

**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 Death Valley 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 Death Valley 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

As initially established by presidential proclamation in 1933, Death Valley National Monument set aside over 1.6 million acres of land for the American public. The 1994 California Desert Protection Act, Pub. L. 103-433, established Death Valley as a National Park and enlarged the Park to an area just shy of 3.4 million acres. At the same time, Congress designated nearly 92% of the Park as Wilderness. Under the John D. Dingell, Jr. Conservation, Management, and Recreation Act of 2019, approximately 35,000 acres of land were transferred from the Bureau of Land Management to the Death Valley National Park expanding its boundary to its present alignment. In this Act, Congress designated an additional 87,999 acres of the Park as Wilderness. Presently approximately 93% of the Park is Congressionally designated Wilderness.

The Environmental Assessment and Plan for Death Valley Backcountry and Wilderness (Backcountry and Wilderness Plan) identifies specific wilderness values unique to Death Valley and what activities or actions degrade those values. The Backcountry and Wilderness Plan identifies the NPS's desired future conditions with respect to wilderness, as stated in the Park's General Management Plan:

Visitors to this landscape experience a primeval environment largely untrammelled by humans, where the land retains its primeval character and influence, without permanent improvements or human habitation, but may contain features of scientific, educational, scenic, or historic value. ... Opportunities for independence, closeness to nature, tranquility, and the application of outdoor skills are high. Opportunities for social interaction with other visitors are low, as is the probability of encountering NPS employees. Likewise, evidence of other visitor impacts is minimal. The landscape offers a high degree of challenge and

adventure for visitors. The visual quality of the landscape contributes significantly to the visitor experience and needs to be protected.

Backcountry and Wilderness Plan at p.15. The NPS regularly evaluates the Backcountry and Wilderness Plan. It is used to guide Park management decisions on all proposals and applications, even as Wilderness areas have been, or may in the future be, added to the Park.

The ATMP, Appendix A to this ROD, provides further background 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 national park in whole or in part, or “may establish” conditions for the conduct of commercial air tour operations over a national 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 parks. *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).

Past Efforts to Complete an ATMP for the Park

The agencies' previous efforts to complete an ATMP for the Park focused on using the Aviation Rulemaking Committee (ARC) process to provide early advice, information, and recommendations from interested stakeholders to the agencies, regarding environmental and other issues to consider in the development of an ATMP. The ARC (which included air tour operators, federal, local and regional agencies, environmental organizations, local businesses, and representatives of the Timbisha Shoshone tribe) held a two-day kickoff meeting in June 2009. In 2010, the FAA published a Supplemental Notice of Intent To Prepare an Environmental Assessment and Request for Public Scoping Comments for the Air Tour Management Plan Program at Death Valley National Park, 75 Fed. Reg. 5846 (Feb. 4, 2010), though the agencies subsequently considered each applying a categorical exclusion in order to comply with the National Environmental Policy Act (NEPA).

Work on this planning process was ultimately paused due to the passage of the 2012 amendments to NPATMA which, as discussed above, included new operator reporting requirements and provided an exemption from the requirement to prepare an ATMP or voluntary agreement for parks with 50 or fewer commercial air tours per year. The agencies implemented the reporting requirement in 2013 and, based on the first two years of reporting data, determined that the Park qualified for the exemption. The NPS withdrew the Park's exemption in 2015, finding that an ATMP was necessary to protect Park resources and values from the impacts of air tours. *See* September 15, 2015 letter from the NPS Director to the FAA Administrator. Adverse impacts of air tours on natural and cultural resources, including significant areas of designated wilderness within the Park, were identified as issues during internal and public scoping conducted by the agencies in support of the ATMP and were cited by the NPS as reasons for withdrawing the exemption. In its withdrawal letter, the NPS also noted that one of the Park's "greatest assets is the overwhelming silence due to the very low background sound levels which is documented in the acoustic data collected." The NPS also noted concerns raised by the Timbisha Shoshone Tribe regarding overflights over the Timbisha Village at Furnace Creek and the potential of overflights to cause disturbance to wildlife and humans.

The Court Approved 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 (Plan). In general, the 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 Death Valley National Park was one of the 23 parks identified as requiring an ATMP or voluntary agreement under NPATMA, it was included in the Plan which was subsequently approved by the Court.

The Planning Process and Public Engagement

As no ATMP had previously been implemented for any park at the time the agencies submitted their 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 National Park System units for decades, the agencies had institutional experience and data to draw upon in developing an ATMP template and in determining how to regulate commercial air tours over the Park. Given the amount of time that had elapsed since the initiation of the prior ATMP process for the Park, the FAA and the NPS terminated that ATMP process, via a September 3, 2020 Federal Register notice, to start the development of ATMPs and associated environmental compliance documents consistent with the court-approved Plan. Termination of Previously Initiated Processes for the Development of Air Tour Management Plans and Environmental Assessments/Environmental Impact Statements for Various National Park Units and Notice of Intent to Complete Air Tour Management Plans at 23 National Park Units, 85 Fed. Reg. 55,060 (Sept. 3, 2020).

The agencies also worked to identify the existing condition of commercial air tours over the Park or outside the Park but within ½ mile of its boundary, and over Timbisha Shoshone tribal lands that are within the Park, i.e., the number of commercial air tours conducted per year and the general operating parameters of those tours. Four commercial air tour operators hold IOA to conduct a combined total of 37 commercial air tours each year over the Park and Timbisha Shoshone tribal lands within the Park. However, two of those operators have never reported flying commercial air tours over the Park since reporting began in 2013. The other two

operators, Courtney Aviation, Inc. (Courtney Aviation), and Maverick Helicopters, Inc. (Maverick Helicopters), each reported flying one commercial air tour in 2019. No other air tours have been reported over the Park by any operator since 2013. 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.

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. In general, 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. The chart below depicts available reporting information regarding the number of commercial air tours conducted by active operators on an annual basis.

	2013	2014	2015	2016	2017	2018	2019	2020 ¹
Courtney Aviation	0	0	0	0	0	0	1	0
Maverick Helicopters	0	0	0	0	0	0	1	0

In order to identify the general operating parameters of the air tours conducted, the FAA reached out to Courtney Aviation and Maverick Helicopters to identify their air tour routes and other operating conditions. Based on reporting data from 2017 to 2019, these two operators conducted one air tour each during those three years. Neither of the other two operators with IOA for the Park have reported conducting any air tours since NPATMA's reporting requirement was implemented. Using the three-year average from 2017-2019, combined average of 0.6 total commercial air tours were conducted per year, or an individual average of 0.3 air tours were conducted each year. Rounded up, existing conditions are a maximum of one air tour per operator (or two air tours total) over the Park each year. Courtney Aviation reported that it conducts commercial air tours using GA-690-A and GA-690-D fixed-wing aircraft and identified five different routes over the Park flown at a minimum of 1,700 feet (ft.) above ground level (AGL). Maverick Helicopters reported that it conducts commercial tours using EC-130 and AS350 aircraft (rotorcraft) and identified two different routes over the Park flown at a minimum of 1,000 ft. AGL. Based on operator reports, these tours may be flown between the hours of 9:00 am and 5:00 pm and may occur any day of the week.

The air tour routes provided were then modeled 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

¹ Based on unpublished reporting data.

interdisciplinary team, which included biologists, the Park's environmental protection specialist, the Park's ecologist, the Park's Cultural Resource Program Manager, the Park's Archeologist, and regional planning and NEPA specialists, conducted a series of biweekly meetings to identify a proposed action. In these meetings the subject matter experts considered the routes and operations that were occurring, the Park's noise sensitive resources, and 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 compliance 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 to hold at least one public meeting for each draft ATMP. The FAA published a notice of availability of the draft ATMP for Death Valley National Park in the Federal Register on July 29, 2021. Public Meeting/Notice of Availability for Proposed Air Tour Management Plans at Mount Rainier National Park; Death Valley National Park; Everglades National Park; and Olympic National Park, 86 Fed. Reg. 40,897 (July 29, 2021). The agencies held the public meeting for the draft ATMP for Death Valley National Park on August 17, 2021 and accepted public comments between July 29 and August 28, 2021. The agencies received 1,259 comment letters on the draft ATMP, 424 of which were form letters and 835 of which were unique individual letters. The agencies' review and analysis of the public comments, including comments regarding draft ATMPs for other parks that were generally applicable to the Death Valley ATMP, 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 significant 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:

- Because the NPS withdrew Death Valley National Park's exemption from NPATMA's requirement to prepare an ATMP or voluntary agreement for the Park, an ATMP or voluntary agreement for the Park is required by NPATMA. The agencies have chosen to satisfy this requirement by implementing an ATMP.
- Currently, commercial air tours are operating under interim operating authority 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 Management Policies, and to achieve Park management objectives.

DESCRIPTION OF ACTION

The agencies will implement the ATMP for Death Valley 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 commercial air tour operations 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 2 total commercial air tours per year on consolidated routes based on an operator reported route, neither of which fly over tribal lands, and prohibits aircraft hovering in place.
- Sets a minimum altitude of 2,000 ft. AGL for helicopters and 2,500 ft. AGL for fixed wing aircraft, with limited exceptions for emergency situations.
- Authorizes specific types of aircraft to be used on the tours 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 two hours after sunrise and must end by two hours before sunset, unless they have been approved by the agencies for the quiet technology incentive, in which case they may operate tours beginning at sunrise or ending at sunset.
- Provides for the establishment of no-fly periods by the NPS for Park management or special events, including tribal events, with a minimum of one-week advance notice to the operator.
- Provides for annual meetings between the FAA Flight Standards District Office, Park staff, and the operator.
- 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 air 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.
- 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.

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.

- 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 that 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 interim operating authority 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 analyzed potential impacts for all threatened or endangered species that occur in or have suitable habitat within the Park with a focus on avian species. Due to the mitigations in the ATMP, including the minimum altitude of 2,000 ft. AGL for helicopters, the minimum altitude of 2,500 ft. AGL for fixed wing aircraft, and the time-of-day limitations, the two flights per year authorized under the ATMP, will have no effect on these species or on other listed species that may be present in the project area. Thus, in accordance with Section 7 of the Endangered Species Act, the agencies determined that the ATMP would have no effect on threatened and endangered species or their critical habitats. *See* No Effect Determination Memorandum, 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 Death Valley National Park. The FAA, acting as lead agency for the Section 106 process, initiated consultation under Section 106 with 26 federally recognized tribes. Via letter dated March 26, 2021, the FAA initiated consultation with the following tribes: Big Pine Paiute Tribe of the Owens Valley; Bishop Paiute Tribe; Chemehuevi Indian Tribe of the Chemehuevi Reservation, California; Colorado River Indian Tribes of the Colorado River Indian Reservation, Arizona and California; Confederated Tribes of the Warm Springs Reservation of Oregon; Duckwater Shoshone Tribe of the Duckwater Reservation, Nevada; Fort Independence Indian Community of Paiute Indians of the Fort Independence Reservation, California; Fort McDermitt Paiute and Shoshone Tribes of the Fort McDermitt Indian Reservation, Nevada and Oregon; Fort McDowell Yavapai

Nation, Arizona; Fort Mojave Indian Tribe of Arizona, California and Nevada; Kaibab Band of Paiute Indians of the Kaibab Indian Reservation; Las Vegas Tribe of Paiute Indians of the Las Vegas Indian Colony, Nevada; Lone Pine Paiute-Shoshone Tribe; Los Coyotes Band of Cahuilla and Copeno Indians, California; Moapa Band of Paiute Indians of the Moapa River Indian Reservation, Nevada; Paiute-Shoshone Tribe of the Fallon Reservation and Colony, Nevada; Pyramid Lake Paiute Tribe of the Pyramid Lake Reservation, Nevada; Reno-Sparks Indian Colony, Nevada; San Manuel Band of Mission Indians, California; Soboba Band of Luiseno Indians, California; Te-Moak Tribe of Western Shoshone Indians of Nevada; Timbisha Shoshone Tribe; Tule River Indian Tribe of the Tule River Reservation, California; Twenty-Nine Palms Band of Mission Indians of California; Yerington Paiute Tribe of the Yerington Colony & Campbell Ranch, Nevada; Yomba Shoshone Tribe of the Yomba Reservation, Nevada. In the same letter, the agencies also invited these tribes to engage in government-to-government consultation under Executive Order 13175. The FAA then initiated consultation via letter to the California State Historic Preservation Officer (California SHPO) and the Nevada State Historic Preservation Officer (Nevada SHPO) and all other identified Section 106 consulting parties on March 29, 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 Kaibab Band of Paiute Indians, the San Manuel Band of Mission Indians, and the Soboba Band of Luiseno Indians) the identified tribes were copied on all correspondence with the SHPO regarding Section 106 consultation. The agencies conducted government to government consultation with the Timbisha Shoshone Tribe, concurrent with Section 106 consultation, which included meeting with the tribe on December 16, 2021.³

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 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.

³ No tribes other than the Timbisha Shoshone Tribe indicated an interest to consult on a government-to-government level so tribal consultation for the undertaking with all other tribes occurred under the Section 106 framework.

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 three public comments about potential noise effects from commercial air tours on historic properties; one comment about a potential historic property; and seven comments from the public related to tribal concerns. *See* Appendix H.

Via letter dated June 17, 2022, the FAA proposed a finding of no adverse effect to the California and Nevada SHPOs and all other consulting parties. The Nevada SHPO concurred with the finding of no adverse effect on July 26, 2022. The California SHPO gave verbal concurrence on July 26, 2022. The THPO for the Fort Independence Indian Community of Paiute Indians of the Fort Independence Reservation, California, responded via email on June 21, 2022, by providing general comments about aviation safety and expressing support for consultation with the Timbisha Shoshone Tribe; the email was silent as to concurrence or an objection. The U.S. Army point of contact for the National Training Center and Fort Irwin sent an email, dated July 12, 2022, concurring with FAA's finding of effect. No other consulting parties responded to the Section 106 determination. *See* Appendix F, Section 106 Compliance Documentation.

- **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)⁴ with jurisdiction, to identify and address any safety concerns associated with the draft ATMP. The FAA's FSDO reviewed all public comments received on the draft ATMP that raised safety concerns as well as the consolidated routes and minimum altitudes included in the final ATMP. The FSDO's review included consideration of other aviation activity in the area, including military overflights.

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,⁵ or based on further agency review, as follows:

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

The routes and altitudes included in the draft ATMP were substantially revised in the final ATMP in response to comments received on the draft ATMP, including comments from the Timbisha Shoshone Tribe who oppose air tours over the Park and raised concerns regarding flights over the Timbisha Village within the Park and disturbance of Timbisha cultural activities. The seven routes included in the draft ATMP were reduced to two designated routes in the final ATMP. The routes eliminated include the Blue Route (VDF), the Orange Route (VDSF), the Light Blue Route (Saline Valley Option A), the Yellow Route (Saline Valley Option B), the Purple Route (Saline Valley Option C-1), and the Green Route (Saline Valley Option C-2). The

⁴ 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.

⁵ In September and October of 2021, the agencies released an additional eight draft ATMPs covering eleven other parks for public review and comment.

final ATMP includes two consolidated routes in the northern area of the Park. Courtney Aviation's Red Route (Death Valley PML) was modified to avoid the majority of the Timbisha Shoshone Natural and Cultural Preservation Area and a new Blue Route was included for Maverick Helicopters that is consolidated with the Red Route to the extent practicable. A prohibition on aircraft hovering in place was added in Section 3.7D.

The provision in the draft ATMP that required air tours to fly at least one mile laterally from the Timbisha Village at Furnace Creek, except as necessary for takeoff and landing at Furnace Creek Airport, was deleted because it was no longer necessary due to the route modifications in the final ATMP. The designated air tour routes in the final ATMP are more than 30 miles from the Timbisha Village. No commercial air tours are authorized to land at the Furnace Creek Airport, which is located on NPS land near the Timbisha Village. The NPS does not authorize commercial use of the airport, none of the commercial air tours authorized by the ATMP originate at the airport, and no fuel is available there.

In response to comments expressing concerns regarding protection for wildlife, visitor experience, tribal use, and wilderness and improving the Park's acoustic environment, the minimum altitudes for commercial air tours were raised in the final ATMP. The minimum altitude for commercial air tours conducted using helicopters was increased from 1,000 ft. AGL in the draft ATMP to 2,000 ft. AGL in the final ATMP. The minimum altitude for tours conducted using fixed wing aircraft was increased from 1,500 ft. AGL in the draft ATMP to 2,500 ft. AGL in the final ATMP. The route and altitude modifications are depicted in the map designated as Figure 2 and included in the ATMP, Appendix A.

- **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 the operator's OpSpecs, 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 3.8 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 the 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 at sunrise or ending at 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. Additional changes to this section better align the justification for the annual operator training with purpose of the training and the justification for the annual meeting with the purpose of this 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 operators 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.

- **Section 6.0 New Entrants**

In response to comments received on Section 6.0 regarding new entrants, the agencies revised the language in this section, which was included in the draft ATMPs that were released for public comment after the draft ATMP for the Park and has been included in the final ATMP for the Park. The language was revised to make clear that although new entrants may be considered, all new entrant applications must be reviewed and approved by both agencies before a prospective new entrant may be allowed to conduct operations over the Park or outside the Park but within ½ mile of its boundary. Though one commenter advocated that Section 6.0 be eliminated altogether, the agencies declined to do so because the ATMP's existing processes for approval of new entrants are sufficient to protect Park resources and visitor experience.

- **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 more clearly identify Timbisha Shoshone tribal lands within the Park, to explain that adaptive management actions could be taken in response to tribal input, and to explain that the restrictions in the ATMP are protective of the Timbisha Shoshone Natural and Cultural Preservation Area, Timbisha Shoshone tribal lands, and tribal use of the Park.

Appendix A to the ATMP was revised to expressly state that IOA for the Park and Timbisha Shoshone tribal lands 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).

BASIS AND JUSTIFICATION FOR DECISION

- **Annual limit of commercial air tours**

The ATMP implements the existing condition, based on operator reported data, which is a maximum of two commercial air tours per year. The agencies decided to implement the existing condition because the NPS interdisciplinary team determined that the impacts associated with the existing condition, together with the reasonable mitigation measures included in the ATMP, would not result in significant adverse impacts of commercial air tour operations upon the Park's natural and cultural resources or visitor experiences.

The agencies did not use IOA as the number of air tour operations authorized under the ATMP because IOA was based on numbers 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. As demonstrated by available reporting data, actual tours flown have been extremely low. In most years for which reporting data is available no air tours were flown. In both the previous planning effort and the current planning effort, the clear majority of public comments received

supported restricting or prohibiting commercial air tours over the Park. Further, the ATMP's authorization of only two commercial air tours per year supports the Park's management objectives.

Although some commentors suggested that the ATMP should include a permanent cap on the number of air tours, the agencies declined to do so because they found the terms of the ATMP, which provide that any increase in the number of air tours authorized per year would require a plan amendment, to be sufficiently protective of Park resources. A plan amendment would require additional public involvement and further environmental compliance, including tribal consultation, which would also provide opportunities for further protection of Park resources and visitor experience. A plan amendment could also provide for a reduction in air tour authorizations.

Some commenters advocated for the elimination of air tours or consideration of a no air tours alternative. 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 agencies believe that the operating parameters and other conditions in the ATMP provide appropriate restrictions and that there are no significant impacts to the Park's resources and visitor experience. The agencies found the annual flight limit in the ATMP (a maximum of two commercial air tours per year) to be sufficiently protective of Park resources, visitor experience, and tribal lands and consistent with the NPS management objective of eliminating commercial air tours over the Park. The vast majority of Park visitors are unlikely to experience any impacts as a result of commercial air tours.

Other comments opposed the ATMP's annual limit on air tours, criticizing it as too low, and expressed support for an increase in the number of flights authorized per year. As explained above, the agencies decided to implement the existing condition; this allowed them to examine the effects of flights actually flown, rather than to speculate as to the effects from some hypothetical future increase in flights. One commenter noted that there are two airports within the Park (Stovepipe Wells airport and Furnace Creek airport) and one airport outside the Park (Shoshone airport) and that there are no restrictions on general aviation into or out of those airports. The agencies acknowledge other sources, including other overflights, contribute to the total amount of noise within the Park. The two airports in the Park are not open to commercial use. The NPS has, and will continue to, work with other federal agencies to reduce noise and visual impacts of all types of overflights over the Park. This ATMP is one step of many the NPS is taking, or hopes to take, to improve acoustic conditions in the Park.

- **Designated routes and minimum altitude**

The ATMP includes a designated route for each of the two operators which are consolidated to the extent practicable and based on an operator reported route. As explained above, the ATMP eliminates several routes over the southern portion of the Park due to concerns raised by the Timbisha Shoshone tribe regarding the impacts of commercial air tours on their residential tribal lands within the park and tribal practices. The designated routes in the final ATMP are more than 30 miles from the Timbisha Village at Furnace Creek.

Some commenters advocated for higher minimum altitudes than those included in the draft ATMP (1,000 ft. AGL for helicopters and 1,500 ft. AGL for fixed wing aircraft), including minimum altitudes higher than 5,000 ft. AGL.⁶ The agencies ultimately decided to raise the minimum altitude to 2,000 ft. AGL for helicopters and 2,500 ft. AGL for fixed wing aircraft. Increasing these minimum altitudes provides more protection for wildlife (including nesting birds), visitor experience, wilderness character, and furthers an overall improvement in the Park's acoustic environment. It is also consistent with the Advisory Circular 91-36D, Visual Flight Rules (VFR) Flight Near Noise-Sensitive Areas referenced by a commenter that encourages pilots flying under visual flight rules near noise-sensitive areas to fly at altitudes higher than the minimum permitted by regulation and on flight paths that will reduce aircraft noise in such areas. The 500 ft. vertical separation for different types of aircraft is a necessary safety measure.

