenter noted that the measure against the actual physical injury threshold for animal life does not account for disruption of natural habitat and does not address the disruption to the visitor experience. The commenter also noted that the noise from helicopters/rotary aircraft which are the bulk of commercial air tour operations are far louder and far more disruptive than fixed wing aircraft, both in general cruise mode and especially in altitude adjustment mode, and are more impactful at any altitude, approaching if not exceeding the cited 92 dB injury level.
6. Several commenters noted potential safety concerns due to the overlapping features of the routes in the draft ATMP at the Park. One commenter noted that some air tour operators fly helicopters

and fixed-wing aircraft on the same route and it is not clear how separation of aircraft will be achieved. The commenter also asked what the width of the routes are which will be required in operation specifications to maintain safety. The commenter also suggested consolidation of routes would improve aviation safety by reducing or eliminating intersecting routes at the same altitude, or routes that both helicopters and fixed-wing aircraft are required to traverse.

7. Several commenters referred to the Utah Field Office Guidelines for Raptor Protection from Human and Land Use Disturbances which recommends a minimum of 1,000 ft. of elevation separation opposed to the 2,600 ft. proposed in the draft ATMPs.
8. Several commenters requested that aircraft maintain a distance of ½ mile outside the Park boundary and maintain an altitude of 5,000 ft. One commenter provided the following reference: https://www.federalregister.gov/documents/2002/10/25/02-27033/national-parks-air-tour-management.
9. One commenter stated that the proposed minimum flight altitudes of 12,500 ft. and 13,500 ft. would require planes to climb to high altitudes at high power settings resulting in maximum noise generated in the lower altitudes during the climb, but also at high altitudes in order to maintain flight elevation. The commenter added that at high altitudes, the cone of engine noise will have its greatest propagation effect. The commenter stated that it takes a plane much longer to climb than to descend, so the negative effects of climb are greater than the positive effects of descent by a factor of two to one, and that this principle is especially noticeable on short scenic flights.
10. One commenter stated that the Park lies along a long-established fly-way north-south from Moab, Utah to Monument Valley, Utah which requires pilots to pass over the Park noting that the average number of flights by all active air tour operators over the Park amounts to less than two per day.
11. One commenter stated that proposed minimum flight altitudes are without warrant. The commenter stated that according to public testimony, the NPS asserts that their high minimum altitudes are necessary to comply with general guidance for raptor protection including threatened and endangered and migratory birds, notably the Mexican spotted owl and the peregrine falcon; however, the United States Fish and Wildlife Service (USFWS) is not expected to say that the air tours being challenged at the Park either have, are, or would in the future cause any damage to eleven threatened/endangered species in the Park.
12. One commenter noted the viewing aspect of touring aircraft should be considered in developing tour routes with a route that offers better views to the side of the airplane to view the scenic Claron formation.
13. Commenters suggested an alternative route should be considered outside the half mile buffer at varying altitudes including 3,000 ft. or 5,000 ft. AGL.
14. One commenter stated that the NPS should work with FAA to ensure that air tour flights operate as planned and that the impacts from those flights are monitored, and that changes in air tour flights should occur to remedy problems.

ELE300 ATMP Elements: Aircraft Type

1. Several commenters requested that helicopter tours be prohibited. One commenter stated that helicopter noise is far more disturbing than fixed wing aircraft, and that numerous studies have shown that people perceive helicopter noise as being much louder than it really is, almost twice as loud (Brotak, Ed. 2021. The science behind helicopter noise - and how the industry is working to reduce it. Vertical Rotary Wing magazine. 25 February 2021 issue), and that at 2,000 ft. elevation above the ground, the helicopter can sound as loud as a vacuum cleaner at 65-75 dB

(Helicopter Association International 1981 Fly Neighborly Guide. https://www.aia.org.nz/site/aianz/Fly Neighbourly Guide.pdf.

