

Public Scoping Packet

Petrified Forest National Park Air Tour Management Plan



Lead Agency: Federal Aviation Administration Cooperating Agency: National Park Service

July 01, 2010

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Notice of Intent (NOI) DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

Notice of Intent to Prepare an Environmental Assessment and Request for Public Scoping Comments for the Air Tour Management Plan Program at Petrified Forest National Park

AGENCY: Federal Aviation Administration (FAA)

ACTION: Notice of Intent to Prepare an Environmental Assessment and to Request Public Scoping Comments

SUMMARY: The FAA, with National Park Service (NPS) as a cooperating agency, has initiated development of an Air Tour Management Plan (ATMP) for Petrified Forest National Park (Petrified Forest), pursuant to the National Parks Air Tour Management Act of 2000 (Public Law 106-181) and its implementing regulations (14 Code of Federal Regulation [CFR] Part 136, Subpart B, *National Parks Air Tour Management*). The objective of the ATMP is to develop acceptable and effective measures to mitigate or prevent the significant adverse impacts, if any, of commercial air tour operations on the natural resources, cultural resources, and visitor experiences of a national park unit and any tribal lands within or abutting the park. It should be noted that the ATMP has no authorization over other non-air-tour operations such as military and general aviation operations. In compliance with the National Environmental Policy Act of 1969 (NEPA) and FAA Order 1050.1E, an Environmental Assessment (EA) is being prepared.

In April 2010, the NPS and FAA held a two-day kickoff meeting at Petrified Forest; minutes may be found at (under "Document List"):

http://parkplanning.nps.gov/projectHome.cfm?parkId=88&projectId=30802

The purpose of the kickoff meeting was for the FAA and NPS to have the opportunity to share information regarding environmental and other issues to consider in the development of an ATMP. Materials presented at the meeting included information on: park resources; the acoustical environment at Petrified Forest; current and historical air tour operations; and representative air tour flight paths. In addition, Petrified Forest staff provided information regarding sensitive park resources, tribal concerns, and tourism patterns.

The FAA and NPS are now inviting the public, agencies, tribes, and other interested parties to provide comments, suggestions, and input on the scope of issues to be addressed in the environmental process.

DATES: By this notice, the FAA is requesting comments on the scope of the EA for the ATMP at Petrified Forest. Comments must be submitted by August 2, 2010.

FOR MORE INFORMATION CONTACT: Keith Lusk—Mailing address: P.O. Box 92007, Los Angeles, California 90009-2007. Telephone: (310) 725-3808. Street address: 15000 Aviation Boulevard, Lawndale, California 90261.

Written comments on the scope of the EA should be submitted electronically via the electronic public comment form on the NPS Planning, Environment and Public Comment System at: http://parkplanning.nps.gov/projectHome.cfm?parkId=88&projectId=30802 or sent to the mailing address above. **SUPPLEMENTARY INFORMATION:** A public scoping packet that describes the project in greater detail is available at:

- http://parkplanning.nps.gov/projectHome.cfm?parkId=88&projectId=30802
- Alpine Public Library
- Apache County Library District Office
- Casa Malpais Visitor Center and Museum
- Flagstaff City-Coconino Public Library
- Gallup Public Library
- Holbrook Public Library
- Larson Public Memorial Library
- Navajo Community College Library-Tsaile Campus
- New Mexico State University Library
- Northern Arizona University Library-Cline Library
- Northland Pioneer College Library
- Painted Cliffs Welcome Center
- Painted Desert Visitor Center
- Phoenix Public Library
- Roxanne Whipple Memorial Library-Winslow
- Tucson-Pima County Public Library

Notice Regarding FOIA: Individuals may request that their name and/or address be withheld from public disclosure. If you wish to do this, you must state this prominently at the beginning of your comment. Commentators using the website can make such a request by checking the box "keep my contact information private." Such requests will be honored to the extent allowable by law, but you should be aware that pursuant to the Freedom of Information Act, your name and address may be disclosed. We will make all submissions from organizations, businesses, and from individuals identifying themselves as representatives or officials of organizations or businesses available for public inspection in their entirety.

Issued in Hawthorne, CA on June 23, 2010.