Commenters questioned the qualifications that aircraft are required to maintain the minimum altitudes set by the ATMP except in emergencies or as necessary for safe operations of the aircraft, in Sections 2.0 and 3.2 of the ATMP, positing that these exceptions could be exploited by the operator to circumvent the restrictions in the ATMP. Safety is a priority for both agencies and they believe the inclusion of language in the ATMP allowing for deviations in emergencies or to avoid unsafe conditions is necessary to ensure safe operation of aircraft. There is no basis to assume that the operator intends to improperly circumvent the ATMP's restrictions. The ATMP's requirement that the operator install and use flight following technology which, together with the ATMP's reporting requirements, will allow the agencies to ensure the operator's compliance with the ATMP's terms, including the altitude restrictions.

- **Hours of operation**

The ATMP authorizes the air tour to operate two hours after sunrise until two hours before sunset, any day of the year, unless they are flown using an aircraft that qualifies for the quiet technology incentive, a mitigation measure that offers resource protection during these times of day which are important to wildlife and visitor experience. Some commenters requested further restrictions on the days and times that commercial air tour operators may conduct tours including seasonal restrictions, a more limited daily window of time during which air tours could take place, and weekly no-fly days. The agencies declined to make a change to the operating hours based on these suggestions finding them unnecessary given the low number of air tours (two) authorized to take place on an annual basis, and the restrictions included in the ATMP. The ATMP already provides for the establishment of no-fly periods by the NPS with one week notice to the operator. No-fly periods may be established to avoid interference with special events, tribal practices, or Park management.

⁶ 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 AGL to more than 5,000 ft. AGL would be tantamount to a ban on commercial air tours over the Park or outside the Park but within ½ mile of its boundary.

- **Annual meetings/training**

Under the ATMP, the NPS will provide interpretive materials at the operator's request. Because only two commercial air tour are permitted each year, interpretive training is encouraged rather than required so that administration of the ATMP is commensurate with the level of air tour activity allowed. The ATMP also requires the operator to attend an annual meeting when such meeting is requested by the NPS or FAA. Commenters requested changes to these provisions including making the meetings public and requiring that the operator 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 educational 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 operator, especially given that the ATMP authorizes only two commercial air tours per year, and would be burdensome on the operator 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 such meetings. The NPS needs to be able to meet with the operator 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.

- **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 4.1 of the ATMP requires that the operator equip the aircraft used for the single authorized commercial air tour with flight monitoring technology, to use such technology when conducting the air tour, and to include flight monitoring data in their semi-annual reports. The agencies 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 complaint response line and, given the monitoring measures included in the ATMP, such a line would be unnecessary. Further, given that commercial air tours are not the only flights conducted over 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. However, the ATMP acknowledges that the public may report allegations

of noncompliance to the appropriate FSDO. Written reports of noncompliance will be investigated by the relevant FSDO consistent with FAA Policy.

- **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 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 made through the amendment process, which requires public participation, and 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 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 two commercial air tours authorized per year 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 authorizes only two commercial air tours pr year and allocates commercial air tour authorizations to two operators, with operator-specific routes and annual flight limitations. Given the limited number of tours authorized by the ATMP, the agencies currently do not believe that a competitive bidding process is necessary or appropriate. However, a competitive bidding process may be appropriate in the future and the ATMP includes provisions related to undertaking such a process.

- **Quiet Technology Incentive**

The ATMP includes a quiet technology incentive that would allow an aircraft utilizing quiet technology to conduct air tours beginning at sunrise or ending at sunset. However, an aircraft not utilizing quiet aircraft would be required to begin operations at least two hours after sunrise and end operations at least 2 hours before sunset. Though 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 Death Valley 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 Death Valley National Park.

As noted above, the ATMP provides for consultation with the operators regarding which 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 adoption of quiet technology. In the future, should an operator 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 balanced with the fact that quiet technology equip 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 draft ATMP. Impact analysis is not required content in an ATMP. However, as noted above, the seven air tour routes originally provided by the operators were modeled by the agencies to predict noise effects using the FAA's Aviation Environmental Design Tool. After the agencies decided to reduce the number of designated routes and to consolidate those routes in response to concerns raised by the Timbisha Shoshone tribe, and other commenters, the agencies then considered the noise effects of air tours on those two routes.

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 the authorized air tours on the Park resources and visitor experience. There are numerous ways to measure the potential impacts of noise from a commercial air tour 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, the amount of time that aircraft from the commercial air tour operation would be above specific sound levels that relate to different Park management objectives (e.g., 35 and 52 decibels), and the average sound level. The FAA considered their standard noise metric of Day-Night Average Sound Level (DNL). The agencies used the modeling results of the metrics they applied 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 the ATMP demonstrates that it does not result in significant impacts when considering the change from existing conditions. A maximum of two air tours per year on the designated routes authorized, subject to the restrictions in the ATMP, do not have the potential significantly affect Park resources. The analysis also discloses the impacts associated with the use itself—two commercial air tours over the Park on two operator-specific designated routes. The impacts of the action, whether evaluating the change from existing condition or the impacts from a single commercial air tour per year, are minimal. The two noise events and duration of the flights are important characteristics when evaluating sounds and the frequency, duration and intensity of noise exposure at any location in the Park is extremely limited under the ATMP. While the agencies acknowledge that some noise will be present during the air tours, if they occur in any given year, the intrusion is limited. The integrity of all resources remains intact, including the opportunity for visitor enjoyment of natural quiet and solitude. Park resources and values susceptible to impacts 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* NPS 2006 Management Policies § 1.4.4.

As to specific concerns regarding acoustic environment impacts noted by commenters, Section 3.3 of the ATMP specifically provides that “any new or replacement aircraft must not exceed the noise level produced by the aircraft being replaced.” A plan amendment, supported by further environmental analysis, would be required to authorize operation of an aircraft that exceeds the noise level of the currently authorized aircraft.

Though some commenters opined that there would be economic harm to the air tour industry, and related industries, given the extremely low amount of commercial air tour activity reported by operators, the agencies did not find an economic impact study was warranted. Further, the agencies considered the economic effects of the ATMP in the Environmental Screening Form and found because the number of air tours authorized under the ATMP is approximately the same as the average number of flights from the most recent three years (2017-

2019) not affected by the COVID-19 pandemic, the ATMP is not expected to impact visitor spending on air tours or economic activity in the local communities.

Some commenters questioned the cumulative effect of the maximum of two commercial air tours authorized by the ATMP when combined with other overflights, including military overflights. The Environmental Screening Form includes a qualitative analysis of cumulative impacts from overflights, including cumulative noise from other noise sources, including administrative overflights and military overflights. The cumulative impacts of the ATMP are not significant since the ATMP does not contribute new noise to the soundscape and the noise from air tours does not meaningfully contribute to overall noise in the Park. *See* 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 upon the Park's natural and cultural resources and visitor experiences, and on tribal lands.

- **Wildlife**

As noted above, the agencies analyzed potential impacts for all threatened or endangered species with suitable habitat within the Park, verbally consulted with the U.S. Fish and Wildlife Service pursuant to Section 7 of the Endangered Species Act, and determined that the ATMP would have no effect on federally listed species or their critical habitat. Many commenters focused on potential effects to threatened and endangered species. As discussed above, the agencies determined that the ATMP would have no effect on any threatened or endangered species. Many commenters also expressed general concerns about the potential effects of commercial air tours or low flying aircraft on wildlife. The ATMP would not allow low-flying commercial air tours, allowing only a maximum of two air tours per year at a minimum altitude of 2,000 ft. AGL for helicopters and 2,500 ft. AGL for fixed wing aircraft which is an improvement from the current condition under IOA. Though IOA prescribes no minimum altitude, the operators report that helicopter tours fly a minimum of 1,000 ft. AGL and fixed wing tours fly a minimum of 1,700 ft. AGL. Because of the limited number of flights per year, the duration of any potential noise exposure is also limited. Additionally, the routes, the limited noise duration and intensity associated with the authorized commercial air tours and the protections included in the ATMP, demonstrate that there will not be any adverse effects to wildlife. In addition, the no hovering provision included in the final ATMP will be protective of wildlife.

- **Wilderness**

Many commenters noted concerns related to the protection of the Park's designated wilderness. Some commented that the Wilderness Act prohibits commercial air tours. However, the Wilderness Act does not prohibit overflights and no commercial air tours are permitted to land in the Park. Though NPATMA does not require the ATMP to include analysis of impacts to 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. The analysis acknowledges that noise from the air tours may temporarily disrupt the opportunity for solitude for some visitors in wilderness on the days of the air tours while they are in operation. However, the maximum of two flights per year and the limited duration of potential exposure of noise from the air tours make it unlikely that most visitors on those days will encounter noise from an air tour within wilderness. If a wilderness visitor does hear noise from an air tour, the visitor will experience the noise for a very short duration of time. Ample opportunities for solitude and refuge from sights and sounds of civilization remain available in the Park's designated wilderness. The ATMP includes additional restrictions, including altitude restrictions and the elimination of multiple routes over wilderness, that further protect the Park's wilderness character. Accordingly, the NPS found that the ATMP is protective of wilderness character and to be consistent with the Park's enabling legislation, Section 4.9 of the NPS Management Policies, and the requirements of NPATMA.

- **Interim operating authority**

Eight commercial air tour operators applied for, and FAA granted, IOA to conduct up to 107 commercial air tours per year over the Park. 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). In 2017, the FAA revoked IOA for 70 air tours per year previously issued to four operators who no longer had operating certificates. Currently, four commercial air tour operators hold IOA for a combined total of 37 air tours over the Park each year, as follows: Courtney Aviation (4 IOA); Maverick Helicopters (15 IOA); Paillon Airways, Inc. (12 IOA); and, Sundance Helicopters, Inc. (6 IOA). 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). Once the OpSpecs are modified, only the operators that hold an allocation of a commercial air tour operation authorized under the ATMP will be permitted to conduct commercial air tours over the Park, or within ½ mile of its boundary. These two commercial air tours will be required to comply with the ATMP in all respects. IOA for the Park will terminate when the OpSpecs are modified, which will be the effective date for this ATMP.

The OpSpecs issued to the four commercial air tour operators with IOA for the Park also reflect IOA for the same number of commercial air tours over Timbisha Shoshone tribal lands within the Park. Because NPATMA provides that IOA terminates after the establishment of an ATMP and provides that an ATMP extends ½ mile outside the boundary of a National Park System unit, IOA for Timbisha Shoshone tribal lands was limited to the portions of those lands that are either within the Park's boundary or outside the Park but within ½ mile of its boundary. Under NPATMA, this IOA is coextensive with and issued in connection with the IOA issued for the Park. It did not apply to Timbisha Shoshone tribal lands that are more than ½ mile outside the

Park and the regulatory status of those lands remains unchanged by the ATMP. As noted above, the ATMP does not authorize any commercial air tour routes over Timbisha Shoshone tribal lands. Like the IOA for the Park, IOA for Timbisha Shoshone tribal lands will terminate on the effective date of the ATMP.

Some operators with IOA for the Park opposed number of commercial air tours authorized by 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. 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, 49 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 is based on the most current operator reported data based on operator reported information.

- **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 disabilities or mobility issues to experience a national park. The NPS works to ensure that people with disabilities can participate in the same programs and activities 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 who work to make sure that NPS staff have the tools and training necessary to provide accessible and inclusive outdoor recreation and interpretation opportunities for park visitors and employees alike. Information regarding accessibility at Death Valley National Park is available at: <https://www.nps.gov/deva/planyourvisit/accessibility.htm>

- **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) 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 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. 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). The fact that the agencies previously worked towards preparing an environmental assessment as part of their past efforts to complete an ATMP for the Park does not undermine their decision regarding the NEPA compliance pathway for this ATMP (and later in the previous planning process the agencies subsequently anticipated applying a categorical exclusion). Agencies may voluntarily choose to prepare an environmental assessment, even if a categorical exclusion applies. Moreover, the agencies’ previous efforts to prepare an ATMP were undertaken without the benefit of reporting data relied on to define the existing condition of air tours over the Park used in the Environmental Screening Form and categorical exclusion documentation in support of the application of the categorical exclusion applied.

- **Tribal consultation**

The tribal consultation conducted by the agencies prior to the signing of this ROD is described above. 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.

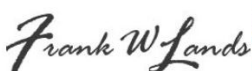
- **Compliance with NPS-specific laws and policies**

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 Death Valley 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 Death Valley National Park is reasonably supported. For those actions, 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 Death Valley National Park and issuance or modification of applicable operations specifications.

Approved by:



FRANK LANDS
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Frank W. Lands
Regional Director
Interior Regions 8, 9, 10 and 12
National Park Service

TAMARA A
SWANN

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SWANN
Date: 2022.08.16 08:15:33 -07'00'

Tamara A. Swann
Regional Administrator (Acting)
Western-Pacific Region
Federal Aviation Administration

RAYMOND
SAUVAJOT

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SAUVAJOT
Date: 2022.08.16 13:13:50 -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: 2022.08.16 08:56:29 -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 Death Valley National Park
- B. Environmental Screening Form
- C. Categorical Exclusion Documentation Form
- D. FAA Categorical Exclusion Adoption
- E. Endangered Species Act: No Effect Determination Memorandum
- 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 Death Valley National Park

APPENDIX A

Final Air Tour Management Plan for Death Valley National Park

FINAL AIR TOUR MANAGEMENT PLAN DEATH VALLEY NATIONAL PARK

SUMMARY

This Air Tour Management Plan (ATMP) provides the terms and conditions for commercial air tours conducted over Death Valley 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 On September 15, 2015, NPS notified FAA that an air tour management plan was necessary to protect Park resources and values and withdrew the exemption for the Park.

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, including any tribal lands within that area, 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 ½ mile of the Park 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).

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.

See 14 CFR § 136.33(d).

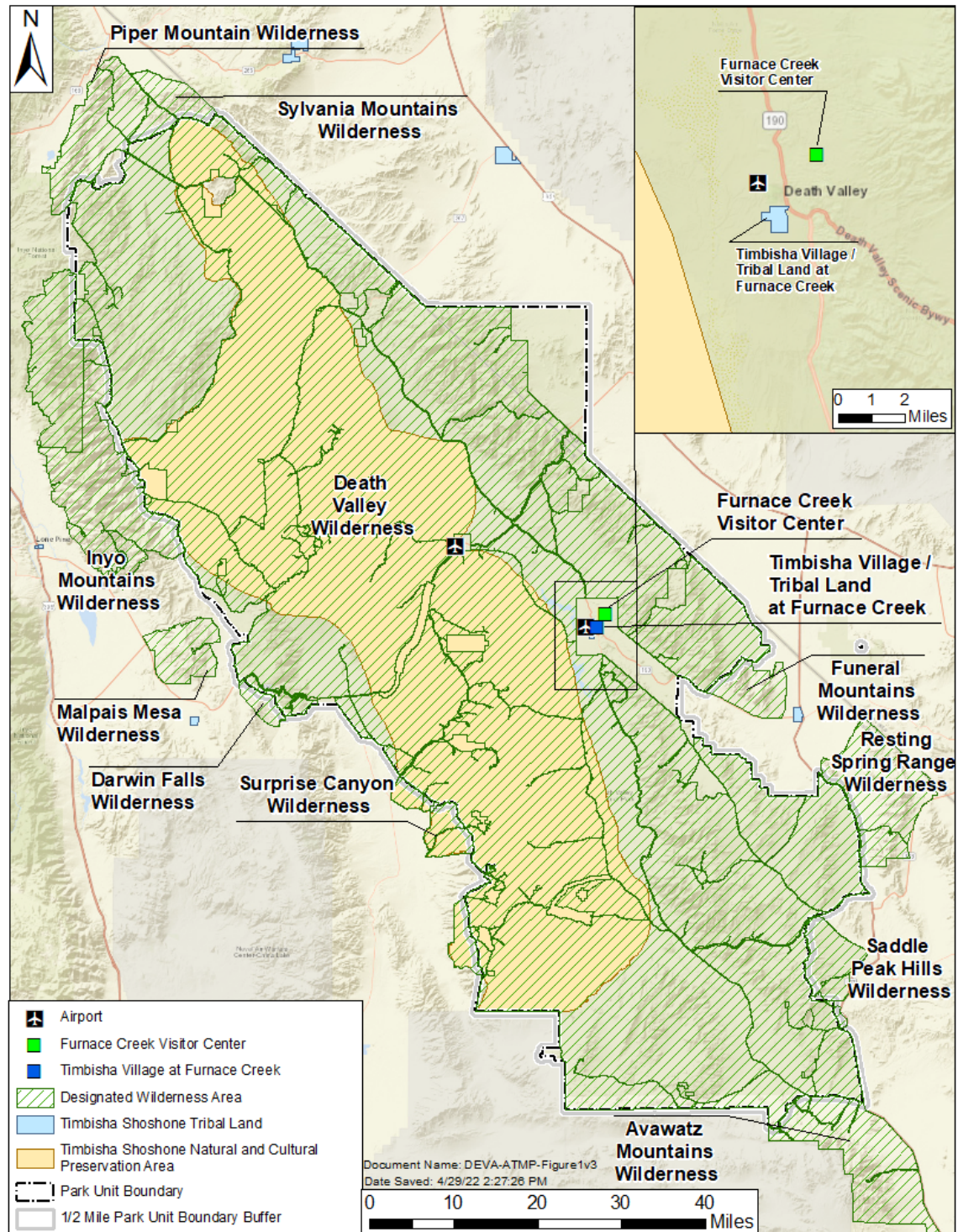


Figure 1. Map of area subject to the ATMP for Death Valley National Park

2.1 Park Overview

Death Valley National Park is the largest U.S. National Park outside of Alaska. The Park comprises 3,422,024 acres, 93% of which is protected as officially designated wilderness. Wilderness areas within the Park include low valley floors crusted with barren salt flats, rugged mountains rising as much as 11,000 feet, deep and winding canyons, rolling sand dunes, and spring-fed oases. These climactic and topographic extremes collectively result in exceptional biodiversity and a wide range of resilient desert ecosystems, many of which serve as habitat for federally threatened and endangered species. Numerous cultural resources are present within the Park, including archaeological sites, ethnographic resources, historic structures, and museum collections.

The Timbisha Shoshone Tribe has tribal lands inside the Park (the Timbisha Village at Furnace Creek) and a management interest in the Timbisha Shoshone Natural and Cultural Preservation Area within the Park. The Timbisha Shoshone Homeland Act (P.L. 106-423) specifies the “Timbisha Shoshone Natural and Cultural Preservation Area” as an area to be managed with special considerations for the Timbisha Shoshone Tribe. Several other tribes also attach religious or cultural significance to areas within the Park.

Visitor points of interest include campgrounds, visitor centers, and hiking trails. Visitor attractions include Zabriskie Point, Telescope Peak, Dantes View, Furnace Creek, Badwater, the Racetrack, Scotty’s Castle, Stovepipe Wells Village, and Saline Valley Warm Springs. Visitor use is generally most concentrated along major roadways within the Park.

The Park is located below the R-2508 Airspace Complex. The military conducts numerous operations in this airspace above the Park.

The Park’s purposes include preserving the unrivaled scenic, geologic, and natural resources of these unique natural landscapes, while perpetuating significant and diverse ecosystems of the California desert in their natural condition, and ensuring the maximum protection of wilderness values provided by law. The following Park management objectives relate to the development of this ATMP:

- The Park’s acoustic environment (i.e., sounds within the Park) supports an outstanding visitor experience and opportunities to hear and enjoy natural sounds and quiet.
- Acoustic resources of the Park are maintained in an appropriate wilderness/backcountry condition and wilderness qualities are preserved including solitude or primitive and unconfined recreation, remoteness from sights and sounds, naturalness, undeveloped condition, and other features of value.
- Park staff are able to conduct, and visitors are able to experience, interpretive programming with minimal interference due to noise.
- Natural sounds are protected to conserve healthy and robust wildlife populations. Natural biological and ecological processes should dominate the sounds within the Park.

- Cultural and historic resources, as well as visitor experience of those resources, are protected from unacceptable impacts from inappropriate or excessive types and levels of noise.

3.0 CONDITIONS FOR THE MANAGEMENT OF COMMERCIAL AIR TOUR OPERATIONS

3.1 Commercial Air Tours Authorized

Under this ATMP, two 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 routes and altitudes in Figure 2 below for each operator.² Altitude expressed in units above ground level (AGL) is a measurement of the distance between the ground surface and the aircraft. Helicopter air tours will fly no lower than 2,000 feet (ft.), while fixed-wing aircraft will fly no lower than 2,500 ft. AGL over the Park or within ½ mile of its boundary. Except 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.

² Appendix B contains an enlarged Figure 2.