2. Regarding Section 3.3 of the draft ATMP, one commenter noted that noise-reducing technology currently exists in next generation commercial air tour aircraft, and that any authorized new or replacement aircraft should be required to utilize the maximum noise-reducing technology and models available, and this should be an express requirement for any agency concurrence.
3. One commenter stated that the T207 is neither a new or replacement aircraft; rather, it is an existing aircraft and must be included in Appendix A with respect to all the ATMPs affecting an operator. The commenter stated that the removal of the T207 in the Ops Specs was temporary and associated with a regulatory-mandated overhaul, and that about three years ago the FAA was informed about the forthcoming overhaul. The commenter stated that the Primary Maintenance Inspector had advised removal of the T207 from the Ops Specs, but said that it would be easy to put the plane back on flying status once the overhaul was completed. The commenter stated that the operator is installing the TSIO-520-M engine. The commenter stated that when the plane does come back on line, it would be used as allowed by existing law and regulation, and that the operator would continue to use the C182. The commenter stated that it is to the advantage of the NPS to allow flights over the parks, as one flight in the T207 is equal to two to three flights in the C182, considering passenger load, and that the T207 is actually a little quieter than the C182R.
4. One commenter noted the draft ATMP should include the noise stage each aircraft qualifies for and that Stage 3 aircraft noise standards should be required on all air tour helicopters and Stage 5 for larger winged commercial aircraft.

ELE400 ATMP Elements: Day/Time

1. One commenter stated that in Section 3.4 of the draft ATMP, the allowable hours of operation during the day do not adequately minimize disruption to the natural habitat and visitor experience, and that there should be a narrower window of no more than two hours, 11am to 1pm, to constrain the actual time of operation. The commenter added that any such limitation should not be linked purely to sunrise and sunset, which vary greatly by park and season, but should be stated as more restrictive, as in "may operate from the later of four hours after sunrise or 11am to the earlier of four hours before sunset or 1pm."

ELE500 ATMP Elements: Other

1. One commenter suggested that staff at the Park where the air tour would take place provide the training referenced in Section 3.7(A) of the draft ATMP.
2. Regarding the required training, one commenter asked if NPS staff will come to the operators' place of business to conduct training; how will the training be accomplished for the operator; and will the annual meeting include all allocation holders in addition to the Flight Standards District Office. The commenter stated that an economic study should be completed to consider the amount of labor hours this creates for the NPS and the operators.
3. One commenter recommended that air tour operators be required to provide passengers with an educational brochure or rack card that informs the public they will be flying over a noise sensitive area and special restrictions (e.g., AGL requirements) are in effect to minimize the adverse impact of aircraft noise on the environment below, and that this is especially important when considering a park's wilderness boundaries.
4. Commenters suggested Section 3.8 of the draft ATMP include a definition or at least a reference to FAA guidance defining quiet technology aircraft. One commenter noted the draft ATMP

should state the ATMP incentivizes the adoption of quiet technology aircraft, adding as described in FAA Advisory Circular AC-93-2 (https://www.faa.gov/documentLibrary/media/Advisory_Circular/AC-93-2.pdf), by the commercial air tour operator conducting commercial air tours over the Park. Another commenter had questions about converting to quiet technology aircraft including upgrading the muffling devices on the aircraft currently being used, or whether it only applies to new aircraft employed by the operator; how much quieter would the aircraft have to be; and since the improvement of only a few decibels would be indistinguishable to wildlife and visitors, has the required improvement been quantified, and if so, is there a specific decibel reduction that operators would have to achieve before being allowed to conduct air tours only one hour after sunrise and until one hour before sunset.