Keith Lusk,

Program Manager, Special Programs Staff, Western-Pacific Region

Part 1: Introduction to the Project

A. National Parks Air Tour Management Act of 2000

The FAA, in cooperation with the NPS has initiated development of an Air Tour Management Plan (ATMP) for Petrified Forest National Park (Petrified Forest), pursuant to the *National Parks Air Tour Management Act of 2000 (NPATMA)*. The *NPATMA* and its implementing regulations (Title 14, Code of Federal Regulations [CFR] Part 136) require the FAA and NPS to develop an ATMP for each unit of the national park system or tribal land that does not have a plan in effect at the time an operator applies for FAA authority to conduct commercial air tours. The objective of an ATMP is to develop acceptable and effective measures to mitigate or prevent significant adverse impacts, if any, of commercial air tour operations upon natural and cultural resources, visitor experiences, and tribal lands.

The *NPATMA* applies to any person who conducts a commercial air tour operation over a unit of the national park system, over tribal lands that are within or abutting a unit of the national park system, or over any area within ½ mile outside a unit 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, during which the aircraft flies below a minimum altitude of 5,000 feet above ground level (AGL).

Several steps are required for the development and implementation of an ATMP. First, as required by NEPA, the FAA and NPS will prepare an environmental assessment (EA) for public review including various alternatives for the ATMP. If no significant environmental impacts are identified, the FAA in cooperation with the NPS will prepare a Finding of No Significant Impact (FONSI) and Record of Decision (ROD). The ROD will identify a preferred alternative for the ATMP. Based on the preferred alternative, the agencies will next develop the ATMP, which will identify specific measures and conditions applying to air tour operations for Petrified Forest. The ATMP may include the conditions for conducting commercial air tour operations and other administrative requirements, such as transferability or termination of Operating Authority, handling requests for increase in Operating Authority, and reporting requirements. The last step in the process is FAA rulemaking, to establish enforceable rules for implementing the ATMP.

At Petrified Forest, two air tour operators have received interim operating authority (IOA) from the FAA (Table 1). In order to determine IOA, each existing operator was required by 14 CFR Part 136 to report the greater of (a) the number of commercial air tour operations conducted during the 12-month period preceding *NPATMA* or (b) the average number of commercial air tour operators conducted by the operator during the three-year period preceding *NPATMA*. Air tour operators can fly up to their IOA level annually. IOA terminates 180 days after an ATMP has been established for the park. The number of existing operations reported by each operator represents the IOA.

Existing Operators with IOA	Flights Per Year under IOA
Southwest Safaris	42
Air Grand Canyon	4

Table 1. Air Tour Operators with Interim Operating Authority to Conduct Air Tours at Petrified Forest National Park.

B. ATMP Development and the NEPA Process

The *NPATMA* and 14 CFR Part 136 specifically require that the environmental impacts of an ATMP be assessed under NEPA and its implementing regulations (40 CFR Parts 1500-1508). The assessment of commercial air tour operations on units of the national park system is different in many respects from other aviation assessments. Air tour aircraft operations differ from the

average national air transportation system operations, occurring in most cases seasonally, and only during daylight hours. Air tour aircraft are by nature flying low for sightseeing purposes, and in national parks are operating relatively close to the ground in low ambient sound environments. These factors require specialized noise assessment. The assessment of visual effects is more rigorous when aircraft are in closer visual range of ground visitors in national parks and there is more potential for intrusion on scenic views. Depending on the environment to be viewed, air tour aircraft may also fly at higher altitudes to get a more panoramic perspective. For all these reasons, this assessment of commercial air tour operations over park units is highly specialized and is not applicable to other types of environmental impact analysis.

The FAA and NPS have determined that an EA will be initiated for the Petrified Forest ATMP. For the purposes of complying with NEPA regulations, the FAA is the lead agency, and the NPS is a cooperating agency. Under *NPATMA* both the FAA Administrator and NPS Director shall each sign the environmental decision document.