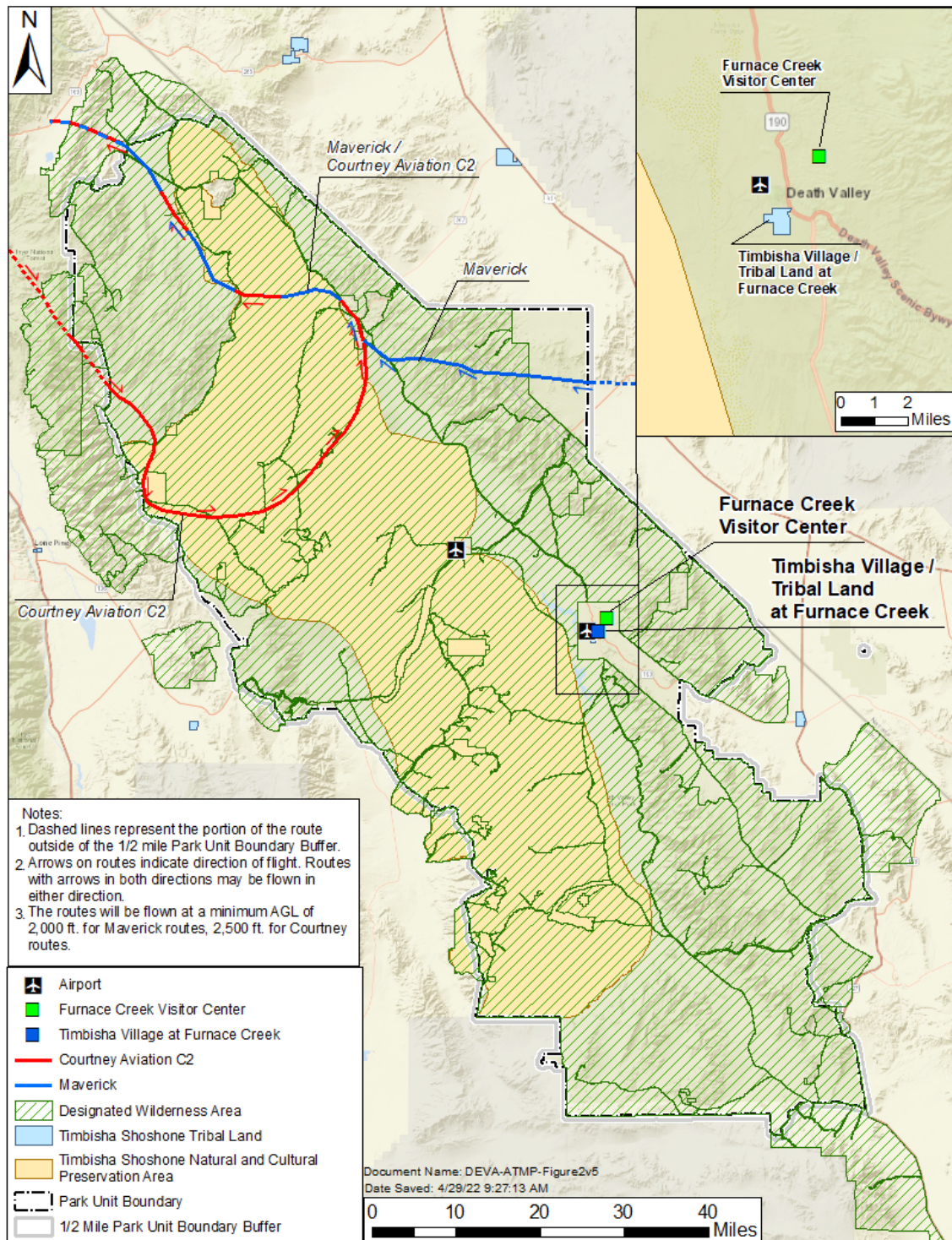


Figure 2. Commercial air tour routes over Death Valley National Park

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,” commercial air tours may operate two hours after sunrise until two hours before sunset, as defined by 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 commercial air tours for special events or planned Park management. Absent exigent circumstances or emergency operations, the NPS will provide a minimum of one week notice to the operators in writing 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 operators. 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: Park staff will provide interpretive and education materials at the request of the operators. Any materials provided by the Park will include 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 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 to discuss the implementation of this ATMP and any amendments or other changes to the ATMP.

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

3.7C In-Flight Communication: 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.

3.7D Hovering: Aircraft hovering in place is prohibited.

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.

3.8 Quiet Technology Incentives

This 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 conduct air tours beginning at sunrise or ending at 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, further agency action may be required to ensure the protection of Park resources and visitor experience.

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, 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, visitor experience, and tribal lands from the effects of commercial air tours, and to 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 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 (including interpretive programs), cultural resources, tribal use, sensitive species, and wilderness areas throughout the Park by limiting the number of potential disturbances caused by commercial air tours.

The condition that helicopter air tours may fly no lower than 2,000 ft. AGL, while fixed-wing aircraft may fly no lower than 2,500 ft. AGL under this ATMP, and the designated routes, are intended to protect the acoustic environment and visitor experience of the Park, Timbisha Shoshone tribal lands, tribal use of the Park, and to provide more

protection for wildlife, including nesting birds. These conditions will protect visitor experience and wilderness character by reducing the amount of air tour noise visitors on the ground are exposed to. Given the minimum required altitudes identified above, the required routes and altitudes for commercial air tour operators are also safety measures necessary to de-conflict the airspace. The designated routes do not fly within 30 miles of the Timbisha Village at Furnace Creek which is protective of tribal use of that area. The designated routes and annual flight limits also minimize the impacts of air tours on the Timbisha Shoshone Natural and Cultural Preservation Area.

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 foraging and communication. Wildlife viewing by Park visitors on the ground is often done during this time of day as well. The day/time restrictions have been included in this ATMP to protect these Park resources. Restrictions for particular events are intended to prevent noise interruptions of Park events or tribal practices.

If operators request training materials, it could provide opportunities to enhance the interpretive narrative for air tour clients and increase understanding of the Park by air tours companies and their clients. Meetings will facilitate effective implementation of the ATMP because they will be used to review and discuss implementation of this ATMP between Park staff, local FAA FSDO, and all operators. Meetings 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 to operators whose allocation of operating authority change 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 air tours authorized per year 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.

_____ Mike L. Reynolds Superintendent Death Valley National Park National Park Service	_____ Date	_____ Tamara A. Swann Regional Administrator (Acting) Western-Pacific Region Federal Aviation Administration	_____ Date
_____ Frank W. Lands Regional Director Interior Regions 8, 9, 10 & 12 National Park Service	_____ Date	_____ Kevin Welsh Executive Director Office of Environment & Energy Federal Aviation Administration	_____ Date
_____ Raymond M. Sauvajot Associate Director Natural Resource Stewardship and Science Directorate National Park Service	_____ Date		

APPENDIX A

1.0 COMMERCIAL AIR TOUR ALLOCATIONS

Table 1 provides allocations of the operations authorized per year along with authorized aircraft type by operator. IOA previously issued for the Park and Timbisha Shoshone tribal lands 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
Courtney Aviation, Inc. (Courtney Aviation, Yosemite Flight Tours)	1	1	GA-690-A, GA-690-D
Maverick Helicopters, Inc.	1	1	AS350, EC-130

2.0 DAY/TIME RESTRICTIONS

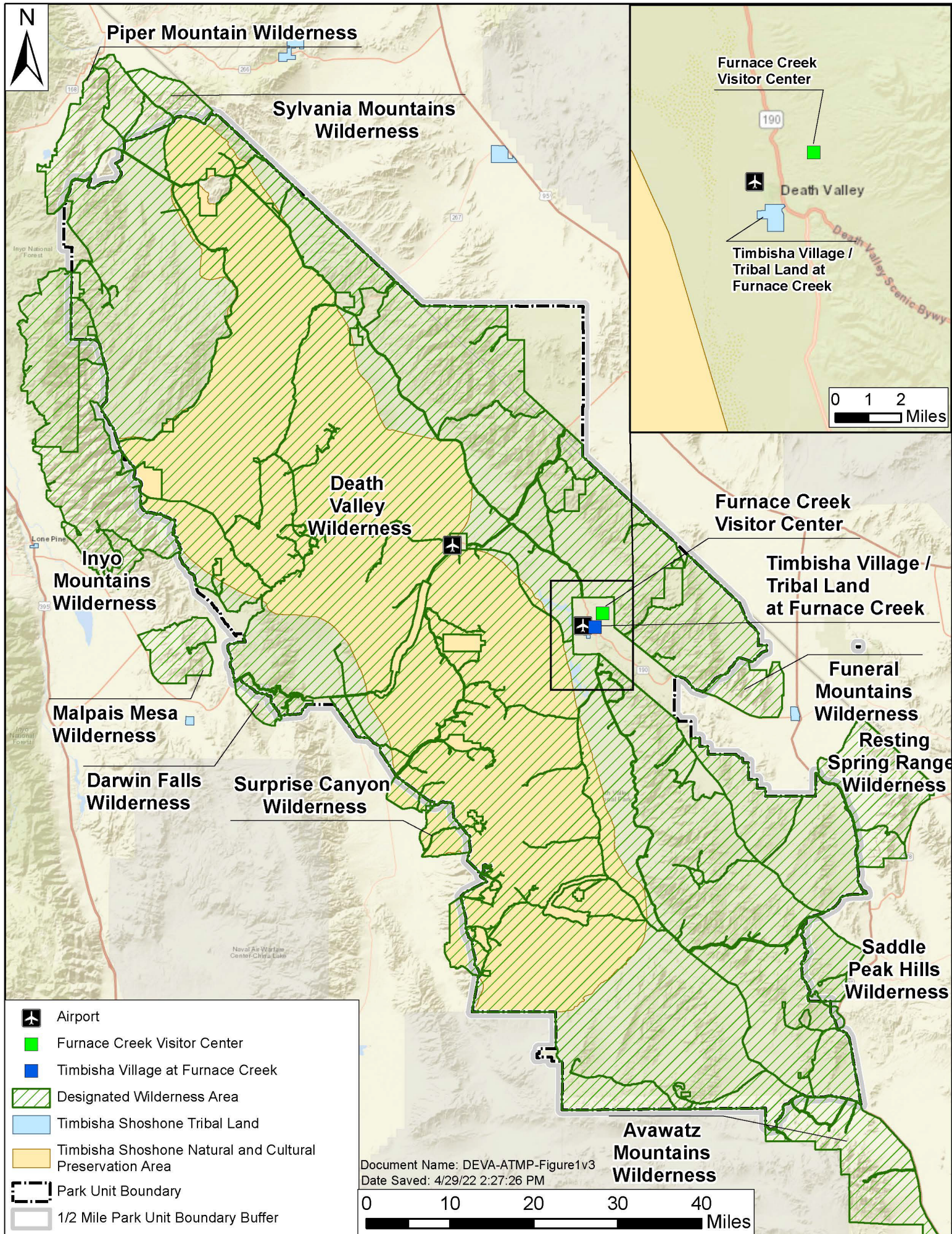
Table 2 lists the time-of-day and day-of-week operating parameters.

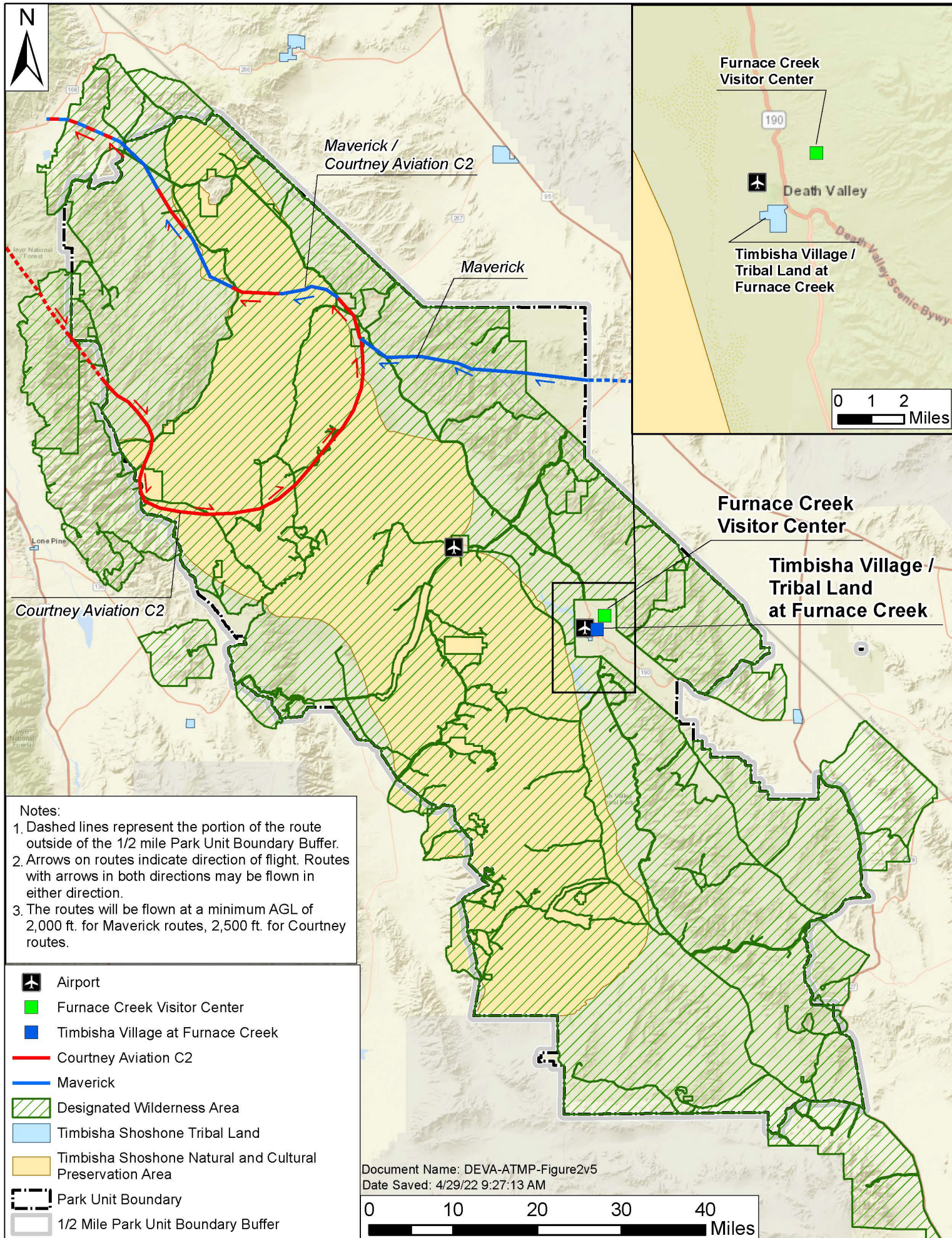
Table 2. Air Tour Time-of-Day and Day-of-Week Restrictions by Operator

Air Tour Operator	Time-of-Day	Day-of-Week
Courtney Aviation, Inc. (Courtney Aviation, Yosemite Flight Tours)	Two hours after sunrise until two 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.	Two hours after sunrise until two 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





APPENDIX B

Environmental Screening Form



ENVIRONMENTAL SCREENING FORM (ESF)

PROJECT INFORMATION

Project Title: Death Valley National Park Air Tour Management Plan

PEPC Project Number: 103441

Project Type: Categorical Exclusion

Project Location: Inyo County, California and Nye County, Nevada

PROJECT DESCRIPTION

The proposed action is to implement an Air Tour Management Plan (ATMP) for Death Valley 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 Impacts (40 C.F.R. § 1508.1(g))

Effects or impacts means changes to the human environment from the proposed action¹ 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 up to two 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 for 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.

¹ The ATMP is the proposed action for this CE.

Existing Conditions of Commercial Air Tours over the Park

Four commercial air tour operators, Courtney Aviation, Inc., Maverick Helicopters, Inc., Papillon Airways, Inc., and Sundance Helicopters, Inc., hold Interim Operating Authority (IOA) to conduct a combined total of 37 commercial air tours over the Park each year.² Commercial air tours over the Park were very infrequent from 2017-2019, with an average of less than one commercial air tour per year, well below IOA. Based on the three-year average of reporting data from 2017 to 2019, the operators conduct an average total of 0.6 commercial air tours per year, or 0.3 commercial air tours per year for each of the two active operators. Rounded up, the existing operations are considered to be up to two commercial air tours per year, consisting of one commercial air tour per year for each of the two active operators. The operators reported seven different commercial air tour routes over the Park. Courtney Aviation, Inc. reported that it may conduct commercial air tours on five different routes using GA-690-A and GA-690-D fixed-wing aircraft at a minimum altitude of 1,700 feet (ft.) AGL. Maverick Helicopters, Inc. reported that it may conduct commercial air tours on two different routes using EC-130 and AS350 aircraft (rotorcraft) at a minimum altitude of 1,000 ft. above ground level (AGL).

Summary of the ATMP

The ATMP limits the number of commercial air tours that the operators are authorized to conduct over the Park or within ½ mile of its boundary to the existing three-year average of tours conducted on an annual basis from 2017-2019 (two tours per year). The operators will each be allowed to conduct one commercial air tour each year on one of two consolidated routes, which are modified from an existing operator reported route for the protection of the Park's natural and cultural resources, tribal use, and visitor experience. The ATMP increases the minimum altitude at which each operator is allowed to conduct commercial air tours (2,000 ft. AGL for Maverick Helicopters, Inc. and 2,500 ft. AGL for Courtney Aviation, Inc.) and prohibits aircraft hovering in place. The ATMP restricts the hours during which commercial air tours may be conducted over the Park. Unless they qualify for the quiet technology incentive, air tours must begin two hours after sunrise or end two hours before sunset, as defined by the National Oceanic and Atmospheric Administration (NOAA).³ The ATMP allows the Park to establish no-fly periods for special events or planned Park management, which may include tribal ceremonies or practices.

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 <i>Air Quality Technical Analysis</i> below.
Biological Biological and Geological Resources	The Park contains one National Natural Landmark (NNL), Eureka Dunes. The ATMP authorizes approximately the same number of commercial air tours per year as the average number of flights from 2017-2019 (two tours per year) and requires each operator to fly on one of two consolidated routes, which are modified from an existing operator reported route for the protection of the Park's natural resources, including biological resources. Therefore, no changes in impacts to NNLs are anticipated from the ATMP.

² The National Parks Air Tour Management Act (NPATMA) states that a national park that has 50 or fewer commercial air tour operations over the park each year is exempt from the requirement to develop an ATMP. 49 U.S.C. § 40128 (a)(5)(A). However, NPATMA also states that if the NPS determines that an ATMP or voluntary agreement is necessary to protect park resources and values or park visitor use and enjoyment, the NPS may withdraw the exemption for that park. *Id.* § 40128 (a)(5)(B). The NPS withdrew the exemption for the Park in a letter to the FAA on September 15, 2015.

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

<p>Biological Species of Special Concern or Their Habitat</p>	<p><u>Federally Listed Threatened and Endangered Species</u></p> <p>The Park has a number of Federally designated threatened and endangered species, including listed mammals, bird, fish, flowering plants, reptiles, and insects. Commercial air tours will have no impact on these species or their habitat due to the proposed commercial air tour routes, minimum flight altitudes, time of day restrictions, type of aircraft, and limit on the maximum number of flights per year that will be permitted under the ATMP, particularly given the relatively low number of flights (total of two tours per year). Based on these measures, the ATMP results in no impact on listed species and it has been determined that the ATMP will have <i>No Effect</i> on listed species or their critical habitat.</p> <p>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. Refer to the <i>No Effect justification memo</i> for additional information, which includes the agencies' analysis. The ATMP is expected to have minimal and only beneficial impacts on listed species when 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 (two flights per year), and the ATMP requires each operator to fly on one of two consolidated routes, which are modified from an existing operator reported route for the protection of the Park's natural resources, including biological resources.</p> <p><u>Special Status Species and Migratory Birds</u></p> <p>Bald eagles (<i>Haliaeetus leucocephalus</i>) and golden eagles (<i>Aquila chrysaetos</i>) are protected raptor species that are present at the Park.⁴ 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 aircraft standoff of 1,000 ft. for bald eagles (National Park Service, 2007) and golden eagles to reduce noise impacts (Richardson and Miller, 1997). The ATMP authorizes approximately the same number of flights as existing conditions (two tours per year) and requires each operator to fly on one of two consolidated routes, which are modified from an existing operator reported route for the protection of the Park's natural resources, including special status species. Furthermore, the ATMP increases the minimum altitude to 2,000 ft. AGL for helicopters and 2,500 ft. AGL for fixed-wing aircraft over the Park for commercial air tours. Therefore, the ATMP is expected to have negligible or only beneficial impacts on these species when compared to current conditions.</p> <p>A number of other migratory birds⁵ 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 is the same as the average number of flights from 2017-2019 (two tours per year). Furthermore, the ATMP requires each operator to fly on one of two consolidated routes, which are modified from an existing operator reported route for the protection of the Park's natural resources, including migratory birds. Therefore, the ATMP is expected to have negligible or only beneficial impacts on these species when compared to current</p>
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	<p>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.</p> <p>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.</p>
<p>Biological Wildlife and/or Wildlife Habitat including terrestrial and aquatic species</p>	<p>The Park is one of the hottest and driest places on earth and is also home to a great diversity of desert wildlife that are well-adapted to life under these conditions. Wildlife at the Park include bighorn sheep, kangaroo rats, desert tortoise, coyote, and jackrabbit. Much of the Park's wildlife have adapted to live in hot, dry conditions with little water. Many animals rest during the hot summer days and are active at night.</p> <p>Noise from commercial 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 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).</p> <p>Since the ATMP authorizes a maximum number of commercial air tours on an annual basis equivalent to the existing three-year average on two consolidated routes, which are modified from an existing operator reported route for the protection of the Park's natural resources including wildlife, it is anticipated that there will be beneficial change to existing operating conditions and the resultant disturbances to wildlife. Furthermore, the ATMP requires the operators to fly at increased altitudes as compared to those that are flown under existing conditions (minimum 2,000 ft. AGL for helicopters, representing an increase of 1,000 ft. from existing conditions, and minimum 2,500 ft. AGL for fixed-wing aircraft, representing an increase of 800 ft. from existing 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.</p> <p>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 compared 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 <i>Noise</i></p>

⁴ Bald eagles are protected under the Bald and Golden Eagle Protection Act.