5. One commenter recommended that Section 6 of the draft ATMP be clarified to say that, while the allotment of annual flights may be redistributed from existing operator(s) to accommodate new entrants, the cap on the total number of annual flights will remain the same as stated in Section 3.1 of the plan.
6. One commenter stated that the adaptive management section of the draft ATMP is vague and asked if there would be a pre-defined and systematic adaptive management program with indicators, desired future conditions, periodic review time frames, or other metrics that would trigger an NPS review to determine if changes are needed to the ATMP, as is commonly done with many adaptive management programs, and if so, what are those indicators or metrics. Other commenters had recommendations for adaptive management including: 1) that it not be authorized in the event it would increase the number of air tours, decrease minimum altitude or other mitigation requirements, or otherwise increase noise emission or other negative impacts on the natural habitat and visitor experience; 2) that any proposed modifications under adaptive management be fully noticed to the public for advance comment; 3) that adaptive management be adequately described in an appropriate level NEPA document; 4) that NPS have volunteers monitor aircraft flight patterns and noise, and that implementation of this draft ATMP should include an adaptive management process with operators, agency staff, scientists, and citizens; and 5) the NPS and the FAA should monitor new technology that may further reduce the noise from aircraft and its ability to meet Park needs, and as a part of adaptive management, NPS should require the most current noise reducing equipment and practices for permitting use by a specific type of aircraft.
7. One commenter requested the draft ATMP describe Park processes to document violations and include specifics on penalties.
8. One commenter stated that the monitoring and enforcement of ATMP limits may be expensive or problematic, and the public should not be expected to subsidize these costs for private profits, therefore an outright prohibition on overflights makes the most sense because it is easy to understand, monitor, and enforce.
9. Regarding Sections 6.0 and 7.0 of the draft ATMP, one commenter stated there is no provision setting forth requirements for any operator sale of its business or transfer of its temporary license to overfly the Park under this ATMP, and that one should be added that at a minimum requires quiet technology. In addition, the commenter stated that reasonable operator licensing, certification, insurance and bond requirements should be included as a condition of authorized operations under the ATMP to ensure maximum safety and compliance.
10. Regarding Section 5.1 of the draft ATMP, one commenter stated that all aircraft should be required to install Automatic Dependent Surveillance-Broadcast Out (ADS-B OUT) technology

and to operate from the beginning to the end of any flight under the ATMP in full transmit mode, because it is critical to adequate enforcement of and public confidence in the ATMP that all such operations be public and subject to public review and complaint in real time by specific identification of the aircraft, operator, time, altitude and location. The commenter stated that while operators have sometimes taken the position that such information is private, that this is not acceptable; there is no expectation of privacy by any operator in such operations.

11. Regarding Section 5.0 of the draft ATMP, first sentence, one commenter stated there should be a date by which the operator must modify the operation specifications to comply with the ATMP or cease any operations, and that deadline should be a matter of a few months.
12. Regarding Section 3.7B of the draft ATMP, one commenter stated that the meeting should be fully open to the public for participation.
13. Regarding Section 3.6 of the draft ATMP, one commenter stated that the required reporting should be fully accessible to the public, that there is no proprietary claim by any operator to information on operations.
14. One commenter requested that all mention of required tracking equipment be removed from the draft ATMP as well as for all the other affected park service units. The commenter stated that small air tour operators cannot afford to implement digital reporting systems, and that it is unfair to require the large investment in digital equipment, software, training, data management and reporting, and user subscriptions of operators who can be shut down at any time for any cause at parks managed by ATMPs. The commenter stated the requirement for special tracking hardware has no substantive justification in the Act or FAA regulations, including FAR 136.39C(2). The commenter stated that digital tracking of flights is unnecessary because flight paths over national parks can easily be observed and digital data can easily be changed or deleted. The commenter stated that the methodology of keeping digital track of all flights over multiple park units, and sorting them out by flight, day, and park, would be problematic for operators, and that the law requires the FAA to do a cost/benefit analysis on all new regulations.
15. One commenter stated that operators should have the option of attending all meetings and training sessions by phone or zoom to reduce cost, increase the chance of participation, and decrease the likelihood of a meeting being cancelled due to inclement weather. The commenter added that frequent long-distance travel by operators may be cost prohibitive.
16. One commenter stated that the requirement for in-flight communication on frequency 122.9 should be dropped because very few general aviation pilots monitor this frequency in flight and non-tour pilots will not know what an air tour pilot is talking about. The commenter stated that all pilots are responsible to see and avoid under existing FAA regulations.
17. One commenter stated that the amendment process proposed under Section 9.0 of the draft ATMP is not fair for operators because the agencies get to make minor modifications to the ATMP without a formal ATMP amendment process, including taking away or reducing an existing operator's allocations, including competitive bidding for existing allocations. The commenter stated that an existing operator should also be allowed to be issued additional allocations without imposing the requirement for a formal ATMP amendment process.
18. One commenter stated that the provisions of the ATMP should not be made part of operation specifications, which are legally an agreement between an operator and the FAA, yet the NPS will control an operator's operations as well as operation specifications through the ATMP process. The commenter cautioned that the precedent it sets for all commercial operators, not just air tour operators, is probably irreversible. The commenter stated that Section 10.0 of the draft