In April 2010, the NPS and FAA held a two-day kickoff meeting at Petrified Forest. Meeting minutes may be found at (under "Document List"):

http://parkplanning.nps.gov/projectHome.cfm?parkId=88&projectId=30802

The purpose of the kickoff meeting was for the FAA and NPS to have the opportunity to share information regarding environmental and other issues to consider in the development of the ATMP. Materials presented at the meeting included information on: park resources; the acoustical environment at Petrified Forest; current air tour operations; and, maps of current air tour flight paths. In addition, Petrified Forest staff provided information regarding sensitive park resources, tribal concerns, and tourism patterns.

The FAA and NPS are now inviting the public, agencies, tribes, and other interested parties to provide comments, suggestions, and input regarding the Petrified Forest ATMP. Generally speaking, the agencies would like to know about any concerns or ideas the public has regarding commercial air tour operations at Petrified Forest and their management. A question to consider when providing input include: Are there any significant issues the agencies need to consider during the planning process, such as potential impacts on natural, cultural, and historic resources?

Instructions for submitting comments as well as the date and location of the public meeting may be found in the Notice of Intent, provided at the beginning of this scoping packet.

After considering input from the public scoping process, the FAA in cooperation with the NPS will prepare an EA for public review and comment. If, after finalizing the EA, no significant impacts are found, a FONSI and a ROD will be prepared.

Additional information on the ATMP Program in general is available at:

http://www.faa.gov/about/office_org/headquarters_offices/arc/programs/air_tour_manage ment_plan/

Interested parties may request information regarding the development of the ATMP for Petrified Forest, as well as other parks' ATMPs, on this website.

Part 2: Setting

A. Introduction

This section describes the setting for the Petrified Forest ATMP project. Descriptions of the park's natural and cultural resources, visitor experiences, and current commercial air tour activity are provided to assist the public and other interested parties in preparing meaningful comments. The most useful comments are those that address the scope of analysis, present significant issues, and suggest reasonable alternatives.

The *NPATMA* limits applicability of the ATMP to operations conducted within Petrified Forest and the area within ½ mile of its boundary. Although the scope of authority is limited, the FAA recognizes its responsibility under applicable environmental laws to consider impacts on potentially affected resources located in the vicinity of Petrified Forest but in excess of ½ mile outside the boundary of the park.

B. Petrified Forest National Park

Petrified Forest National Park is located in a remote, arid, and sparsely populated area in northeastern Arizona; about 100 miles east of Flagstaff, Arizona (Figure 1, page 6). The original Park is comprised of 93,533 acres separated into two units: the Painted Desert Unit in the northern segment and the Rainbow Forest Unit in the southeast segment of the Park. About 54 percent of the Park is designated as wilderness; 43,020 acres in the Painted Desert Unit and 7,240 acres in the Rainbow Forest Unit.

On December 3, 2004, President George W. Bush signed a bill that authorized expansion of the Park boundary that would include roughly 128,000 new acres of federal, state, and private lands. The expansion would allow for Park acreage to increase to approximately 221,621 acres more than doubling the size of the Park (Figure 2, page 9).

The Park averages over 682,000 visitors per year. Remains of petrified wood and the Painted Desert are the primary attractions. The Late Triassic fossil floras and faunas preserved at the Park are globally significant as a record of terrestrial ecosystems approximately 214 to 225 million years old. Additionally, thousands of petroglyphs and hundreds of pictographs that illustrate a 10,000 year continuum of human use are found here. The closest communities are greater than 25 miles from the Park's visitor facilities.

The purpose of the Park is to:

- Preserve and protect Petrified Forest, its outstanding paleontologic sites and specimens, its associated ecosystems, cultural and historic resources, and scenic and wilderness values for present and future generations.
- Provide opportunities to experience, understand, and enjoy the Petrified Forest and surrounding area in a manner that is compatible with the preservation of park resources and wilderness character.
- Facilitate orderly, regulated, and continuing research.
- Promote understanding of resources and park values by providing educational opportunities for students, scientific groups, and the public.