⁵ Migratory bird species are protected under the Migratory Bird Treaty Act.

	<p><i>Technical Analysis</i> but could be more than when there are no flights during this time of day.</p> <p>In conclusion, while wildlife will continue to be exposed to noise in the areas that the consolidated routes pass over when air tours are conducted, 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 (two tours per year) on two consolidated routes, which are modified from an existing operator reported route for the protection of the Park's natural resources. 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.</p>
<p>Cultural Cultural Landscapes</p>	<p>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 Landscapes, not mutually exclusive: historic sites, historic designed landscapes, historic vernacular landscapes, and ethnographic landscapes (National Park Service, 2002).</p> <p>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.</p> <p>There are as many as twenty-nine Cultural Landscapes present within the Park. Particularly significant Cultural Landscapes are found at Scotty's Castle, Lower Vine Ranch, the salt tram in Saline Valley, and in association with many of the Civilian Conservation Corps era national monument administration structures. The number of authorized flights under the ATMP is the same as the average number of flights from 2017-2019, and the ATMP requires each operator to fly on one of two consolidated routes, which are modified from an existing operator reported route for the protection of the Park's cultural resources. The <i>Noise Technical Analysis</i> shows that aircraft noise related to commercial air tours is predicted to be greater than 35 dBA for less than five minutes on days when flights occur in areas directly beneath and adjacent to the routes (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, and particularly given the relatively low number of flights (total of two tours per year) that are authorized under the ATMP. Furthermore, since the consolidated routes avoid much of the Park's area, there will be a benefit to Cultural Landscapes compared to current conditions.</p>

	<p>The Federal Aviation Administration (FAA), in coordination with the NPS, consulted with the California and Nevada State Historic Preservation Offices, federally recognized 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.</p>
Cultural Ethnographic Resources	<p>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 (National Park Service, 2002). Ethnographic resources include Traditional Cultural Properties (TCPs) (National Park Service, 1992).</p> <p>An impact to an Ethnographic Resource will occur if the project affects 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.</p> <p>Twenty-three Native American tribes attach religious or cultural significance to areas within and adjacent to the Park. These include:</p> <ul style="list-style-type: none"> • Big Pine Paiute Tribe of the Owens Valley • Bishop Paiute Tribe • Yerington Paiute Tribe of the Yerington Colony & Campbell Ranch • Chemehuevi Indian Tribe of the Chemehuevi Reservation • Colorado River Indian Tribes of the Colorado River Indian Reservation • Confederated Tribes of the Warm Springs Reservation of Oregon • Duckwater Shoshone Tribe of the Duckwater Reservation • Fort Independence Indian Community of Paiute Indians of the Fort Independence Reservation • Fort McDermitt Paiute and Shoshone Tribes of the Fort McDermitt Indian Reservation • Fort McDowell Yavapai Nation • Fort Mojave Indian Tribe of Arizona • Las Vegas Tribe of Paiute Indians of the Las Vegas Indian Colony • Lone Pine Paiute-Shoshone Tribe • Los Coyotes Band of Cahuilla and Cupeno Indians • Moapa Band of Paiute Indians of the Moapa River Indian Reservation • Yomba Shoshone Tribe of the Yomba Reservation • Paiute-Shoshone Tribe of the Fallon Reservation and Colony • Pyramid Lake Paiute Tribe of the Pyramid Lake Reservation • Reno-Sparks Indian Colony • Te-Moak Tribe of Western Shoshone Indians of Nevada • Timbisha Shoshone Tribe • Tule River Indian Tribe of the Tule River Reservation • Twenty-Nine Palms Band of Mission Indians of California <p>The tribes have informed Park staff that there are sites within the Park that are significant to the tribes. There are a number of areas throughout the Park that contain traditional natural resources significant to tribes such as arches, 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</p>

	<p>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.</p> <p>Additionally, the Timbisha Shoshone Tribe has abutting lands and management interest in the Timbisha Shoshone Natural and Cultural Preservation Area within the Park.⁶ The ATMP requires commercial air tours to fly on designated routes which avoid the Timbisha Village at Furnace Creek by approximately 30 miles at their nearest point.</p> <p>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.</p>
Cultural Prehistoric/historic structures	<p>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 only feeling and setting are the contributing elements. Feeling and setting have been identified as contributing elements for 40 cultural resources at the Park (refer to the Section 106 documentation for a complete list). There are nine additional cultural resources within the area of potential effect (APE) for which it is unclear whether feeling and setting contribute to significance. For the purpose of this undertaking, the agencies assume that these properties retain integrity of feeling and setting and that these are characteristics that contribute to the properties' NRHP eligibility:</p> <ul style="list-style-type: none"> • SR-190 (NRHP eligible) • Eagle Borax Works (NRHP listed) • Saline Valley Aerial Salt Tram (NRHP listed) • Leadfield (NRHP listed) • Harmony Borax Works (NRHP listed) • Corduroy Road (NRHP eligible) • Johnson Canyon Arrastras (NRHP eligible) • Journigan's Mill (NRHP eligible) • Schwab Town Site (NRHP eligible) <p>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 two instances per year, and of limited duration. The <i>Noise Technical Analysis</i> shows that aircraft noise related to commercial air tours are predicted to be greater than 35 dBA for less than five minutes on days when flights occur in areas directly beneath and adjacent to the routes (see Figure 1). These impacts will be similar or beneficial compared to impacts currently occurring because the number of authorized flights under the ATMP is the same as the average number of flights from 2017-2019,</p>

⁶Timbisha Shoshone Homeland Act (P.L. 106-423) specifies the "Timbisha Shoshone Natural and Cultural Preservation Area" as an area to be managed with special considerations for the Timbisha Shoshone Tribe.

	<p>and the ATMP requires each operator to fly on one of two consolidated routes, which are modified from an existing operator reported route for the protection of, among other things, the Park's cultural resources. The consolidated routes avoid much of the Park's area, which represents a benefit to cultural resources. Therefore, the ATMP is expected to have negligible or only beneficial impacts on cultural resources when compared to current conditions.</p> <p>The FAA, in coordination with the NPS, consulted with the California and Nevada State Historic Preservation Offices, federally recognized tribes, and other consulting parties on the potential impacts of the ATMP on historic properties, including cultural; prehistoric/historic structures as part of Section 106 consultation. That consultation process led to a finding that the ATMP will have no adverse effect on historic properties.</p>
Cultural Tribal Lands	<p>NPATMA requires that ATMPs address commercial air tours over tribal lands that are within the Park or outside the Park and within ½-mile of its boundary. The Timbisha Shoshone Tribe has tribal lands inside the Park (the Timbisha Village at Furnace Creek) and a management interest in the Timbisha Shoshone Natural and Cultural Preservation Area within the Park. The Timbisha Shoshone Homeland Act (P.L. 106-423) specifies the "Timbisha Shoshone Natural and Cultural Preservation Area" as an area to be managed with special considerations for the Timbisha Shoshone Tribe. Neither of the authorized commercial air tour routes fly over the Timbisha Village at Furnace Creek. At their nearest point, the commercial air tour routes authorized by the ATMP avoid the Timbisha Village by approximately 30 miles. Although the commercial air tour routes authorized by the ATMP do fly over a portion of the Timbisha Shoshone Natural and Cultural Preservation Area, the routes authorized by the ATMP are consolidated and modified from an existing operator reported route for, among other things, the protection of tribal use. While sound does travel over distances, given the location of the commercial air tour routes authorized under the ATMP coupled with the altitude at which the aircraft will be flying, and the various factors that influence how far a sound travels before being absorbed into the atmosphere, NPS has determined that no impacts to tribal lands will result from the commercial air tours authorized under the ATMP. Refer to Figure 1 in the CE form to understand where tribal lands occur.</p>
Lights Lights	<p>Under the ATMP, unless they qualify for the quiet technology incentive, commercial air tours are only permitted from two hours before sunset until two hours 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 approximately the same as the average number of flights from 2017-2019 but will be required to fly on one of two consolidated routes. Therefore, impacts to lights will not be significant.</p>
Other Human Health and Safety	<p>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.</p>
Socioeconomic Minority and low- income populations, size, migration patterns, etc.	<p>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 the Park and within ½-mile of the Park boundary. Based on this review, low-income populations were identified in Inyo 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 <i>Noise Technical Analysis</i>, the noise associated with commercial air tours is predicted to be above 52 dBA for less than five minutes in areas</p>

	<p>directly beneath the routes (see Figure 2) on days when commercial air tours occur. Therefore, the ATMP will not have a disproportionate impact on low-income or minority populations.</p>
<p>Socioeconomic Socioeconomic</p>	<p>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. 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.</p>
<p>Soundscapes Acoustic Environment</p>	<p>Baseline acoustic conditions in the Park were measured in 2008 (Lee and MacDonald, 2011). At the locations nearest commercial air tour routes, the existing ambient daytime sound level was reported to be 15 – 38 decibels, while the natural ambient daytime sound level was reported to be 13 – 33 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 commercial 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.</p> <p>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.</p> <p>Overall, noise impacts associated with commercial air tours over the Park are not expected to measurably change, since the ATMP authorizes approximately the same number of flights per year as the average number of flights from 2017-2019 (two flights) on two consolidated routes, which are modified from an existing operator reported route for the protection of the Park's natural and cultural resources, tribal use, and visitor experience. The consolidated routes avoid much of the Park's area compared to existing operations, which represents an improvement for the Park's soundscape as compared to current conditions. Furthermore, the ATMP requires commercial air tours to maintain increased altitudes as compared to existing conditions (minimum 2,000 ft. AGL for helicopters, representing an increase of 1,000 ft. from existing conditions, and minimum 2,500 ft. AGL for fixed-wing aircraft, representing an increase of 800 ft. from existing conditions), 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.</p>

	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 ⁷ 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 <i>Noise Technical Analysis</i> below.
Viewsheds Viewsheds	<p>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 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 topography.</p> <p>Under existing conditions, commercial air tours over the Park may be flown on seven different routes, though operators are not required to fly on any of these routes. The ATMP limits the number of commercial air tours to two tours per year, which is consistent with the average number of flights from 2017-2019, and requires each commercial air tour operator to fly on one of two consolidated routes, which are modified from an existing operator reported route for the protection of the Park’s visitor experience. Therefore, impacts to viewsheds will be similar to or decrease compared to impacts currently occurring because the number of authorized flights under the ATMP is the same as the average number of flights from 2017-2019. They would therefore not be considered significant, and because altitudes will increase when compared to existing flight 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. The consolidated routes also avoid much of the Park’s area as compared to existing operations, which represents an improvement to current conditions.</p>
Visitor Use and Experience Recreation Resources	<p>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 authorized by 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 conditions.</p> <p>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.</p>
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

⁷ 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 on an annual basis 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.

<p>Visitor Use and Experience</p>	<p>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).</p> <p>Effects of commercial air tours on Park visitor experience have been well documented over many years. See <i>Report on the Effects of Aircraft Overflights on the National Park System</i> (Department of Interior/National Park Service, 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).</p> <p>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).</p> <p>Visitor points of interest include campgrounds, visitor centers, and hiking 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 approximately the same number of commercial air tours as the average number of flights from 2017-2019 (two tours per year). The ATMP requires operators to fly at higher altitudes than those currently reported on one of two consolidated routes, which are modified from an existing operator reported route for the protection of the Park’s visitor experience. On days when commercial air tours will occur, noise levels above 52 dBA will occur for less than five minutes in areas directly beneath the routes (see Figure 2). See <i>Noise Technical Analysis</i> below. Finally, limiting the operation of commercial air tours from two hours after sunrise until two hours before sunset, or from sunrise until sunset 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.</p>
<p>Wilderness Wilderness</p>	<p>The Park comprises a total of 3,422,024 acres. Currently, 3,102,456 acres in the Park are designated wilderness, which represents approximately 93% of the Park’s area.</p> <p>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</p>

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. 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 the Park, 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 designated wilderness areas. On days when commercial air tours will occur, noise levels above 35 dBA are not anticipated to exceed five minutes (see Figure 1). The average sound level (Equivalent Sound Level or $L_{Aeq\ 12\ hr}$) is not anticipated to exceed 35 dB. See *Noise Technical Analysis* below. However, as described in analyses for soundscapes, viewsheds, and visitor use and experience, because the ATMP authorizes approximately the same number of commercial air tours as the average number of flights from 2017-2019 (two flights per year) on consolidated routes which are modified from an existing operator reported route for the protection of, among other things, the Park’s natural resources and visitor experience, 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 (two tours per year). 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 approximately the same number of commercial air tours as the average number of flights from 2017-2019 on consolidated routes which are modified from an existing operator reported route for the protection of the Park’s natural resources, 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 (c)(4) of the Wilderness Act states that wildernesses "may contain features of ecological, geological, scientific, educational, scenic, or historical value." Where present, cultural resources are part of this "unique" quality of wilderness character.

	<p>Therefore, active management of wilderness cultural resources must take into account both cultural resource values and contributions to wilderness character.</p> <p>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.</p> <p>However, as described in analyses for cultural resources above, because the ATMP authorizes approximately the same number of commercial air tours as the average number of flights from 2017-2019 on consolidated routes which are modified from an existing operator reported route for the protection of the Park's cultural resources and tribal use, impacts to other features of value will be similar or decrease compared to impacts currently occurring. The consolidated routes avoid more of the Park's wilderness than the routes currently reported by operators, which may result in an improvement compared to existing conditions. Therefore, the impacts to other features of value within wilderness will not be significant.</p>
Cumulative Effects	<p>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.</p> <p>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 military aircraft, high altitude jets, or private aviation regardless of altitude are not subject to regulation under NPATMA. All of these aviation activities may contribute noise to the project area. Military overflights are particularly common over the Park, and many visitors travel to see low-level high-speed overflights, particularly in areas such as Rainbow Canyon. These flights may detract from the viewshed of the Park as well.</p> <p>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.</p> <p>The agencies have qualitatively considered the cumulative impacts of commercial air tours along with impacts from existing activities generally described above. In some cases, the noise contribution from other sources may be substantial, such as military overflights and 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 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. Therefore, when considering other sources of noise in the Park that are likely to continue under the ATMP, the continuation of a maximum of two commercial air tours per year on consolidated routes which are modified from an existing operator reported route for the protection of the Park's natural and cultural resources, tribal use, and visitor experience will not result in a meaningful change to the current condition of the visual or auditory landscape at the Park.</p>

	<p>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 altitudes which decreases the noise along the flight paths as compared to existing conditions. 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 (two tours per year).</p> <p>Therefore, no significant cumulative environmental impacts are likely to result from the ATMP.</p>
Indirect Effects	<p>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 Columbia, CA and Las Vegas, NV which are approximately 60-150 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 takeoff and landing locations and the Park primarily consist of undeveloped open space areas and low-density residential 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 amounting to no more than two flights per year, these effects are expected to be insignificant.</p> <p>Since the ATMP authorizes approximately the same number of commercial air tours per year as existing conditions on consolidated routes which are modified from an existing operator reported route, 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 conditions or to require operators to change any operational parameters (e.g., altitude or routes).</p>

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 Park – 168 flight miles. The most common aircraft that fly commercial air tours 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 all 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 the Park by multiplying the total number of operations (by aircraft type), the longest routes flown by each aircraft type over the Park and the ½-mile boundary outside of the Park, and the aircraft-specific emission factor. The sum of total emissions by aircraft type represent the maximum emissions conditions for the Park. To highlight the potential impacts to ambient air quality for all criteria pollutants, the Park’s emissions results were compared with the EPA’s General Conformity *de minimis* thresholds for the most stringent⁸ nonattainment areas. 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.”

Additionally, a portion of the Park and the ½-mile boundary outside the Park is classified as Marginal Nonattainment for ozone (2015 standard), Moderate Nonattainment for PM_{2.5} (2006 standard), and Moderate Maintenance for carbon monoxide (1971 standard) and is thus subject to the General Conformity regulations. However, since emissions estimates for all pollutants in the entire Park and the ½-mile boundary outside the Park are well below the most stringent *de minimis* levels (Table 2), a General Conformity Determination is not required. Furthermore, 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 tons per year (TPY) for particulate matter and sulfur dioxide, and <2 TPY for nitrogen oxides – 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 the Park with *de minimis* thresholds for the most stringent nonattainment areas.

Pollutant	<i>de minimis</i> threshold (Tons per Year)	Emissions Inventory for DEVA (Tons per Year)
Carbon Monoxide	100	0.343
Volatile Organic Compounds	10	0.003
Nitrogen Oxides	10	<0.0005
Particulate Matter, diam. < 2.5 µm	70	<0.0005
Particulate Matter, diam. < 10 µm	70	<0.0005
Lead	25	<0.0005
Sulfur Oxides	70	<0.0005
Carbon Dioxide	n/a	0.780

⁸ 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.

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.

Table 3. Primary metrics used for the noise analysis.

Metric	Relevance and citation
Time Above 35 dBA ⁹	<p>The amount of time (in minutes) that aircraft sound levels are above a given threshold (i.e., 35 dBA)</p> <p>In quiet settings, outdoor sound levels exceeding 35 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).</p>
Time Above 52 dBA	<p>The amount of time (in minutes) that aircraft sound levels are above a given threshold (i.e., 52 dBA)</p> <p>This metric represents the level at which one may reasonably expect interference with Park interpretive programs. At this background sound level (52 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).</p>
Equivalent sound level, $L_{Aeq, 12\text{ hr}}$	<p>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.</p>
Day-night average sound level, L_{dn} (or DNL)	<p>The logarithmic average of sound levels, in dBA, over a 24-hour day, DNL takes into account the increased sensitivity to noise at night by including a ten dB penalty between 10 p.m. and 7 a.m. local time.</p> <p>For aviation noise analyses, the FAA (2015, Appendix. B, B-1) has determined that the cumulative noise energy exposure of individuals to noise resulting from aviation activities must be established in terms of day-night average sound level (DNL).</p> <p>Note: Both $L_{Aeq, 12\text{ hr}}$ and L_{dn} characterize:</p> <ul style="list-style-type: none"> Increases in both the loudness and duration of noise events The number of noise events during specific time period (12 hours for $L_{Aeq, 12\text{ hr}}$ and 24-hours for L_{dn}) <p>If there are no nighttime events, then $L_{Aeq, 12\text{ hr}}$ is arithmetically three dBA higher than L_{dn}.</p>

⁹ 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.

	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.

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 day¹⁰ 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 one flight on the Courtney Aviation, Inc. PML route using a Twin Commander AC-690 aircraft. Note that although the PML route is an operator reported route flown under existing conditions, the ATMP does not permit commercial air tour operators to fly over the Park or its ½ mile boundary using this route. Rather, the ATMP requires commercial air tour operators to fly on one of two consolidated routes, which are modified from an existing operator reported route. The consolidated routes in the ATMP fly over the Park and over the area within ½ mile of its boundary for fewer flight miles at similar altitude to the modeled PML route, which would reduce the spatial footprint of the noise effects of the ATMP compared to that of the modeled routes. Therefore, although the footprint of the noise contours for routes authorized by the ATMP may differ from those reflected in the noise analysis below, the modeled routes represent a conservative estimate of potential noise effects, and actual noise effects of the ATMP are expected to be similar or slightly decrease compared to those reflected in the noise modeling analysis below.

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

¹⁰ 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.