ATMP constitutes a merger between two independent agencies, but Congress never contemplated nor authorized such a union.

19. One commenter noted the quiet technology incentives provides little benefit given the low number of total flight allocations offered to operators. The commenter also asked why a particular operator is not listed in Table 1 of the draft ATMP even though the operator implemented quiet technology.
20. Commenters expressed support for requiring noise reduction technology that is approved and ensures aircraft meet the required noise standards for the Park.
21. One commenter stated that operators should record all air tours over park units, and the record for each trip should be provided to the FAA and the NPS in order to correlate ground data on noise and disturbance with flight paths and elevation, and that these records should be available to the public through the Freedom of Information Act (FOIA). The commenter stated that the plan should require that all flight record data be digital and be able to be imported into Geographical Information Systems (GIS) to be analyzed with other data.
22. One commenter stated that NPS should engage local visitors in monitoring air tours using cell phones to record sound level and reporting their experience to the NPS, so that by correlating specific ground measurement to air tour monitoring data, important information can be gained to understand if the soundscape of the Park is adequately protected. The commenter stated that the NPS, working with noise experts, the public, conservation organizations and Native American tribes, should design aircraft noise standards consistent with the goals that the draft ATMP requires, and that to achieve these noise standards using adaptive management, aircraft would be required to fly at elevations when aircraft noise meets the noise standards.
23. One commenter stated that it is logical and customary in legal documents to specify that the aggrieved parties to a unilaterally-imposed mandate be granted the right of judicial review of disputes, and therefore the right of access to the courts is a stipulation that must be put into all ATMPs, as these impositions do not represent voluntary agreements. The commenter noted that paragraph 40128(b)(4)(5) of the Act requires such inclusion.
24. One commenter noted that operators should not have to absorb costs for aircraft monitoring system purchase, installation and operation. The operator requested the agencies pay for this cost, referencing operators in Alaska and the Gulf of Mexico where this equipment was provided to them at no cost. The commenter referenced the Capstone project in Alaska.

FAV100 Benefits of Air Tours

1. Commenters stated that air tours offer the elderly or those with physical disabilities an opportunity to experience the Park in a way that they otherwise could not.
2. Commenters noted that air tours provide a positive benefit to the local economy.
3. Commenter stated that air tours offer visitors a low impact opportunity to see the Park that does not add to Park congestion. Commenters also noted that air tours provide the only timely way to see the back country of the Park.

PRO100 Process Comments: Impact Analysis

1. Commenters stated that there has been no NEPA, NHPA, or ESA analysis presented and that the agencies have issued a proposed action for public comment without disclosing potential impacts, citing NEPA regulations.