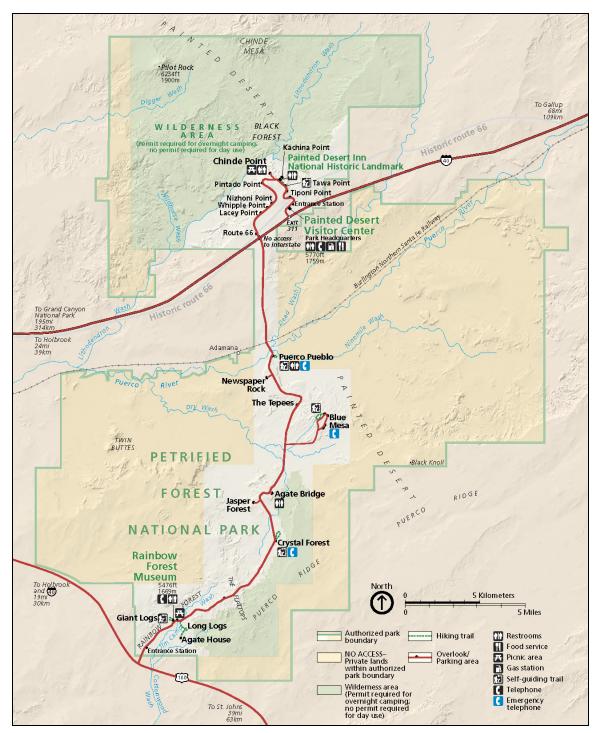


Figure 1. General Features of Petrified Forest National Park.

Geology and Hydrology

The Petrified Forest provides the best opportunities to learn about the Late Triassic period through animal and plant fossils (214 to 225 million years old). The Chinle Formation preserves a variety of strata that represent ancient sedimentary environments (rivers, floodplains, lakes, swamps, soils) and their relationship to each other. The Park illustrates erosion processes that shape the landscape and geomorphical features including the mesas, buttes, badlands, lava flows, washes, and tinajas.

Petrified wood from seven species of trees are found in their natural setting in the park. Though the primary resource of the Park is petrified wood, large quantities of other fossils, including leaves and seeds, vertebrate, invertebrate, and trace fossils, also occur there.

There are ten named surface water drainages located in the Park. The largest are the Puerco River and Lithodendron, Dry, Cottonwood, and Jim Camp washes. These streams flow with snowmelt (in the case of the Puerco River) and rain in the spring, and sometimes flash flood during the summer monsoon rainy season. Surface water is also intermittently available in small pools and seeps. The segment of the Puerco River in the Park is eligible for designation as a Wild and Scenic River.

Vegetation and Wildlife

There are three ecological regions within the Park:

- Great Basin
- Sonoran
- Great Plains

Vegetation in the Park is varied and includes juniper woodlands, grasslands, shrublands, and desert plant communities. The Park is the largest example of a recovering (due to recent lack of grazing) native grassland in the southern Colorado Plateau. The Puerco River riparian corridor has the most vegetation biodiversity in the Park and provides important refuge and habitat for the Park wildlife.

A wide range of birds, amphibians, and reptiles inhabit the Park. No federal threatened and endangered species are known to exist within the Park, but there are two state species of concern found: the gladiator milkvetch and the paper-spined cactus.

Cultural Resources: Archaeological and Historic Sites

Archaeological

For the past 100 to 150 years, the Park has been the site of numerous paleontological and archaeological studies. Thousands of petroglyphs, hundreds of pictographs, pit houses, campsites, multi-room pueblos, projectile points, and a vast array of diverse ceramics illustrate a 10,000 year continuum of human use and occupation that spans Paleo-Indian culture through the modern American Indian culture.

Ethnographic

Ethnographic resources are defined as landscapes, sites, structures, objects or natural features that have significance attached to them by a sociocultural group associated with the Park. The Park area represents a crossroads of ancient Native American trade routes. Over 600 recorded sites representing Paleo-Indian, Archaic, Basketmaker, Puebloan, and Navajo cultures exist within the Park. At least four contemporary Native American tribes (Hopi, Zuni, Navajo, and Apache) are associated with traditional uses of the Park.

Historic

The Painted Desert Inn National Historic Landmark is a former trading post and inn located in the Park and is also considered historically significant by the Arizona State Historic Preservation Office. The Agate Bridge Comfort Station is listed as a "Classified" structure for preservation and maintenance. Two landscapes – the Rainbow Forest Historic Landscape and the Crystal Forest Cultural Landscape – have been determined to be eligible for inclusion in the National Register of Historic Places (NRHP).