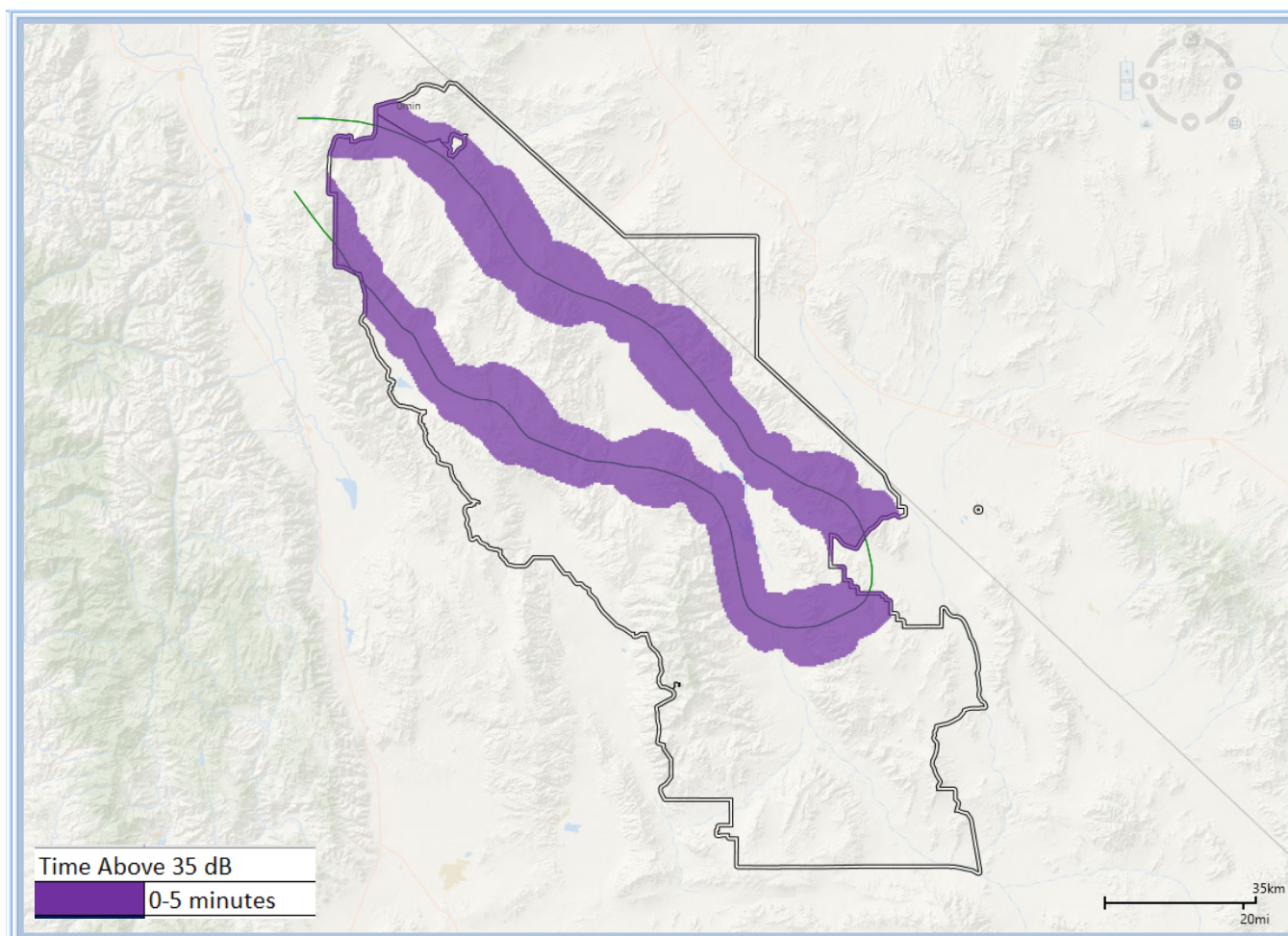


Figure 1. Noise contour results for Time Above 35 dBA

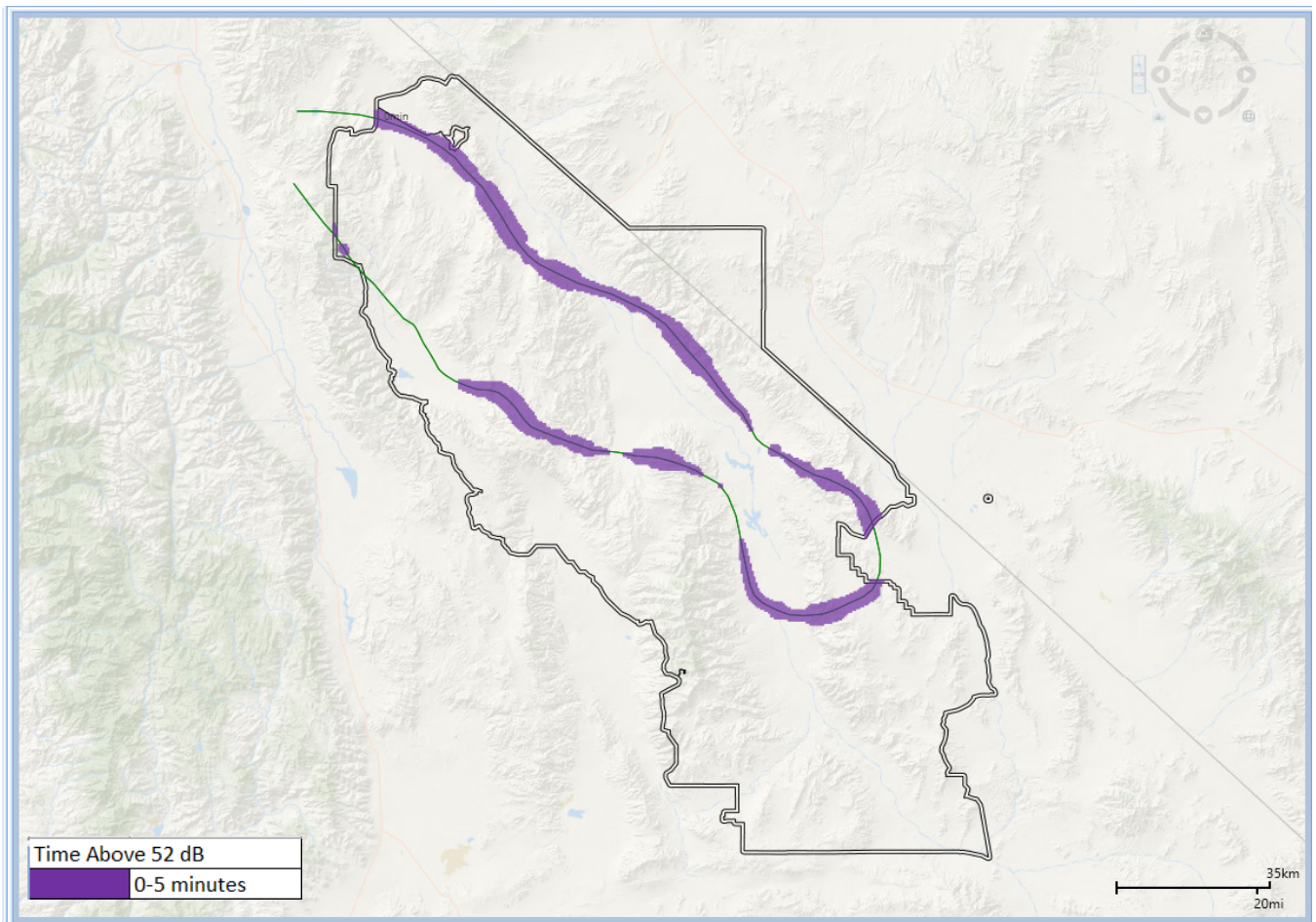


Figure 2. Noise contour results for Time Above 52 dBA

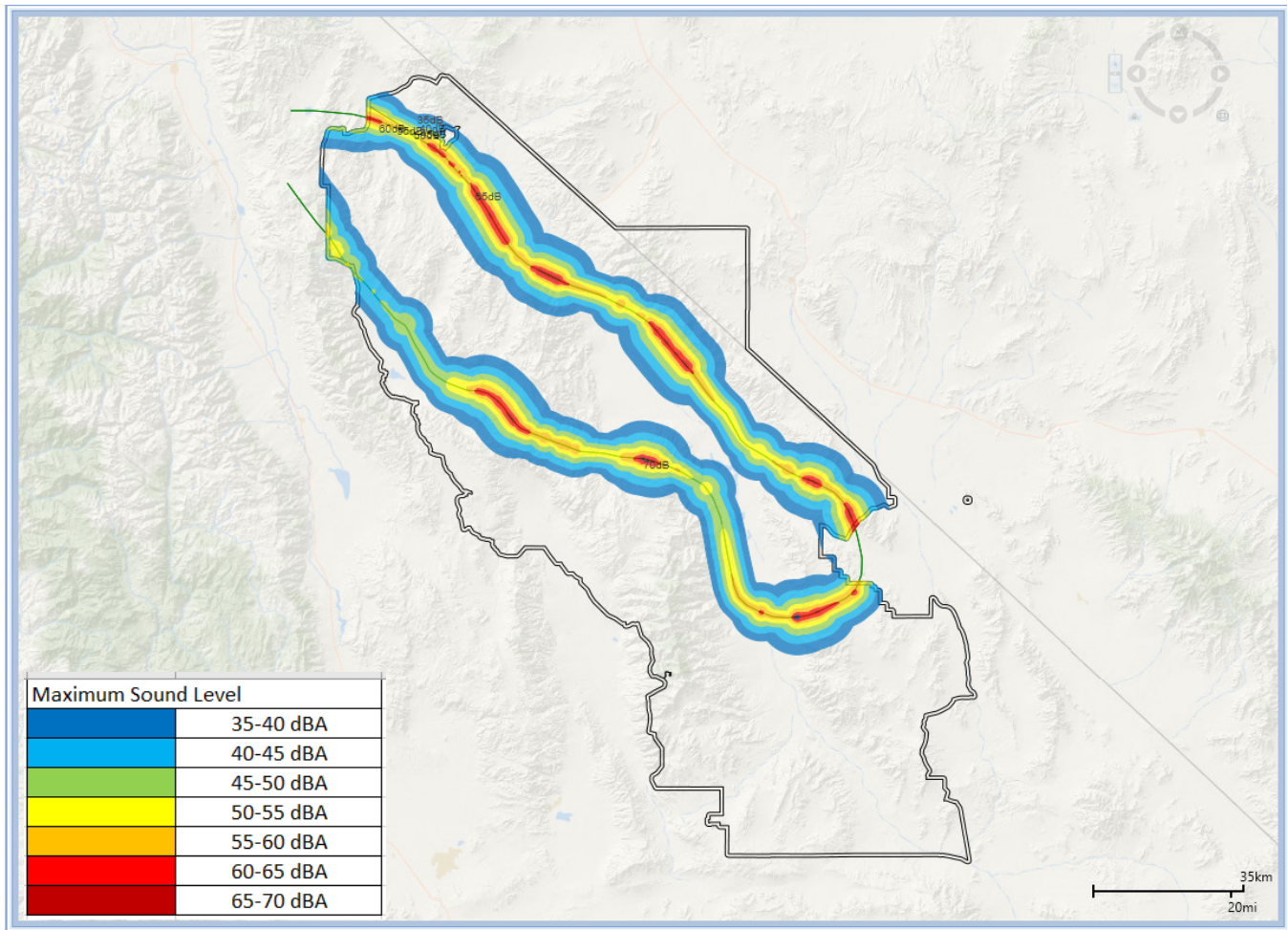


Figure 3. Noise contour results for L_{\max}

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APPENDIX C

Categorical Exclusion Documentation Form



Categorical Exclusion Documentation Form (CE Form)

PROJECT INFORMATION

Project Title: Death Valley National Park Air Tour Management Plan

PEPC Project Number: 103441

Project Type: Categorical Exclusion

Project Location: Inyo County, California and Nye County, Nevada

PROJECT DESCRIPTION

The proposed action is to implement an Air Tour Management Plan (ATMP) for Death Valley 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, two commercial air tours are authorized per year. Table 1 identifies the operators authorized to conduct commercial air tours and annual flight allocations.

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

Commercial Air Tour Operator	Annual Operations	Daily Operations	Aircraft Type
Courtney Aviation, Inc. (Courtney Aviation, Yosemite Flight Tours)	1	1	GA-690-A, GA-690-D
Maverick Helicopters, Inc.	1	1	AS350, EC-130

Commercial Air Tours Routes and Altitudes

Commercial air tours authorized under the ATMP shall be conducted on the routes and altitudes in Figure 1 below for each operator. Altitude expressed in units above ground level (AGL) is a measurement of the distance between the ground surface and the aircraft. Helicopter commercial air tours will fly no lower than 2,000 feet (ft.), while fixed-wing aircraft will fly no lower than 2,500 ft. AGL over the Park or within ½ mile of its boundary. Except 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.

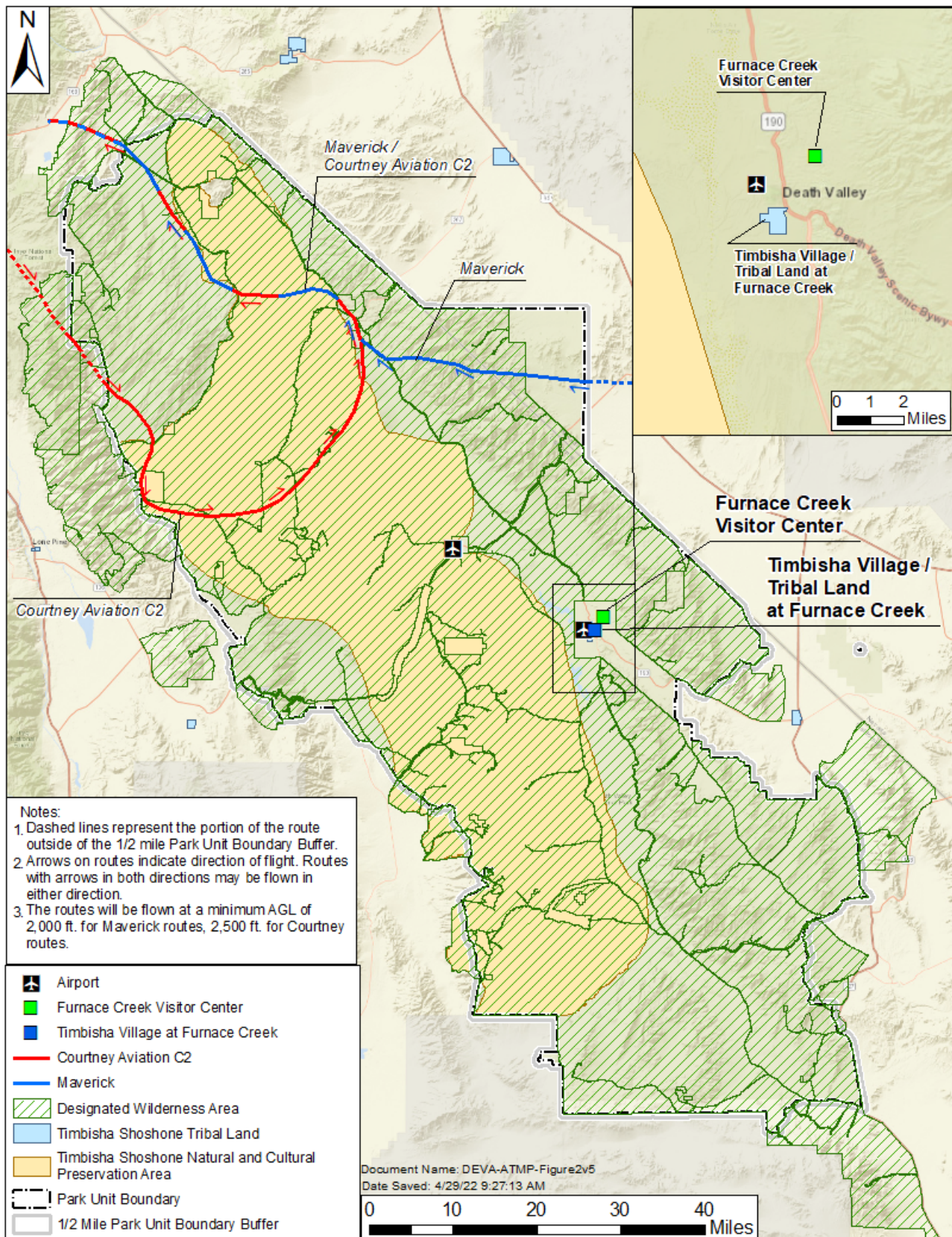


Figure 1. Commercial air tour routes over the Park

Aircraft Type

The aircraft types authorized to be used for commercial air tours are 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 commercial air tours with the new or replacement aircraft.

Day/Time

Except as provided in the section below, “Quiet Technology Incentives,” commercial air tours may operate two hours after sunrise until two hours before sunset, as defined by National Oceanic and Atmospheric Administration (NOAA).¹ Commercial air tours may operate any day of the year, except under circumstances provided in the section below, “Restrictions for Particular Events.”

Restrictions for Particular Events

The NPS can 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 one week notice to the operators in writing 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. Operators that have converted to quiet technology aircraft, or are considering converting to quiet technology aircraft, may request to be allowed to conduct commercial air tours beginning at sunrise or ending at 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.

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* – 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 operators.
- *Operator Training and Education* – Park staff will provide interpretive and education materials at the request of the operators.
- *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 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 over 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.
- *Hovering* – Aircraft hovering in place is prohibited.

¹ Sunrise and sunset data is available from the NOAA Solar Calculator, <https://www.esrl.noaa.gov/gmd/grad/solcalc/>

- *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.³ 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.

Four commercial air tour operators, Courtney Aviation, Inc., Maverick Helicopters, Inc., Papillon Airways, Inc., and Sundance Helicopters, Inc., hold IOA to conduct a combined total of 37 commercial air tours over the Park each year⁴. Commercial air tours over the Park were very infrequent from 2017-2019, with an average of less than one commercial air tour per year, well below IOA. See Table 2, *Reported Commercial Air Tours from 2013-2019*. 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 0.6 commercial air tours per year, or 0.3 commercial air tours per year for each of the two active operators. Rounded up, the existing operations are considered to be two commercial air tours per year over the entire Park, consisting of one commercial air tour per year for each of the two active operators. This number reflects existing commercial air tour 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 generally resulted in atypical commercial air tour operations, which does not represent the conditions in a typical year. In addition, the year 2021 was not included because the planning and impact analysis for the ATMP occurred before 2021 reporting information was collected and analyzed, though including 2020 instead of 2017 would not have changed the three-year average. Although the approved action (IOA) allowed 37 flights per year, the current condition of Park resources and values reflects the impact of an average of two flights per year, which represents existing commercial air tour operations. The ATMP sets a maximum of two flights per year.

² 49 U.S.C. § 40128(c)(2)(A)(i-ii)

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).

⁴ NPATMA states that a national park that has 50 or fewer commercial air tour operations over the park each year is exempt from the requirement to develop an ATMP. 49 U.S.C. § 40128 (a)(5)(A). However, NPATMA also states that if the NPS determines that an ATMP or voluntary agreement is necessary to protect park resources and values or park visitor use and enjoyment, the NPS may withdraw the exemption for that park. *Id.* § 40128 (a)(5)(B). The NPS withdrew the exemption for the Park in a letter to the FAA on September 15, 2015.

The operators report that they may conduct commercial air tours on seven different routes over the Park. Courtney Aviation, Inc. reported five different routes on which it may conduct tours using GA-690-A and GA-690-D fixed-wing aircraft at a minimum altitude of 1,700 ft. AGL. Maverick Helicopters, Inc. reported two different routes on which it may conduct tours using EC-130 and AS350 aircraft (rotorcraft) at a minimum altitude of 1,000 ft AGL.

The ATMP limits the number of commercial air tours that the operators are authorized to conduct over the Park or within ½ mile of its boundary to the existing three-year average of tours conducted on an annual basis from 2017-2019 (rounded up to a maximum of two tours per year). The operators will be allowed to conduct commercial air tours on two consolidated routes, which are modified from an existing operator reported route for the protection of the Park's natural and cultural resources, tribal use, and visitor experience. The ATMP increases the minimum altitude at which each operator is allowed to conduct commercial air tours (2,000 ft. AGL for Maverick Helicopters, Inc. and 2,500 ft. AGL for Courtney Aviation, Inc.) and prohibits aircraft hovering in place. The ATMP restricts the hours during which commercial air tours may be conducted over the Park, beginning two hours after sunrise until two hours before sunset, except as provided for 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 ⁵
Courtney Aviation, Inc.	Fixed-Wing GA-690-A and GA-690-D	4	0	0	0	0	0	0	1	0
Maverick Helicopters, Inc.	Helicopter EC-130 and AS350	15	0	0	0	0	0	0	1	0
Papillon Airways, Inc.	Helicopter AS350, EC-130	12	0	0	0	0	0	0	0	0
Sundance Helicopters, Inc.	Helicopter AS350, EC-130	6	0	0	0	0	0	0	0	No data
Total		37	0	0	0	0	0	0	2	0

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 zero and two commercial air tours per year, or a rounded average of two 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 commercial 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.⁶ 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 routes beyond that permitted by adaptive management or where the impacts have not 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

⁵ Based on unpublished reporting data.

⁶ See 40 CFR § 1508.1(g)

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.