2. Many commenters noted the lack of studies, analysis, or modeling to justify ATMP provisions. One commenter noted analysis is needed to see if the periods of quiet time are adequate to protect visitor experience in the backcountry, wildlife, and tribal resources and cultural sites.
3. Commenters asked what studies were done to determine the significant adverse impacts commercial air tours have on natural and cultural resources in the Park that led to the determination that operators' IOA was too much of an impact on Park resources.
4. One commenter requested that the agencies assemble a bibliography of noise related data and documents for these National Park units, and requested that this bibliography be part of the final environmental analysis.
5. One commenter stated that the management decision needs to have a logical basis that links air tour routes and the number flights with measurable goals to protect Park values.
6. One commenter stated that the NPS should have analyzed the low impact nature of air tours and how air visitation reduces the overcrowding that most national parks have been experiencing.
7. One commenter stated that 40 CFR 1508.8 requires government programs to address indirect effects, and although the draft ATMP only extends to a half-mile around the Park, the indirect effects stretch all the way back to the airport. The commenter asked how the draft ATMP considers the damage to the homes and businesses affected by air tours.
8. One commenter asked if a visitor poll was conducted at the Park, similar to the poll done early in the ATMP process for Hawai'i Volcanoes National Park. The commenter asked if a poll was conducted, what were the results, or if not, why a poll was not conducted.
9. One commenter noted that absent from the meeting of September 27, 2021, was any specific reference to documented allegations of noise or evidence. Commenters stated that the NPS is basing all of its claims of negative aircraft impact on subjective and arbitrary standards, none of which have substantive proof that can be formally defended, and that there is no scientific basis upon which to establish a reasonable and defensible altitude standard, nor for reducing the number of flights from current IOA allocations or for changing route structures.
10. One commenter stated that the draft ATMP does not include any park-specific data or information to judge adverse impacts to resources, visitor experience, and tribal lands, yet it allows new entrants' to be granted operating authority.
11. One commenter stated that NPS should be conducting acoustic monitoring beyond the sunrise/sunset time frames to ensure no adverse effects or impairment of Park resources and values.
12. One commenter stated that the Ambrose and Florian's 2008 report found that in backcountry areas natural sound levels were generally very low, often less than 20 dB, but that this conclusion may reflect the limitation of their equipment rather than actual conditions which are likely to be lower than reported. The commenter stated that future monitoring needs to more accurately assess the sound level of the natural environment.
13. One commenter stated that the agencies need to establish noise standards that protect Park values, requesting that air tours be designed that call for altitudes, routes, frequency of flights and time that meet the noise standards, and that this should be adopted by the NPS in an environmental impact statement (EIS) as the preferred alternative.
14. Another commenter stated that NPS should consider the impacts of commercial air flights at all elevations as they cross the Park because there are alternatives that can reduce the noise that commercial flights generate in National Park units.

PRO200 Process comments: Public Review

1. One commenter stated that the agencies have issued a proposed action (the plan) for public comment without disclosing potential impacts or providing any environmental impact analysis regarding the proposed action. The commenter cited: 40 CFR 1501.2(b)(2).
2. One commenter stated that the online submission for comments does not allow formatted text (which has footnotes for example) and images, special characters, graphs, photographs, and other image information, and that related documents that the NPS should consider cannot be attached and submitted. The commenter stated that this limits public input into this process.