Ground-based Visitor Experience

The Park hosts approximately 682,000 visitors per year. The average visit lasts anywhere from two to five hours. Viewing petrified wood and experiencing the natural beauty and solitude of the Painted Desert are the Park's primary attractions. The peak visitor month is July, but visitor numbers are high throughout the other summer months.

Visitor Services/Facilities

A variety of visitor services are provided within the Park. The nonprofit Petrified Forest Museum Association operates bookstores at three locations – the Painted Desert Inn, the Rainbow Forest Museum and the Painted Desert Visitor Center. AMFAC Resorts, L.L.C., operates a gift shop, café, and gas station/mini-mart at the Painted Desert Visitor Center and Park Headquarters, and a gift shop and snack bar at Rainbow Forest. No permit is required for day use of the wilderness areas, but a permit is required for overnight camping. Public access on private lands within the authorized Park boundary is prohibited.

Visitor Activities

Visitor activities include cross-country hiking, backpack camping, picnicking, horseback riding, enjoying nature and scenic overlooks, wildlife viewing, interpretive activities, cultural demonstrations, and photography. Visitor access to the Park is by private vehicle, foot or horseback (no bicycling is allowed).

C. Commercial Air Tour Activity and Air Tour Visitor Experience

Visitors may gain an aerial perspective on the Park's natural features by taking an air tour flying out of two locations – Santa Fe Municipal Airport (KSAF) and Grand Canyon National Park Airport (KGCN).

In accordance with *NPATMA*, the annual air tour operations over and within a ½-mile outside the boundary of the Park were capped at the number of existing operations reported in the operator's application. The FAA has granted IOA at the Park to two commercial air tour operators. These two operators have been granted IOA for a total of 46 annual flights. An example of the generalized flight tracks for Southwest Safaris existing flights are shown on Figure 2 (page 9).

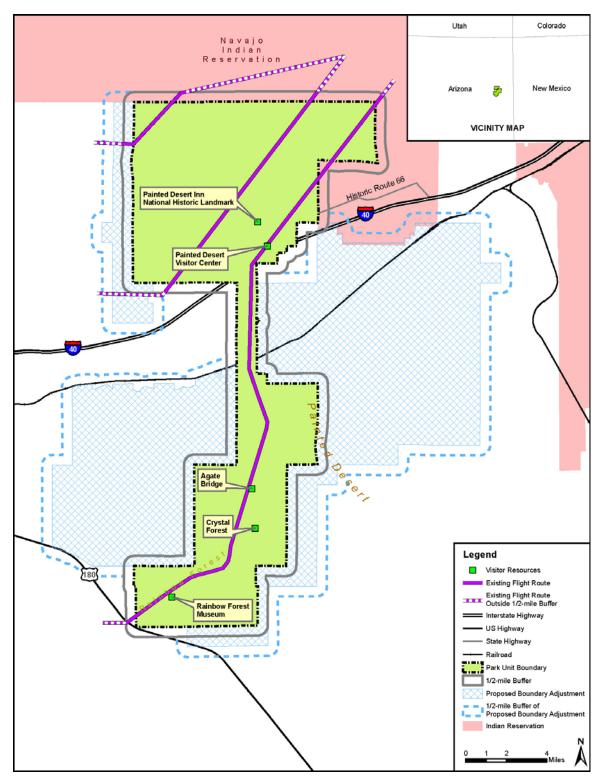


Figure 2. Generalized Flight Tracks for IOA-Allowed Commercial Air Tours in the Park.

Part 3: Federal Action and Alternatives

A. Federal Action

The proposed federal action is the establishment of an ATMP at Petrified Forest in accordance with 14 CFR Part 136. The alternative selection will be based on adequate justification and will include any measures that are necessary to mitigate or prevent significant adverse impacts of commercial air tour operations, if any, on Petrified Forest's natural and cultural resources and visitor experiences.