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 approximately the same number of flights that that were flown from 2017-2019 (two commercial air tours per year) on two consolidated routes, which are modified from an existing operator reported route for the protection of the Park's natural and cultural resources, tribal use, and visitor experience. Therefore, there will be no or minimal change in the potential for impacts compared to current conditions. The minimum 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. <i>See</i> 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 accurately 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

		<p>applies to the use or consumption of resources in a way that prohibits another use of the same resource.</p> <p>Commercial air tours do not consume NPS resources.</p> <p>The impacts from commercial air tours affect resources but the resources remain present for others to enjoy or appreciate.</p>
D. Have highly uncertain and potentially significant environmental effects or involve unique or unknown environmental risks?	No	<p>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 approximately same number of flights that was flown from 2017-2019 on two consolidated routes, which are modified from an existing operator reported route for the protection of the Park's natural and cultural resources, tribal use, and visitor experience. Therefore, there will be no or minimal impacts compared to current conditions. As also noted above, the minimum 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. <i>See</i> ESF for more information.</p>
E. Establish a precedent for future action or represent a decision in principle about future actions with potentially significant environmental effects?	No	<p>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.</p>
F. Have a direct relationship to other actions with individually insignificant, but cumulatively significant, environmental effects?	No	<p>The FAA and the NPS qualitatively considered the cumulative impacts of the up to two commercial air tours authorized each year by the ATMP along with impacts from existing activities described in the ESF. In some cases, the noise contribution from other sources may be substantial, such as military overflights. 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 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 continued authorization of two 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, and no significant cumulative</p>

		environmental impacts are likely to result from the ATMP.
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	<p>As noted above, the ATMP authorizes approximately the same number of flights that were flown from 2017-2019 on two consolidated routes, which are modified from an existing operator reported route for the protection of the Park's natural and cultural resources, tribal use, and visitor experience. Therefore, there will be no or minimal change in the potential for impacts compared to current condition. The minimum 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.</p> <p>The authorized number of commercial air tours is not anticipated to adversely affect properties listed on or eligible for listing on the National Register of Historic Places. The FAA, as lead federal agency for Section 106 consultation, and in coordination with the NPS, have consulted with the State 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 Nevada and California SHPOs concurred with the finding of no adverse effect, the former in writing and the latter verbally. The THPO for the Fort Independence Indian Community of Paiute Indians of the Fort Independence Reservation, California, responded via email on June 21, 2022, by providing general comments about aviation safety and expressing support for consultation with the Timbisha Shoshone Tribe; the email was silent as to concurrence or an objection. The U.S. Army point of contact for the National Training Center and Fort Irwin sent an email, dated July 12, 2022, concurring with FAA's finding of effect. No other consulting parties responded to the Section 106 determination. <i>See</i> ESF for more information.</p>
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	<p>As noted above, the ATMP authorizes approximately the same number of flights that was flown from 2017-2019 on two consolidated routes, which are modified from an existing operator reported route for the protection of the Park's natural and cultural resources, tribal use, and visitor experience. Therefore, there will be no or minimal change in the potential for impacts compared to current conditions. The minimum altitude requirements and time of day restrictions further</p>

		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. After having informal discussions with the U.S. Fish and Wildlife Service, the NPS has determined the ATMP will have <i>No Effect</i> on listed species. Therefore, there is no potential for significant impacts to any listed species associated with the commercial air tour activity proposed in the ATMP. <i>See</i> 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. <i>See</i> 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. <i>See</i> 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. <i>See</i> 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 introduction, growth, or expansion of the range of such species (Federal Noxious Weed Control Act and Executive Order 13112)?	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.

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.

Signature

MICHAEL
REYNOLDS

 Digitally signed by MICHAEL
REYNOLDS
Date: 2022.08.11 08:02:07 -07'00'

Mike L. Reynolds
Superintendent
Death Valley 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 Death Valley 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 Death Valley 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

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.

consulted with Officials with Jurisdiction of 4(f) resources in the study area. Further information about those consultations is included in Exhibit 2.

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 Death Valley 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: **TAMARA A SWANN** Digitally signed by
TAMARA A SWANN
Date: 2022.08.12
09:38:37 -07'00' Date: _____

Tamara A. Swann, Regional Administrator (A)
Western Pacific Region
Federal Aviation Administration

EXHIBIT 1

Documentation of FAA Extraordinary Circumstances Analysis

**The FAA's Extraordinary Circumstances
For Death Valley 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 FAA, in coordination with the NPS, consulted with the California and Nevada State Historic Preservation Offices, 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. 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 two tours per year and requires the operators to fly on two consolidated routes, which are modified from an existing operator reported route for the protection of the Park's natural and cultural resources, tribal use, and visitor experience. Overall, noise impacts associated with commercial air tours over the Park are not expected to measurably change, since the ATMP authorizes approximately the same number of flights per year as the average number of flights from 2017-2019 (two flights) and requires each operator to fly on one of two consolidated routes, which are modified from an existing operator reported route, and maintain increased altitudes as compared to 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 approximately the same as the average number of flights from 2017-2019, and routes have been modified from an existing operator-reported route. After consulting with officials with jurisdiction over appropriate 4(f) resources, the FAA has

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
			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?		✓	<p>The ATMP limits the number of commercial air tours to two tours per year and requires commercial air tours to fly on two consolidated routes, which are modified from an existing operator reported route for the protection of the Park's visitor experience. Therefore, impacts to viewsheds will be similar to impacts currently occurring because the number of authorized flights under the ATMP will be approximately the same as the average number of flights from 2017-2019 and routes will be consolidated as compared to existing conditions. Furthermore, since altitudes will increase 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.</p> <p>The FAA and NPS determined the ATMP will have <i>No Effect</i> on listed species or their critical habitat. See No Effect determination memo.</p>
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 92% of the Park is designated wilderness. Because commercial air tours do not land in wilderness or parks, the undeveloped quality of wilderness will be maintained. Because the ATMP authorizes approximately the same number of commercial air tours as the average number of flights from 2017-2019 on consolidated routes which are modified from an existing operator reported

Extraordinary Circumstance	Yes	No	Notes
			route, impacts to solitude and the natural quality of 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 or eligible wild and scenic rivers are located within the Park or its ½-mile boundary.
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 developments 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 approximately the same number of flights per year as the average number of flights from 2017-2019 (two flights) on two consolidated routes, which are modified from an existing operator reported route for the protection of the Park's natural and cultural resources, tribal use, and visitor experience, and requires commercial air tours 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 military overflights. In those cases, the addition of air tour noise from two flights per year is such a small contribution of noise overall that it is unlikely they will result in noticeable or meaningful change in the 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 two 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 Death Valley National Park

Section 4(f) Analysis in FAA Adoption Document

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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 Death Valley 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 commercial air tour routes over the Park and a ½ mile outside the boundary of the Park, plus an additional five-mile buffer extending from either side of the centerline of the air tour routes (the buffer is a total of ten miles wide).

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.

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 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 Bureau of Land Management and U.S. Forest Service. Each resource that intersected the study area (i.e., some portion of the property occurs within the buffer around the routes) was included in the Section 4(f) analysis.

Table 1 lists Section 4(f) historic sites, Table 2 shows Section 4(f) parks and recreational areas, and Table 3 shows Section 4(f) wildlife and waterfowl refuges identified in the study area.⁵ Figure 1 shows a map of all Section 4(f) resources within the study area.⁶

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

Property Name	Official(s) with Jurisdiction	Property Type	Eligibility Status	Significant Characteristics
Death Valley Scotty Historic District	NPS, State Historic Preservation Officer (SHPO)	District	Eligible	The Death Valley Scotty Historic District is an area of Regional significance in the fields of 20 th century architecture, folklore and social history, and of local significance in the fields of archeology, art and invention. The Scotty's Castle complex serves as a reminder of the excesses of mining promotion during the early 20 th century, the frontier romanticism connected with it, and the conspicuous consumption practiced by the wealthy during the 1920's. The architecture typifies their values.
Ubehebe Crater/Tumpingwosa TCP	NPS, SHPO	Traditional Cultural Property (TCP)	Eligible	The Timbisha Shoshone and NPS park staff have informed FAA that there are TCPs present within the APE.
Saline Valley Warm Springs TCP	NPS, SHPO	TCP	Eligible	The Timbisha Shoshone and NPS park staff have informed FAA that there are TCPs present within the APE.
Grapevine Ranger Station Historic District	NPS, SHPO	District	Eligible	The potential historic district is associated with significant events in history (Criterion A) and the buildings embody the

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

⁶ In order to protect resources and confidentiality, Traditional Cultural Properties, archeological sites, and other sensitive sites are not displayed on Figure 1.

Property Name	Official(s) with Jurisdiction	Property Type	Eligibility Status	Significant Characteristics
				distinctive characteristics of NPS styles and methods of construction during the 1960s (Criterion C).
Grapevine Canyon Archeological District	NPS, SHPO	District	Eligible	The Park is estimated to contain approximately 1,400 archeological sites, most of them prehistoric. Historic archeological sites in the Park are largely associated with transportation corridors, water sources, and mining and ranching operations of the late 19th and early 20th centuries.
Mesquite Springs Campground	NPS, SHPO	Site	Eligible	Significant for its association to the Civilian Conservation Corps (CCC) crews, who were housed in 3 permanent camps at Wildrose, Funeral Range and Cow Creek and spike camps at Mesquite Springs, Emigrant Canyon, Daylight Pass and Butte Valley.
Saline Valley Warm Springs Historic District	NPS, SHPO	District	Eligible	In 2014, the National Park Service completed a Determination of Eligibility (DOE). The DOE recommends that the area of historic significance for the recreational users is significant at the local level under Criterion A for recreation as a campground established around a hot springs site in use by Euro-Americans since 1955. Additionally, the DOE recommends that the area of historic significance is significant for social history
North Highway/Bonnie Clare Road	NPS, SHPO	Linear Feature	Eligible	The road qualifies under NRHP Criteria A and C for its association with significant events in local history (Criterion A) and embodiment of distinctive characteristics that represent distinctive design and artistic values (Criterion C). The road is associated with the early Mission 66 NPS improvement

Property Name	Official(s) with Jurisdiction	Property Type	Eligibility Status	Significant Characteristics
				program; those improvements represent a formalization of the road as a major circulation feature of the park and the NPS's continued philosophy of unobtrusive development on the landscape.
Ubehebe Crater Road	NPS, SHPO	Linear Feature	Eligible	The road qualifies under NRHP Criteria A and C for its association with significant events in local history (Criterion A) and embodiment of distinctive characteristics that represent distinctive design and artistic values (Criterion C). The road is associated with the early Mission 66 NPS improvement program; those improvements represent a formalization of the road as a major circulation feature of the park and the NPS's continued philosophy of unobtrusive development on the landscape.
Leadfield	NPS, SHPO	District	Listed	Located in Titus Canyon, this mining town began in 1925 as a promotion scheme based on spurious claims. C.C. Julian advertised the town, making exaggerated claims. His advertising posters showed steamboats navigating the Amargosa River to Leadfield, ignoring the fact that the Amargosa River is dry much of the time and does not run within twenty miles of Leadfield. The mining town sparked to life but briefly, like a flame from a damp match. Julian disappeared and the inhabitants soon became disillusioned and quickly drifted away. The significance of the site lies in the fact it was an example of one of the get-rich-quick schemes of the 1920's.

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

Property Name	Official(s) with Jurisdiction	Description	Approximate Size
Death Valley National Park	NPS	National park that straddles eastern California and Nevada known for Titus Canyon, the Badwater Basin salt flats, and North America's lowest point.	3,373,063 acres
Inyo National Forest	US Forest Service	National Forest	1.8 million acres (3471 acres in study area)
Southern Nevada Extensive RMA	Bureau of Land Management	Extensive Recreation Management Area	2.5 million acres (526 acres in study area)

Table 3. Section 4(f) wildlife and waterfowl refuges in the study area

Property Name	Official(s) with Jurisdiction	Description	Approximate Size
Burro Sanctuary	California Department of Fish and Wildlife	Refuge established in Section 10930 of the California Fish and Game Code	3.9 million acres (549,000 acres in study area)
Saline Valley Ecological Reserve	California Department of Fish and Wildlife	Ecological Reserve	528 acres (entirely within study area)

Section 4(f) Study Area and Properties for ATMP at Death Valley National Park

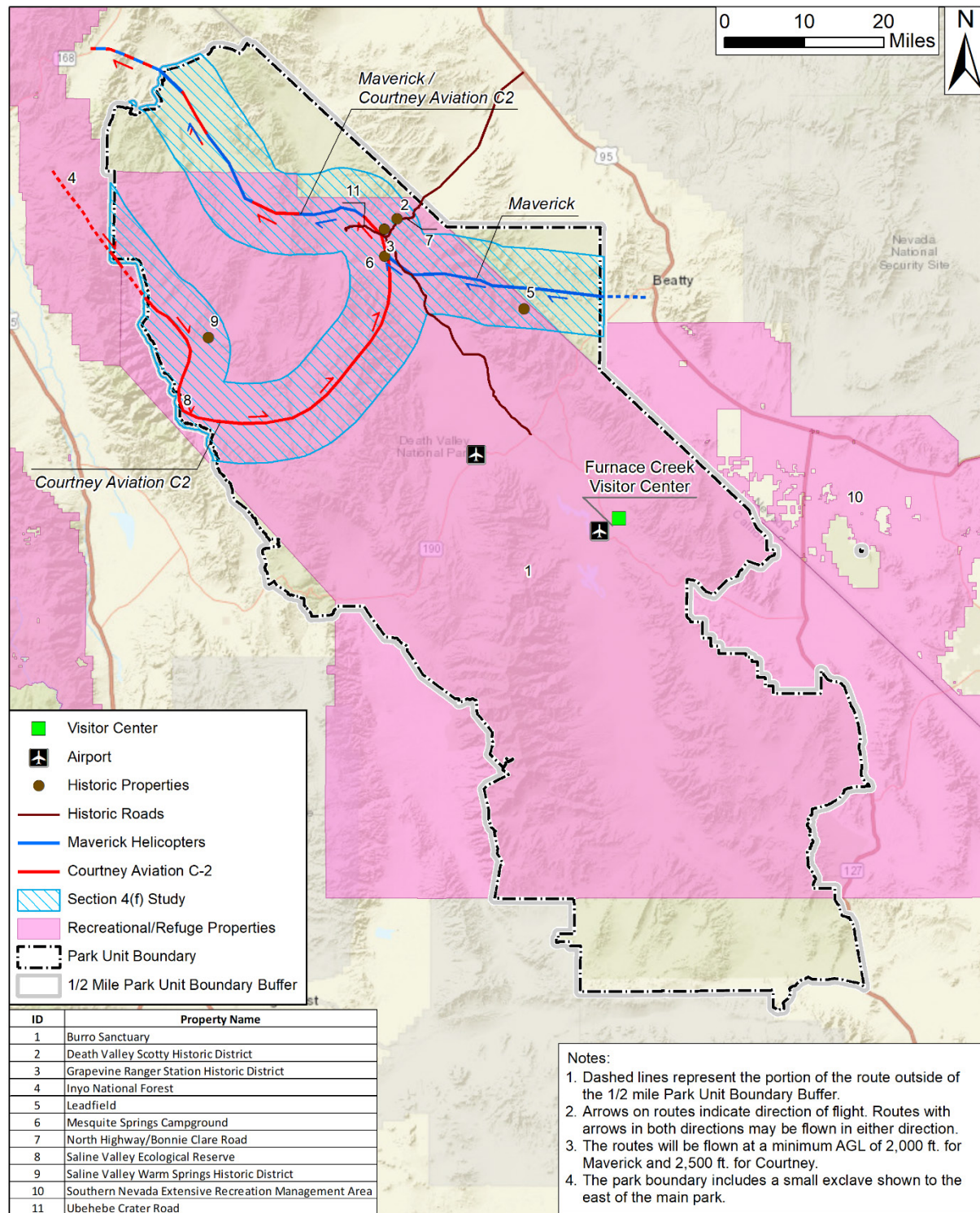


Figure 1. Map of Section 4(f) resources at the Park; includes resources entirely and partially within the Park study area.

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 4.

Table 4. Metrics used for the noise analysis.

Metric	Relevance and citation
Day-night average sound level, DNL	<p>The logarithmic average of sound levels, in dBA, over a 24-hour day DNL takes into account the increased sensitivity to noise at night by including a ten dB penalty between 10 p.m. and 7 a.m. local time.</p> <p>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</p>
Equivalent sound level, $L_{Aeq, 12\text{ hr}}$	<p>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.</p> <p>Note: Both $L_{Aeq, 12\text{ hr}}$ and DNL characterize:</p> <ul style="list-style-type: none">• Increases in both the loudness and duration of noise events• The number of noise events during specific time period (12 hours for $L_{Aeq, 12\text{ hr}}$ and 24-hours for DNL) <p>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, $L_{Aeq, 12\text{ hr}}$ will be three dB higher than DNL.</p>

⁷ 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 ⁸	<p>The amount of time (in minutes) that aircraft sound levels are above a given threshold (i.e., 35 dBA)</p> <p>In quiet settings, outdoor sound levels exceeding 35 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).</p>
Time Above 52 dBA	<p>The amount of time (in minutes) that aircraft sound levels are above a given threshold (i.e., 52 dBA)</p> <p>This metric represents the level at which one may reasonably expect interference with Park interpretive programs. At this background sound level (52 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</p>

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.¹⁰ A peak day has therefore been used as a conservative representation of assessment of AAD conditions required by FAA policy.

This approach 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 (two annual commercial air tours on 2 different routes) and total flight miles over the Park.

⁸ dBA (A-weighted decibels): Sound is measured on a logarithmic scale relative to the reference sound pressure for atmospheric sources, 20 μ Pa. 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.

¹⁰ 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 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 two consolidated routes, which are modified from an existing operator reported route for the protection of the Park's natural and cultural resources, tribal use, and visitor experience. The ATMP restricts the minimum altitude that the operators will be allowed to conduct commercial air tours to 2,000 ft. AGL for helicopter tours and 2,500 ft. AGL for fixed-wing aircraft. For the Park, the 90th percentile day was identified as one flight on the Courtney Aviation, Inc. PML route using a Twin Commander AC-690 aircraft.

The noise was modeled for the acoustic indicators in Table 4 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.¹¹ Under the ATMP, there are no changes to the routes and no changes to the number of commercial air tours per year as compared with 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 as the average number of flights from 2017 to 2019, evaluation of the 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 5 minutes in areas directly below and adjacent to routes (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) will occur for less than five minutes in several small areas directly beneath and adjacent to the routes. Section 4(f) resources which fall under the 52 dBA noise contour include: Death Valley Scotty Historic District, Inyo National Forest, and Saline Valley Ecological Reserve (see Environmental Screening Form, Figure 2).

In addition, the ATMP limits the operation of commercial air tours to between two hours after sunrise until two hours before sunset. Operators that have converted to quiet technology aircraft, or are considering converting to quiet technology aircraft, may request to be allowed to conduct air tours beginning at sunrise or ending at sunset on all days that flights are authorized. These restrictions provide times when visitors seeking solitude may experience the Section 4(f) resources without disruptions from commercial air tours. The ATMP increases the minimum altitudes for fixed-wing aircraft from 1,700 ft. AGL to 2,500 ft AGL, and for helicopters from 1,000 ft AGL to 2,000 ft AGL, which will reduce the maximum noise levels directly below the air tour routes. These changes from existing operations and its

¹¹ Per FAA Order 1050.1F, the FAA refers to noise changes meeting the following criteria as "reportable": for DNL 65 dB and higher, \pm DNL 1.5 dB; for DNL 60 dB to <65 dB, \pm DNL 3 dB; for DNL 45 dB to <60 dB, \pm DNL 5 dB. See also 1050.1F Desk Reference, Section 11.3.

effect on the current use of 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 of 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 a constructive use of Section 4(f) resources in the study area. This Section 4(f) determination is 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 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.^{12, 13} 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.

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 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.

The ATMP limits the number of commercial air tours to two flights per year and limits the routes to two consolidated routes, which are modified from an existing operator reported route for the protection of the Park's natural and cultural resources, tribal use, and visitor experience. Based on the three-year average of reporting data (2017-2019), under current conditions, people in the park are not likely to see more than 1 commercial air tour per day. Since the ATMP only authorizes two commercial air tours each year, the vast majority of the year will be free of air tour activity.

¹² 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.

¹³ 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.

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 ATMP limits the routes to two consolidated routes, which are modified from an existing operator reported route for the protection of the Park's natural and cultural resources, tribal use, and visitor experience. 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 (two flights per year) would be the same as or less than the average number of flights from 2017 to 2019, and the ATMP limits the routes to two consolidated routes, which are modified from an existing operator reported route for the protection of the Park's natural and cultural resources, tribal use, and visitor experience. 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 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 June 28, 2022, FAA sent a letter to the U.S. Forest Service, Bureau of Land Management and California Department of Fish and Wildlife 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-ups were sent on July 5, 2022. No responses were received.

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

June 23, 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 Death Valley National Park

Angelita Bulletts
Bureau of Land Management
4701 North Torrey Pines Dr.
Las Vegas, NV 89130

Dear Angelita Bulletts:

The Federal Aviation Administration (FAA), in cooperation with the National Park Service (NPS), is developing an Air Tour Management Plan (ATMP) for the Death Valley 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 the Southern Nevada Extensive Recreation Management Area, 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 issued 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 granted the petition and

ordered the agencies to file a proposed schedule for bringing twenty-three eligible parks, including Death Valley 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 Death Valley 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 37 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 two (2) flights. 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.

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.

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

- A maximum of two commercial air tours are authorized per year on the routes depicted in **Attachment A**;
- The helicopter air tours will fly no lower than 2,000 ft. above ground level (AGL) and fixed-wing aircraft no lower than 2,500 ft. AGL when over the Park or within ½ mile of its boundary;
- The aircraft types authorized for the commercial air tours includes: GA-690-A, GA-690-D, AS350, and EC-130. Any new or replacement aircraft must not exceed the noise level produced by the aircraft being replaced;
- The air tours may operate between two hours after sunrise until two hours before sunset, except as provided by the quiet technology incentive. The NPS can establish temporary no-fly periods that apply to commercial air tours for special events or planned Park management.
- The operators are 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;
- Park staff will provide interpretive and education materials at the request of the operators. Any materials provided by the Park will include information that the 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;
- At the request of either of the agencies, the Park staff, the FAA Flight Standards District Office (FSDO), and all operators will meet to discuss the implementation of the ATMP and any amendments or other changes to the ATMP; and
- 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.

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 commercial air tour routes over the Park and a ½ mile outside the boundary of the Park, plus an additional five-mile buffer extending from either side of the centerline of the air tour routes (the buffer is a total of ten miles wide). 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 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 buffer around the routes) 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.