PRO300 Process Comments: Alternatives Considered

1. Commenters requested the following alternatives: 1) a no air tours alternative; 2) status quo; 3) limited routes in backcountry areas; 4) increased altitudes; 5) lower use levels; 6) avoidance of sensitive areas; 7) coordinated loop alternative crossing the Park near highway 12 and then flying around just outside the Park; 8) a quiet week alternative in which periods are scheduled and announced for a week or more of no air tours over the Park; 9) adaptive management alternative based on Park values that includes phased changes in air tours based on sound standards developed in a soundscape protection plan, with changes to routes, number of flights, and flying altitude in order to meet quiet standards; 10) adjusted flight routes alternative where the number of approved air tour routes would be reduced from 16 to 8 and portions of most of the remaining routes would be shifted up to 1-2 miles to the east so that only 1 leg of the route passes directly overhead of the Pink Cliffs area of the Park; 11) phased reduction of air tours at medium-to-high volume air tour parks alternative where flights would be reduced over a 3-5 year period.
2. Commenters stated that the agencies must consider a range of reasonable alternatives to the proposed action, citing the NPS NEPA Handbook 2015, Sections 4.2 and 4.3. One commenter referenced Bob Marshall Alliance v. Hodel, 852 F.2d 1223, 1229 (9th Cir. 1988) (agency's duty to consider alternatives is both independent of, and broader than, its duty to complete an environmental analysis); Greater Yellowstone Coalition v. Flowers, 359 F.3d 1257, 1277 (10th Cir. 2004); 42 U.S.C.A. Section 4332(E).

PRO400 Process Comments: Other

1. Commenters stated that NPS should prepare an appropriate use analysis in accordance with NPS Management Policies and the Organic Act that serves, in part, as the basis for determining whether air tours of any amount should be allowed or prohibited.
2. One commenter recommended that the ATMP planning and compliance process be managed directly by a NEPA project manager at the NPS Environmental Quality Division (EQD).
3. One commenter pointed out that the Act states when ATMPs are created, operators may not add aircraft to their fleets beyond what was originally allowed under original IOA provisions.
4. Commenter stated that the agencies should coordinate with the air tour industry and NPOAG and that the ATMP planning process should be a joint effort between all stakeholders in the Park.
5. Commenters suggested that a voluntary agreement option should be explored that could protect park resources without affecting operators.
6. One commenter was concerned that the NPS has failed to include State and local governments in the development of the ATMPs, and noted that the State of Utah was not involved in public meetings prior to and during the development of the draft ATMP, which is a formal requirement of the Act. The commenter added that the operators that will be negatively impacted by these

changes were also not included in the planning process despite repeated requests, and therefore this ATMP planning effort should be paused so that specific details of the plan can be meaningfully coordinated with the interested parties per federal law.

PRO500 Process Comments: NEPA

1. One commenter stated that the NPS should be the lead agency in making this decision, and FAA should act in cooperation to NPS.
2. One commenter stated that the ATMP does not comply with NEPA, that no decision document is available for public review concurrent with the ATMP, and pointed out the following from the court decision that prompted this ATMP planning process: Management plans must go through notice and comment and comply with NEPA (https://www.peer.org/wp-content/uploads/2020/05/5_1_20-Court-Decision-Overflights.pdf).
3. Commenters noted shortcomings in the NEPA process including: A) the agencies have issued a proposed action for public comment without disclosing potential impacts or providing any environmental impact analysis regarding that proposed action; B) the agencies have failed to conduct public scoping or otherwise consider reasonable alternatives to the proposed action; C) the NPS has not made the case that its proposed action will effectively mitigate the adverse impacts of ongoing air tours at the Park that have been operating virtually unregulated over the past 20 years; D) the agencies stated intention is to finalize the action (i.e., the ATMP) before actually issuing a NEPA analysis which violates NEPA procedural requirements; and E) the agencies have improperly identified NPS categorical exclusion 3.3 A1 as the preliminary NEPA pathway for this draft ATMP. One commenter referenced Minn. Pub. Interest Research Grp. v. Butz, 498 F.2d 1314, 1321 (8th Cir. 1974); https://www.federalregister.gov/documents/2021/09/03/2021-19059/public-meetingnotice-of-availability-for-proposed-air-tour-management-plans-at-bandelier-national.
4. Commenters questioned why the NPS would consider a pre-existing air tour to be an approved action eligible for NPS CE 3.3 A1 since NPS has not conducted a NEPA review and never formally approved national park air tours in the first place (i.e., has never signed or had the authority to sign, or otherwise approved authorizations, permits, plans or other documents allowing national park air tours to occur).
5. Commenters stated that this draft ATMP requires an EIS with a full range of feasible alternatives. One commenter asked why the NPS is not conducting a complete environmental review when a federal lawsuit already determined that EISs are necessary for ATMPs. Another commenter stated that this decision is a major federal action that significantly impacts the environment and involves unresolved conflicts concerning alternative uses, and cited the following: https://www.law.cornell.edu/cfr/text/40/1501.2; https://www.nps.gov/subjects/nepa/upload/NPS_NEPAHandbook_Final_508.pdf;
6. One commenter noted the Act states that granting IOA makes compliance with NEPA impossible, citing City of New York v. Mineta, 262 F.3d 169, 178 (2nd Cir. 2001).
7. One commenter referenced an Air Force EIS that noted significant impacts would potentially occur in Wilderness Areas and areas protected for wilderness qualities due to aircraft overflights at subsonic speeds, and that National Park units have even more requirements to protect quiet and natural values than are found on other federal lands given the habitats of endangered species, reduction of natural areas, and their ability to preserve nature for future generations. The commenter referenced: Scientists' Inst. for Pub. Info., Inc. v. Atomic Energy Comm'n, 481 F.2d 1079 (D.C. Cir. 1973) (citing CEQ, Statements on Proposed Federal Actions Affecting the