The ATMP will only apply to the airspace below 5,000 feet (ft) AGL over the area encompassed by the Park and to the ½ mile buffer zone surrounding the park boundary. The ATMP applies to all commercial air tour operations in this airspace, unless, for the purposes of safe operation of an aircraft as determined under the rules and regulations of the FAA, the pilot-in-command is required to take action to ensure the safe operation of the aircraft.

The purpose of this project is in compliance with *NPATMA*, which directs the FAA and NPS to establish an ATMP for any national park or tribal lands for which such a plan is not in effect whenever a person applies for authority to conduct a commercial air tour operation over the park. The need to develop an ATMP at Petrified Forest was triggered by statutory language in *NPATMA* that required the development of an ATMP for parks where commercial air tour operations.

The environmental decision to be made is the selection of an ATMP alternative for Petrified Forest. Once completed, the ATMP will be incorporated, either directly or by reference, into Title 14, CFR, Part 136, *National Park Air Tour Management*. Appropriate actions will be taken to implement the selected ATMP alternative, in compliance with the existing legislative, regulatory, and policy mandates of both the FAA and NPS.

NPATMA specifies that the ATMP be developed by means of a public process. This scoping process is one of the elements of that public process. A specific proposed action alternative will be identified in the Draft EA, following scoping and following the completion of a comprehensive environmental impact analysis.

B. Alternatives Development

The alternatives are the "heart" of the NEPA process and must meet the *NPATMA* objective 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 and visitor experiences at Petrified Forest.

The FAA and NPS have identified general reasonableness criteria that each ATMP alternative should: (1) be safe, (2) satisfy the Purpose and Need, (3) be technically and economically feasible, and (4) avoid repeating actions in other alternatives. As required by NEPA and Council on Environmental Quality (CEQ) regulations, the "No Action Alternative" must also be evaluated. FAA and the NPS have agreed that "no action" for purposes of developing an ATMP is defined as "no change" from current management direction or level of management intensity, as recommended in CEQ Guidance. Therefore, the No Action Alternative for Petrified Forest will be an ATMP that codifies current and existing flight track conditions at the IOA level of annual operations. Figure 2 (page 9) shows existing typical flight tracks and operating altitudes for Southwest Safaris over and within ½ mile of Petrified Forest's boundary. Commercial air tour operations over Petrified Forest would be required to comply only with existing applicable FAA Regulations.

In addition to these criteria, the *NPATMA* and implementing regulations in 14 CFR Part 136 state that the ATMP for a park:

• May prohibit commercial air tour operations within ½ mile outside the boundary of a national park.

- May establish conditions for the conduct of commercial air tour operations, including, but not limited to, commercial air tour routes, maximum number of flights per unit of time, maximum and minimum altitudes, time of day restrictions, restrictions for particular events, intrusions on privacy on tribal lands, and mitigation of noise, visual, or other impacts.
- Shall apply to all commercial air tour operations within ½ mile outside the boundary of a national park.
- Shall include incentives (such as preferred commercial air tour routes and altitudes, relief from caps and curfews) for the adoption of quiet aircraft technology by commercial air tour operators conducting commercial air tour operations at a park.
- Shall provide for the initial allocation of opportunities to conduct commercial air tour operations if the plan includes a limitation on the number of commercial air tour operations for any time period.
- Shall justify and document the need for measures taken pursuant to the items above.

At the conclusion of the scoping process, the FAA and NPS will develop alternatives to be carried forward for evaluation in the Draft EA. The public will have an opportunity to view the alternatives and their analysis when the Draft EA is distributed for public review and comment.

Part 4: References

Federal Aviation Administration (FAA), *Air Tour Management Program* (http://www.faa.gov/about/office_org/headquarters_offices/arc/programs/air_tour_manag ement_plan)

National Park Service (NPS), Petrified Forest (http://www.nps.gov/pefo)

NPS Public Use Statistics Office (http://www.nature.nps.gov/stats/)

- NPS (2004), Petrified Forest Final General Management Plan Revision/Environmental Impact Statement, (http://www.nps.gov/pefo/parkmgmt/upload/PEFOFINALGMP060404PDF.pdf)
- NPS (2010), Draft General Management Plan Amendment/Environmental Assessment, (http://parkplanning.nps.gov/document.cfm?parkID=88&projectId=16863&documentID=3 2270)