Metric	Relevance and citation
Day-night average sound level, DNL	<p>The logarithmic average of sound levels, in dBA, over a 24-hour day DNL takes into account the increased sensitivity to noise at night by including a ten dB penalty between 10 p.m. and 7 a.m. local time.</p> <p>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.²</p>
Equivalent sound level, $L_{Aeq, 12\text{ hr}}$	<p>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.</p> <p>Note: Both $L_{Aeq, 12\text{ hr}}$ and DNL and characterize:</p> <ul style="list-style-type: none"> Increases in both the loudness and duration of noise events The number of noise events during specific time period (12 hours for $L_{Aeq, 12\text{ hr}}$ and 24-hours for DNL) <p>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, $L_{Aeq, 12\text{ hr}}$ will be three dB higher than DNL.</p>
Maximum sound level, L_{max}	<p>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.</p>

² FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures*, Exhibit 4-1

Time Above 35 dBA ³	<p>The amount of time (in minutes) that aircraft sound levels are above a given threshold (i.e., 35 dBA)</p> <p>In quiet settings, outdoor sound levels exceeding 35 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).</p>
Time Above 52 dBA	<p>The amount of time (in minutes) that aircraft sound levels are above a given threshold (i.e., 52 dBA)</p> <p>This metric represents the level at which one may reasonably expect interference with Park interpretive programs. At this background sound level (52 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.⁴</p>

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 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. 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

³ 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.

⁴ Environmental Protection Agency. Information on Levels of Noise Requisite to Protect the Public Health and Welfare with an Adequate Margin of Safety, March 1974.

tour activity at the Park. For the Park, the 90th percentile day was identified as one flight on the Courtney Aviation, Inc. PML route using a Twin Commander AC-690 aircraft.⁵

The noise was modeled for the acoustic indicators in the table above 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," as described in the table above, or "reportable" under FAA's policy for the NEPA.⁶ Under the ATMP, there are two consolidated routes, which are modified from an existing operator reported route for the protection of the Park's natural and cultural resources, tribal use, and visitor experience and no changes to the number of commercial air tours per year as compared with 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 as the average number of flights from 2017 to 2019, evaluation of the 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 five minutes in areas directly below and adjacent to routes.
- On days when commercial air tours will occur, noise levels above 52 dBA (which is associated with speech interference) will occur for less than five minutes in several small areas directly beneath and adjacent to the routes. Southern Nevada Extensive Recreation Management Area does not fall under the 52 dBA contour.

In addition, the ATMP limits the operation of commercial air tours to between two hours after sunrise until two hours before sunset. Operators that have converted to quiet technology aircraft, or are considering converting to quiet technology aircraft, may request to be allowed to conduct air tours beginning at sunrise or ending at sunset on all days that flights are authorized. These restrictions provide times when visitors seeking solitude may experience the Section 4(f) resources without disruptions from commercial air tours. This change from existing operations and its effect on the current use of 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 and rotorcraft overflights is

⁵ Note that although the PML route is an operator reported route flown under existing conditions, the ATMP does not permit commercial air tour operators to fly over the Park or its ½ mile boundary using this route. Rather, the ATMP authorizes commercial air tours to fly on two consolidated routes, which are modified from an existing operator reported route. The consolidated routes in the ATMP fly over the Park and ½ mile boundary for fewer flight miles at similar altitude than the modeled PML route, which would reduce the spatial footprint of the noise effects of the ATMP compared to that of the modeled route. Therefore, although the footprint of the noise contours for routes authorized by the ATMP may differ from those reflected in the noise analysis, the modeled route represents a conservative estimate of potential noise effects, and actual noise effects of the ATMP are expected to be similar or slightly decrease compared to those reflected in the noise modeling analysis.

⁶ 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.

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.

As a result, FAA concludes there would be no substantial impairment of Section 4(f) resources in the study area from noise-related and vibrational 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) resource. Likewise, vibrational impacts from air tour overflights would be minimal. This all supports the FAA's determination that implementation of the Proposed Action would not constitute a constructive use of Section 4(f) resources in the study area. This Section 4(f) determination is 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 the same. 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.

The ATMP limits the number of commercial air tours to two flights per year and limits the routes to two consolidated routes, which are modified from an existing operator reported route for the protection of the Park's natural and cultural resources, tribal use, and visitor experience. Based on the three-year average of reporting data (2017-2019), under current conditions, people in the park are not likely to see more than one commercial air tours per day. Since the ATMP only authorizes two commercial air tours each year, the vast majority of the year will be free of air tour activity.

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 will remain 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 to 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 the Southern Nevada Extensive Recreation Management Area. 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**

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M ELMORE
Date: 2022.06.28
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Eric Elmore
Senior Policy Advisor
Office of Environment and Energy
Federal Aviation Administration

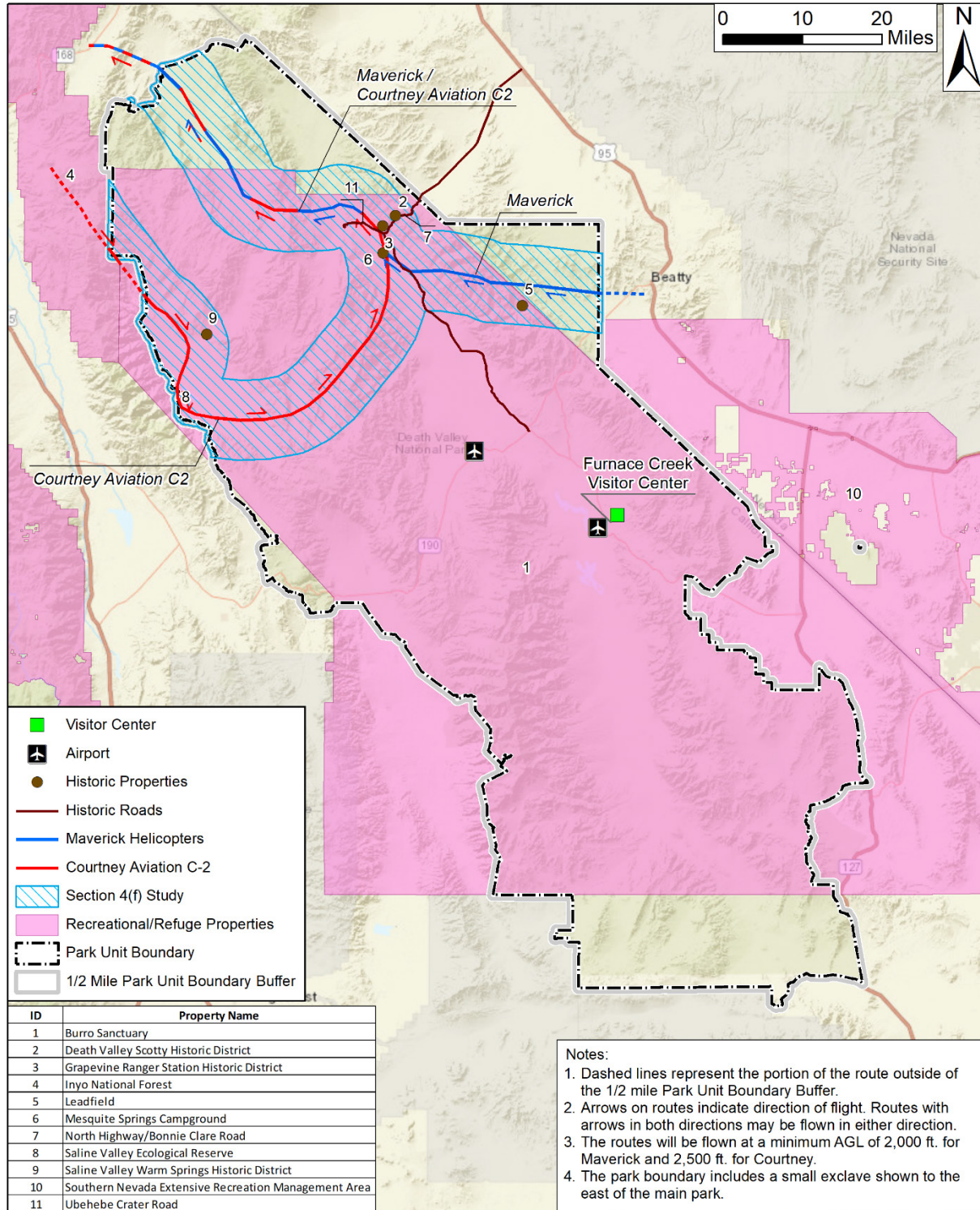
Attachments

- 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 Death Valley National Park





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

June 23, 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 Death Valley National Park

Heidi Calvert
California Department of Fish and Wildlife
3602 Inland Empire Blvd, Suite C-220
Ontario, CA 91764

Dear Heidi Calvert:

The Federal Aviation Administration (FAA), in cooperation with the National Park Service (NPS), is developing an Air Tour Management Plan (ATMP) for the Death Valley 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 Saline Valley Ecological Reserve and the Burro Sanctuary which are protected properties 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 issued 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 granted the petition and

ordered the agencies to file a proposed schedule for bringing twenty-three eligible parks, including Death Valley 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.

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“... 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 Death Valley 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 37 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 two (2) flights. 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.

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.

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

- A maximum of two commercial air tours are authorized per year on the routes depicted in **Attachment A**;
- The helicopter air tours will fly no lower than 2,000 ft. above ground level (AGL) and fixed-wing aircraft no lower than 2,500 ft. AGL when over the Park or within ½ mile of its boundary;
- The aircraft types authorized for the commercial air tours includes: GA-690-A, GA-690-D, AS350, and EC-130. Any new or replacement aircraft must not exceed the noise level produced by the aircraft being replaced;
- The air tours may operate between two hours after sunrise until two hours before sunset, except as provided by the quiet technology incentive. The NPS can establish temporary no-fly periods that apply to commercial air tours for special events or planned Park management.
- The operators are 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;
- Park staff will provide interpretive and education materials at the request of the operators. Any materials provided by the Park will include information that the 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;
- At the request of either of the agencies, the Park staff, the FAA Flight Standards District Office (FSDO), and all operators will meet to discuss the implementation of the ATMP and any amendments or other changes to the ATMP; and
- 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.

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 commercial air tour routes over the Park and a ½ mile outside the boundary of the Park, plus an additional five-mile buffer extending from either side of the centerline of the air tour routes (the buffer is a total of ten miles wide). 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 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 buffer around the routes) 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.

Metric	Relevance and citation
Day-night average sound level, DNL	<p>The logarithmic average of sound levels, in dBA, over a 24-hour day DNL takes into account the increased sensitivity to noise at night by including a ten dB penalty between 10 p.m. and 7 a.m. local time.</p> <p>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.²</p>
Equivalent sound level, $L_{Aeq, 12\text{ hr}}$	<p>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.</p> <p>Note: Both $L_{Aeq, 12\text{ hr}}$ and DNL and characterize:</p> <ul style="list-style-type: none"> Increases in both the loudness and duration of noise events The number of noise events during specific time period (12 hours for $L_{Aeq, 12\text{ hr}}$ and 24-hours for DNL) <p>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, $L_{Aeq, 12\text{ hr}}$ will be three dB higher than DNL.</p>
Maximum sound level, L_{max}	<p>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.</p>

² FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures*, Exhibit 4-1

Time Above 35 dBA ³	<p>The amount of time (in minutes) that aircraft sound levels are above a given threshold (i.e., 35 dBA)</p> <p>In quiet settings, outdoor sound levels exceeding 35 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).</p>
Time Above 52 dBA	<p>The amount of time (in minutes) that aircraft sound levels are above a given threshold (i.e., 52 dBA)</p> <p>This metric represents the level at which one may reasonably expect interference with Park interpretive programs. At this background sound level (52 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.⁴</p>

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 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. 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

³ 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.

⁴ Environmental Protection Agency. Information on Levels of Noise Requisite to Protect the Public Health and Welfare with an Adequate Margin of Safety, March 1974.

tour activity at the Park. For the Park, the 90th percentile day was identified as one flight on the Courtney Aviation, Inc. PML route using a Twin Commander AC-690 aircraft.⁵

The noise was modeled for the acoustic indicators in the table above 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," as described in the table above, or "reportable" under FAA's policy for the NEPA.⁶ Under the ATMP, there are two consolidated routes, which are modified from an existing operator reported route for the protection of the Park's natural and cultural resources, tribal use, and visitor experience and no changes to the number of commercial air tours per year as compared with 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 as the average number of flights from 2017 to 2019, evaluation of the 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 five minutes in areas directly below and adjacent to routes.
- On days when commercial air tours will occur, noise levels above 52 dBA (which is associated with speech interference) will occur for less than five minutes in several small areas directly beneath and adjacent to the routes. The Burro Sanctuary falls under the 52 dBA contour. Saline Valley Ecological Reserve does not fall under the 52 dBA contour.

In addition, the ATMP limits the operation of commercial air tours to between two hours after sunrise until two hours before sunset. Operators that have converted to quiet technology aircraft, or are considering converting to quiet technology aircraft, may request to be allowed to conduct air tours beginning at sunrise or ending at sunset on all days that flights are authorized. These restrictions provide times when visitors seeking solitude may experience the Section 4(f) resources without disruptions from commercial air tours. This change from existing operations and its effect on the current use of 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 and rotorcraft overflights is

⁵ Note that although the PML route is an operator reported route flown under existing conditions, the ATMP does not permit commercial air tour operators to fly over the Park or its ½ mile boundary using this route. Rather, the ATMP authorizes commercial air tours to fly on two consolidated routes, which are modified from an existing operator reported route. The consolidated routes in the ATMP fly over the Park and ½ mile boundary for fewer flight miles at similar altitude than the modeled PML route, which would reduce the spatial footprint of the noise effects of the ATMP compared to that of the modeled route. Therefore, although the footprint of the noise contours for routes authorized by the ATMP may differ from those reflected in the noise analysis, the modeled route represents a conservative estimate of potential noise effects, and actual noise effects of the ATMP are expected to be similar or slightly decrease compared to those reflected in the noise modeling analysis.

⁶ 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.

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.

As a result, FAA concludes there would be no substantial impairment of Section 4(f) resources in the study area from noise-related and vibrational 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) resource. Likewise, vibrational impacts from air tour overflights would be minimal. This all supports the FAA's determination that implementation of the Proposed Action would not constitute a constructive use of Section 4(f) resources in the study area. This Section 4(f) determination is 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 the same. 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.

The ATMP limits the number of commercial air tours to two flights per year and limits the routes to two consolidated routes, which are modified from an existing operator reported route for the protection of the Park's natural and cultural resources, tribal use, and visitor experience. Based on the three-year average of reporting data (2017-2019), under current conditions, people in the park are not likely to see more than one commercial air tour per day. Since the ATMP only authorizes two commercial air tours each year, the vast majority of the year will be free of air tour activity.

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 will remain 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 to 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 Saline Valley Ecological Reserve and the Burro Sanctuary. 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**

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

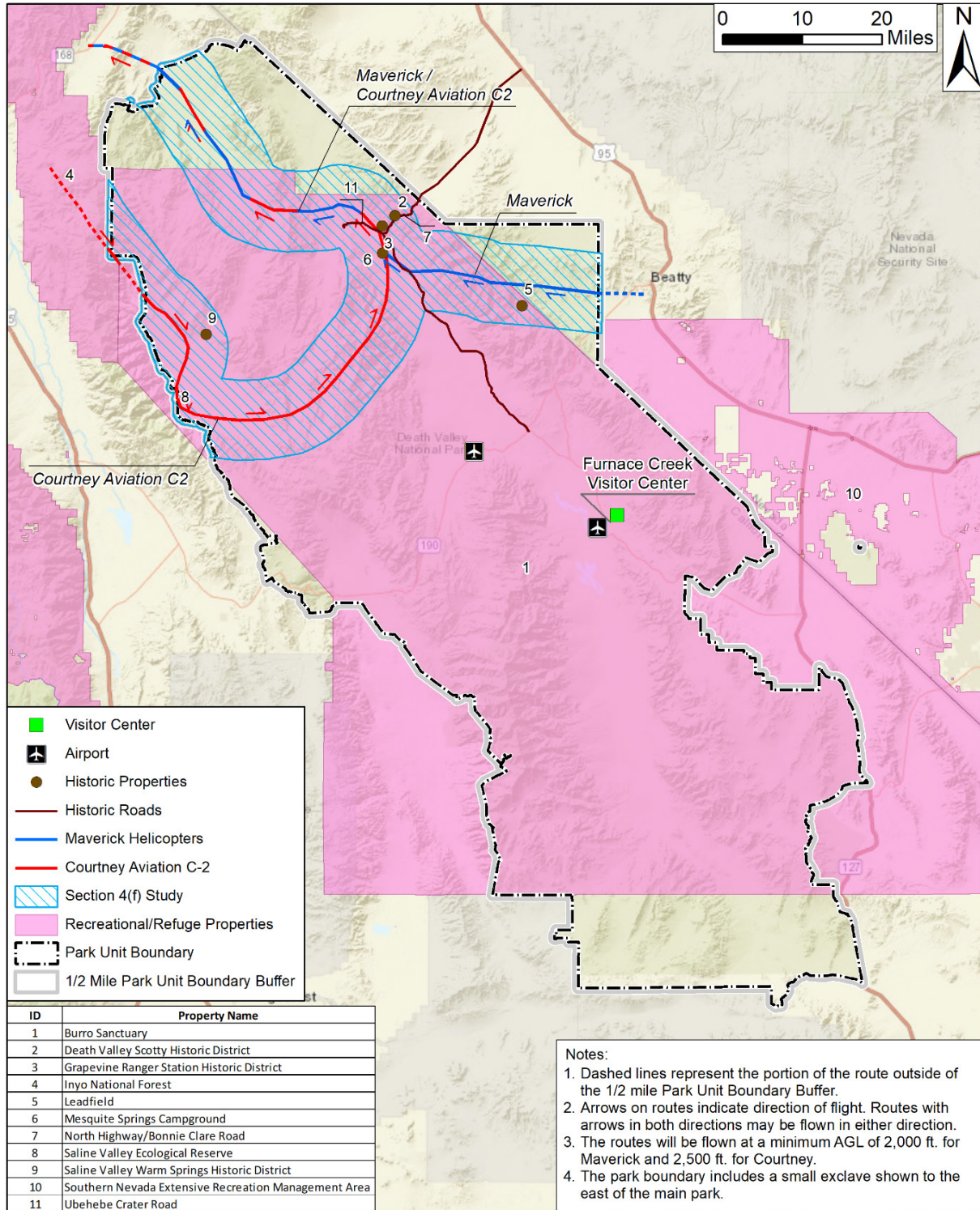
Attachments

- 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 Death Valley National Park





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

NATIONAL PARKS AIR TOUR MANAGEMENT PROGRAM

June 23, 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 Death Valley National Park

Lesley Yen
US Forest Service
351 Pacu Lane, Suite 200
Bishop, CA 93514

Dear Lesley Yen:

The Federal Aviation Administration (FAA), in cooperation with the National Park Service (NPS), is developing an Air Tour Management Plan (ATMP) for the Death Valley 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 Inyo 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 issued 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 Death Valley 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 Death Valley 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 37 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 two (2) flights. 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.

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.

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

- A maximum of two commercial air tours are authorized per year on the routes depicted in **Attachment A**;
- The helicopter air tours will fly no lower than 2,000 ft. above ground level (AGL) and fixed-wing aircraft no lower than 2,500 ft. AGL when over the Park or within ½ mile of its boundary;
- The aircraft types authorized for the commercial air tours includes: GA-690-A, GA-690-D, AS350, and EC-130. Any new or replacement aircraft must not exceed the noise level produced by the aircraft being replaced;
- The air tours may operate between two hours after sunrise until two hours before sunset, except as provided by the quiet technology incentive. The NPS can establish temporary no-fly periods that apply to commercial air tours for special events or planned Park management.
- The operators are 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;
- Park staff will provide interpretive and education materials at the request of the operators. Any materials provided by the Park will include information that the 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;
- At the request of either of the agencies, the Park staff, the FAA Flight Standards District Office (FSDO), and all operators will meet to discuss the implementation of the ATMP and any amendments or other changes to the ATMP; and
- 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.

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 commercial air tour routes over the Park and a ½ mile outside the boundary of the Park, plus an additional five-mile buffer extending from either side of the centerline of the air tour routes (the buffer is a total of ten miles wide). 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 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 buffer around the routes) 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.

Metric	Relevance and citation
Day-night average sound level, DNL	<p>The logarithmic average of sound levels, in dBA, over a 24-hour day DNL takes into account the increased sensitivity to noise at night by including a ten dB penalty between 10 p.m. and 7 a.m. local time.</p> <p>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.²</p>
Equivalent sound level, $L_{Aeq, 12\text{ hr}}$	<p>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.</p> <p>Note: Both $L_{Aeq, 12\text{ hr}}$ and DNL and characterize:</p> <ul style="list-style-type: none"> Increases in both the loudness and duration of noise events The number of noise events during specific time period (12 hours for $L_{Aeq, 12\text{ hr}}$ and 24-hours for DNL) <p>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, $L_{Aeq, 12\text{ hr}}$ will be three dB higher than DNL.</p>
Maximum sound level, L_{max}	<p>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.</p>

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Time Above 35 dBA ³	<p>The amount of time (in minutes) that aircraft sound levels are above a given threshold (i.e., 35 dBA)</p> <p>In quiet settings, outdoor sound levels exceeding 35 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).</p>
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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 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

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tour activity at the Park. For the Park, the 90th percentile day was identified as one flight on the Courtney Aviation, Inc. PML route using a Twin Commander AC-690 aircraft.⁵

The noise was modeled for the acoustic indicators in the table above 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," as described in the table above, or "reportable" under FAA's policy for the NEPA.⁶ Under the ATMP, there are two consolidated routes, which are modified from an existing operator reported route for the protection of the Park's natural and cultural resources, tribal use, and visitor experience and no changes to the number of commercial air tours per year as compared with 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.