Environment: Guidelines, 36 Fed. Reg. 7724, 7726 (Guideline 5(a)(i)) (April 23, 1971), which justifies the preparation of an EIS or EA; 54 USCA 100101.

TRIBE Tribal Concerns

1. Commenters noted that the ATMP needs to incorporate Native American information on cultural landscapes and should make route and flight changes to protect these values. Commenter noted that the agencies should work with the associated tribal communities to protect significant cultural resources. One commenter stated that there is no evidence that Section 106 consultation requirements have been met, citing FAA Order 1050.1F, Section 2-4.4, which requires FAA, when preparing a NEPA document for a proposed action that may impact Native American tribes, to conduct government-to-government consultation with the Tribe(s) in accordance with the requirements of FAA Order 1210.20, American Indian and Alaska Native Tribal Consultation Policy and Procedures (https://www.faa.gov/about/office_org/headquarters_offices/arc/programs/grand_canyon_overflights/documentation/FAAOrder1210.20.pdf).

NS100 Non-Substantive Comment: Support Air Tours

1. One commenter noted that air tours provide a new and exciting way to see and experience the Park.
2. Several commenters noted they opposed limitations on the total number of flights.

NS150 Non-Substantive Comment: Other

1. One commenter asked why air tour operators are allowed to enter the Park boundaries without paying an entrance fee.
2. One commenter stated that all existing exemptions to the ATMP requirement should be withdrawn by the NPS, and that no further voluntary agreements should be adopted.
3. One commenter asked that the agencies incorporate the ideas found in their national policy for air tours: https://www.sierraclub.org/policy/air-tours.
4. One commenter requested the FAA designate park units as restricted airspace on aeronautical charts. The commenter also requested that the Class E airspace be reduced to the minimum amount over the Park. The commenter provided the following references: https://www.federalregister.gov/documents/2020/04/14/2020-07703/amendment-of-class-e-airspace-bryce-canyon-ut; https://www.faa.gov/air_traffic/publications/atpubs/aip_html/part2_enr_section_5.1.html/; United States Court of Appeals for the District of Columbia Circuit. May 1, 2020. No. 19-1044. Public Employees For Environmental Responsibility And Hawaii Coalition Malama Pono, Petitioners. On Petition for Writ of Mandamus.

NS200 Non-Substantive Comment: Oppose Air Tours Continuing

1. Commenters requested that air tours be strictly limited or prohibited over national parks.

NS300 Non-Substantive Comment: Oppose Air Tours Introduction

1. Many commenters opposed the introduction of air tours where the stated concerns included impacts to cultural resources, wilderness, and habitat.