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- On days when commercial air tours will occur, noise levels above 52 dBA (which is associated with speech interference) will occur for less than five minutes in several small areas directly beneath and adjacent to the routes. Inyo National Forest does not fall under the 52 dBA contour.

In addition, the ATMP limits the operation of commercial air tours to between two hours after sunrise until two hours before sunset. Operators that have converted to quiet technology aircraft, or are considering converting to quiet technology aircraft, may request to be allowed to conduct air tours beginning at sunrise or ending at sunset on all days that flights are authorized. These restrictions provide times when visitors seeking solitude may experience the Section 4(f) resources without disruptions from commercial air tours. This change from existing operations and its effect on the current use of 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 and rotorcraft overflights is

⁵ Note that although the PML route is an operator reported route flown under existing conditions, the ATMP does not permit commercial air tour operators to fly over the Park or its ½ mile boundary using this route. Rather, the ATMP authorizes commercial air tours to fly on two consolidated routes, which are modified from an existing operator reported route. The consolidated routes in the ATMP fly over the Park and ½ mile boundary for fewer flight miles at similar altitude than the modeled PML route, which would reduce the spatial footprint of the noise effects of the ATMP compared to that of the modeled route. Therefore, although the footprint of the noise contours for routes authorized by the ATMP may differ from those reflected in the noise analysis, the modeled route represents a conservative estimate of potential noise effects, and actual noise effects of the ATMP are expected to be similar or slightly decrease compared to those reflected in the noise modeling analysis.

⁶ 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.

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.

As a result, FAA concludes there would be no substantial impairment of Section 4(f) resources in the study area from noise-related and vibrational 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) resource. Likewise, vibrational impacts from air tour overflights would be minimal. This all supports the FAA's determination that implementation of the Proposed Action would not constitute a constructive use of Section 4(f) resources in the study area. This Section 4(f) determination is 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 the same. 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.

The ATMP limits the number of commercial air tours to two flights per year and limits the routes to two consolidated routes, which are modified from an existing operator reported route for the protection of the Park's natural and cultural resources, tribal use, and visitor experience. Based on the three-year average of reporting data (2017-2019), under current conditions, people in the park are not likely to see more than one commercial air tour per day. Since the ATMP only authorizes two commercial air tours each year, the vast majority of the year will be free of air tour activity.

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 will remain 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 to 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 Inyo 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: 2022.06.28
09:58:30 -04'00'

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

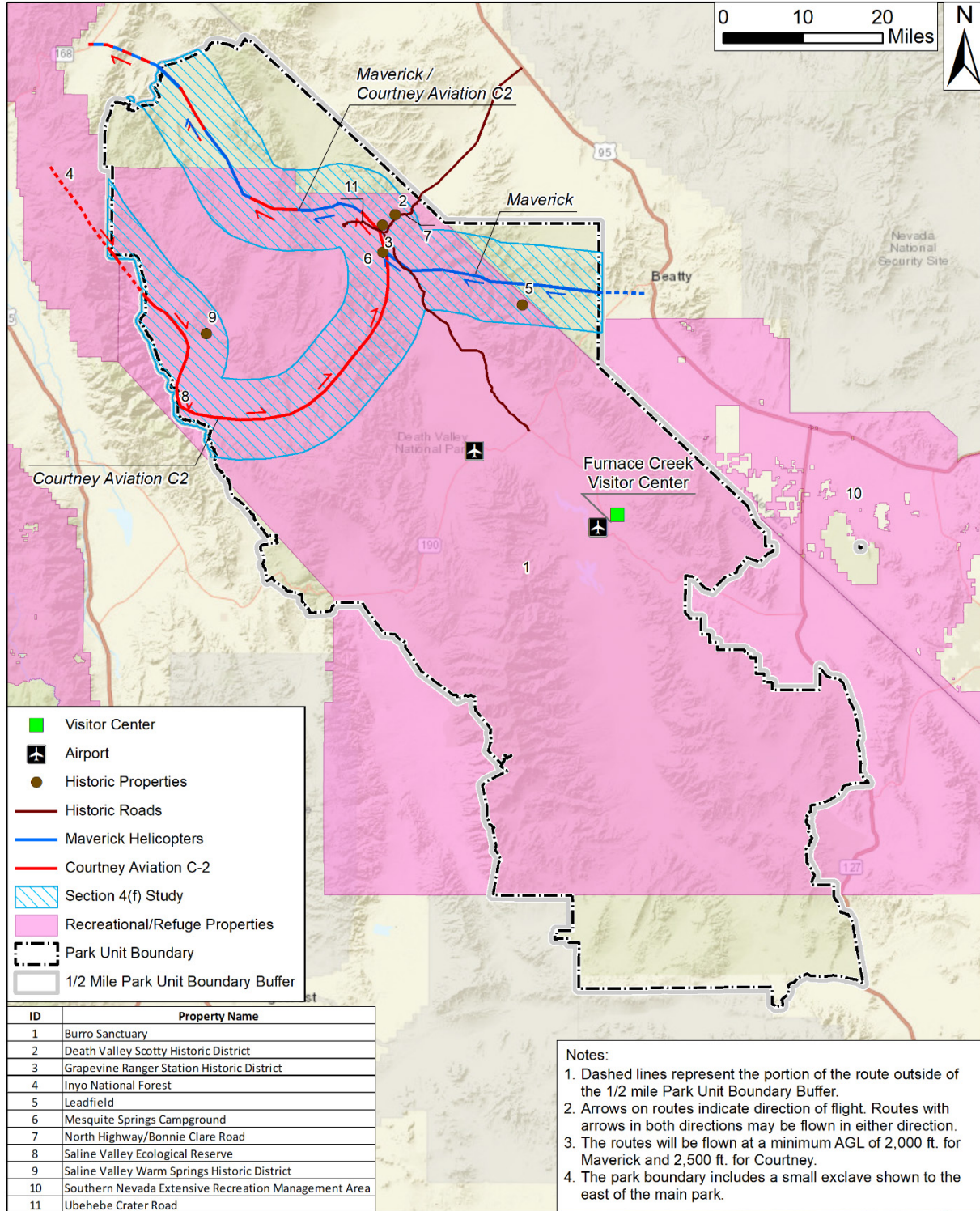
Attachments

- 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 Death Valley National Park



APPENDIX E

Death Valley National Park Air Tour
Management Plan Section 7 Endangered
Species Act No Effect Determination
(No Effect Determination Memorandum)



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

NATIONAL PARKS AIR TOUR MANAGEMENT PROGRAM

July 17, 2022

Re: Death Valley National Park Air Tour Management Plan
Section 7 Endangered Species Act No Effect Determination

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 Death Valley National Park (the Park). The agencies are preparing documentation for the ATMP in accordance with the National Parks Air Tour Management Act and other applicable laws. This memorandum documents the agencies' *No Effect* determination associated with the proposed action for the purpose of compliance with Section 7 of the Endangered Species Act (the Act).

Action Area and Description of Proposed Action

The action area includes the Park and the land within a ½-mile boundary from the Park depicted in Figure 1. 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 feet above ground level (except solely for the purposes of takeoff or landing, or necessary for safe operation of an aircraft as determined under the rules and regulations of the FAA requiring the pilot-in-command to take action to ensure the safe operation of the aircraft); or
- (2) Less than one mile laterally from any geographic feature within the Park (unless more than ½-mile outside the Park boundary).

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

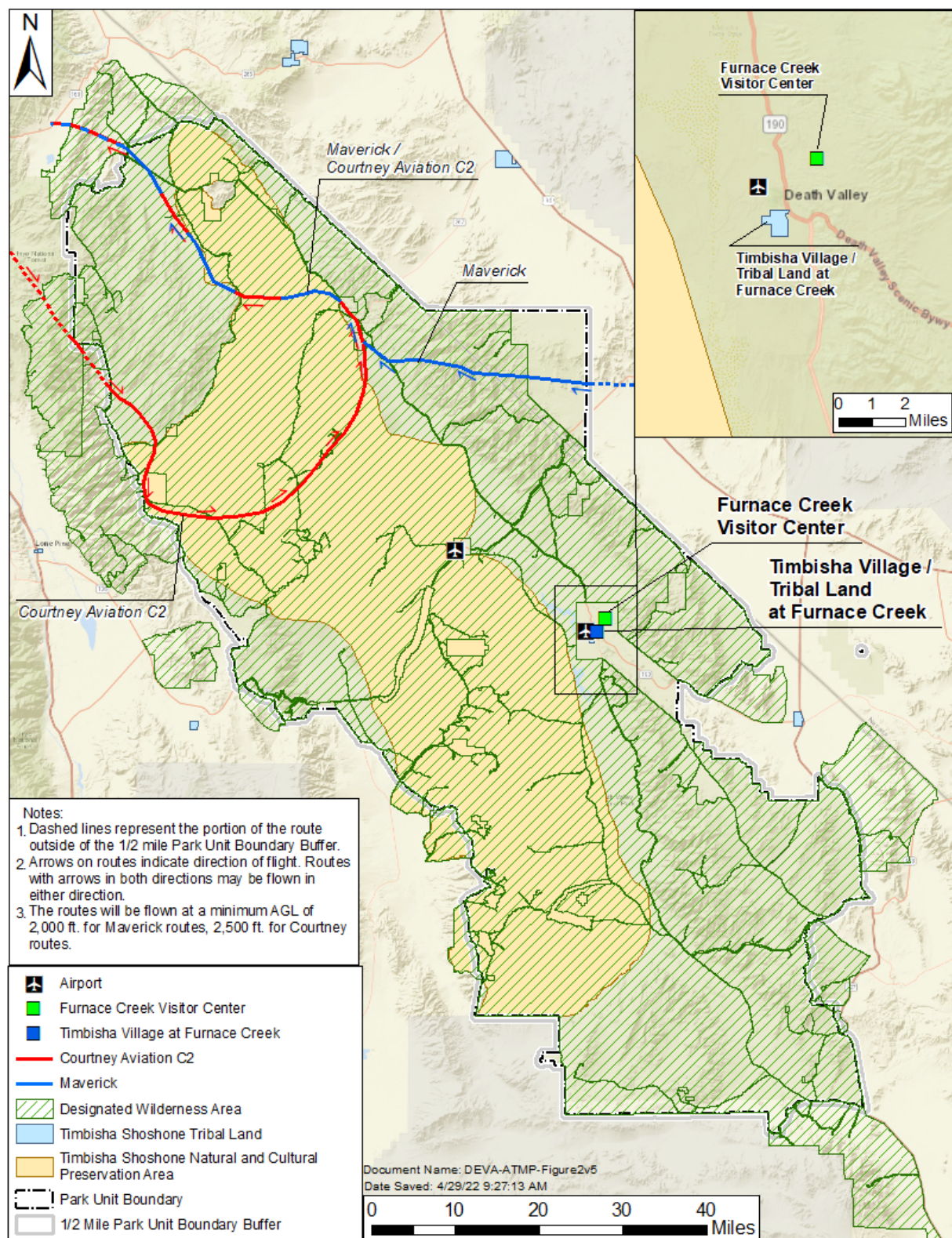


Figure 1 Commercial Air Tour Routes over the Park

Annual Commercial Air Tours Authorized

The ATMP authorizes two annual commercial air tours. While the proposed action does not cap daily flights, given that only two annual flights are allowed, many days would not have any commercial air tours.

Commercial Air Tour Routes and Altitudes

The ATMP implements the designated routes and minimum altitudes above ground level (AGL) that commercial air tours are required to fly (See Figure 1). At the Park, helicopter air tours will fly no lower than 2,000 feet (ft.) AGL, while fixed wing aircraft will fly no lower than 2,500 ft. AGL (see Figure 1 for details) over the park or within ½ mile of its boundary. Except 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.

Hovering aircraft in place is prohibited. 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.

Day/Time

Except as provided in the section below entitled “Quiet Technology Incentives,” commercial air tours may operate two hours after sunrise until two hours before sunset, as defined by National Oceanic and Atmospheric Administration (NOAA).¹ 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.

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.

Quiet Technology Incentives

The ATMP incentivizes the adoption 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 conduct air tours beginning at sunrise or ending at sunset on all days that flights are authorized.

¹ Sunrise and sunset data is available from the NOAA Solar Calculator, <https://www.esrl.noaa.gov/gmd/grad/solcalc/>

Listed Species Evaluated for Effects

The U.S. Fish and Wildlife Service's Information Planning and Consultation (IPaC) tool was used to determine the potential for any federal threatened and endangered species or designated critical habitat that may occur within this area. Species that may occur within the Park are listed in Table 1 below.

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 fish species will not be impacted by commercial air tours.

The 2,000 ft. minimum altitude for helicopters and the 2,500 ft. minimum altitude AGL requirement for fixed-wing commercial air tours reduces the potential for collisions to occur with avian species. While historically present within the Park, no known recent nesting or roosting of California condor (*Gymnogyps californianus*) has been observed. Commercial air tours do have the potential to generate noise that could be audible to other avian species. However, these noise events are not expected to be stressors on these species given that a maximum of only 2 air tours will occur annually. Commercial air tours will not inhibit foraging, feeding, breeding or nesting of listed species because they are infrequent and of short duration (likely limited to no more than a few minutes of exposure).

Table 1. Listed Species in the Action Area with No Effect Determination

Mammals Common Name	Mammals Scientific Name	Mammals Status (Federal)	Mammals Critical Habitat? (Y/N)	Mammals Occurrence in Park²
Amargosa Vole	<i>Microtus californicus scirpensis</i>	Endangered	Y	Unknown
Fisher	<i>Pekania pennanti</i>	Endangered	N	Not Present
Sierra Nevada Bighorn Sheep	<i>Ovis canadensis sierrae</i>	Endangered	N	Not Present
Birds Common Name	Birds Scientific Name	Birds Status (Federal)	Birds Critical Habitat? (Y/N)	Birds Occurrence in Park²
California Condor	<i>Gymnogyps californianus</i>	Endangered	N	Unknown
Southwestern Willow Flycatcher	<i>Empidonax traillii extimus</i>	Endangered	Y	Present
Yuma Ridgways (clapper) Rail	<i>Rallus obsoletus yumanensis</i>	Endangered	N	Unknown
Inyo California Towhee	<i>Pipilo crissalis eremophilus</i>	Threatened	N	Unknown
Western Snowy Plover	<i>Charadrius nivosus nivosus</i>	Threatened	N	Unknown
Yellow-billed Cuckoo	<i>Coccyzus americanus</i>	Threatened	N	Possible Migrant
Fishes Common Name	Fishes Scientific Name	Fishes Status (Federal)	Fishes Critical Habitat? (Y/N)	Fishes Occurrence in Park²
Ash Meadows Amargosa Pupfish	<i>Cyprinodon nevadensis mionectes</i>	Endangered	Y	Not Present
Ash Meadows Speckled Dace	<i>Rhinichthys osculus nevadensis</i>	Endangered	Y	Not Present
Devils Hole Pupfish	<i>Cyprinodon diabolis</i>	Endangered	N	Present
Owens Pupfish	<i>Cyprinodon radiosus</i>	Endangered	N	Not Present
Owens Tui Chub	<i>Gila bicolor ssp. snyderi</i>	Endangered	N	Not Present
Warm Springs Pupfish	<i>Cyprinodon nevadensis pectoralis</i>	Endangered	N	Not Present
Lahontan Cutthroat Trout	<i>Oncorhynchus clarkii henshawi</i>	Threatened	N	Not Present

² Based on NPS species list, <https://irma.nps.gov/NPSpecies/Search/SpeciesList>

Flowering Plants Common Name	Flowering Plants Scientific Name	Flowering Plants Status (Federal)	Flowering Plants Critical Habitat? (Y/N)	Flowering Plants Occurrence in Park²
Amargosa Niterwort	<i>Nitrophila mohavensis</i>	Endangered	N	Not Present
Ash Meadows Blazingstar	<i>Mentzelia leucophylla</i>	Threatened	Y	Not Present
Ash Meadows Gumplant	<i>Grindelia fraxinipratensis</i>	Threatened	Y	Not Present
Ash Meadows Ivesia	<i>Ivesia kingii</i> var. <i>eremica</i>	Threatened	Y	Not Documented
Ash Meadows Milk- vetch	<i>Astragalus phoenix</i>	Threatened	Y	Not Documented
Ash Meadows Sunray	<i>Enceliopsis nudicaulis var. corrugata</i>	Threatened	Y	Unknown
Spring-loving Centauray	<i>Centaureum namophilum</i>	Threatened	Y	Not Documented
Reptiles Common Name	Reptiles Scientific Name	Reptiles Status (Federal)	Reptiles Critical Habitat? (Y/N)	Reptiles Occurrence in Park²
Desert Tortoise	<i>Gopherus agassizii</i>	Threatened	N	Present
Insects Common Name	Insects Scientific Name	Insects Status (Federal)	Insects Critical Habitat? (Y/N)	Insects Occurrence in Park²
Ash Meadows Naucorid	<i>Ambrysus amargosus</i>	Threatened	Y	Not Present

Conclusion

While an individual aircraft flying on a designated route has the potential to generate noise of short duration and low intensity, the duration of disturbance to wildlife associated with the noise from a commercial air tour would be temporary and likely limited to no more than a few minutes when commercial air tours occur. Only two commercial air tours would occur annually, with no flights occurring on most days during the year. The ATMP also implements a fixed route and sets a minimum altitude. Therefore, the ATMP results in no meaningful, measurable or noticeable impact on the species listed in Table 1. In accordance with Section 7 of the ESA, the agencies have determined that the proposed project would have No Effect on threatened and endangered species or their critical habitats.

APPENDIX F

National Historic Preservation Act: Section 106 Compliance Documentation



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

NATIONAL PARKS AIR TOUR MANAGEMENT PROGRAM

June 17, 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 Death Valley National Park

Julianne Polanco
State Historic Preservation Officer
California State Historic Preservation Office
1725 23rd Street, Suite 100
Sacramento, CA 95816

Dear Julianne Polanco:

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 Death Valley 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 July 30, 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 efforts to identify historic properties within the APE and invited and encouraged consulting parties to share any information about previously unidentified historic properties in our most recent correspondence dated March 7, 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 issued the draft ATMP on July

28, 2021, in the Federal Register. The public comment period on the draft ATMP was July 28, 2021, through August 28, 2021. A public meeting was held August 19, 2021.

The FAA and the NPS received three public comments about potential noise effects from commercial air tours on historic properties. Commenters expressed concern that aircraft noise from air tours could disrupt the character of cultural resources. Specific sites mentioned were Scotty's Castle and Lower Vine Ranch. Another commenter recommended a historic property to be considered during the ATMP planning process: the historic mining camp of Ryan, CA, which is within the ½-mile buffer of the Park.

The FAA and the NPS received seven comments from the public related to tribal concerns. Commenters expressed concern that air tours will violate the sanctity of Native American cultural values and practices at the Park, including the Timbisha Shoshone, Owens Valley Paiute, and other neighboring tribal communities. One commenter referenced the Timbisha Shoshone Natural and Cultural Preservation Area established by the Timbisha Shoshone Homeland Act (PL 106-423). Commenters questioned if the ATMP planning process included tribal consultation and expressed concern that a tribal consultation process in accordance with the NHPA and EO 13175 was not discussed in the draft ATMP.

Description of the Undertaking

The FAA and the NPS are developing ATMPs for multiple parks, including Death Valley National Park (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 operations over the Park date back more than 20 years. Since 2005, air tours have been authorized by interim operating authority (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 an annual limit of, currently 37 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 0.6 air tours per year, or .3 air tours per operator, which has been rounded up to one air tour per operator, or two air tours per year. 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. Currently, commercial air tours may be conducted using the fixed-wing GA-690-A and GA-690-D and helicopters AS350 and EC-130. Under existing conditions, commercial air tours may be conducted on the routes shown in **Attachment A**. Commercial air tour operators report that they presently fly no lower than 1,000 feet (ft.) above ground level (AGL) depending on the location over the Park.¹

Under existing conditions, operators report that commercial air tours over the Park may be flown on seven different routes shown in **Attachment A** though they are not required to fly on any particular route. The two operators fly variations of similar routes, some of which enter the Park from the southeastern corner and travel in a roughly northwest direction before returning to exit the Park along

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

the southeastern corner of the Park, while others enter the park at the northwest boundary, circle the park, and exit at the northwest boundary.

The undertaking for purposes of Section 106 is implementing the ATMP that applies to all commercial air tours over the Park and outside the Park but within ½ mile of its boundary. 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.

Following public comment, the FAA and NPS consolidated and modified commercial air tour routes, and raised the minimum altitudes. The undertaking would result in commercial air tours being conducted along the routes shown in **Attachment C**. The new routes are based on one of the existing operator-reported routes, and have been consolidated along areas of parallel flight paths. The ATMP will require each of the operators to conduct commercial air tours on one of the designated routes. Under existing conditions, operators are not required to adhere to routes.

The undertaking was previously described in detail in our Section 106 consultation letter dated July 30, 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=297&projectID=103441&documentID=114129>.

- A maximum of two commercial air tours are authorized per year on designated routes;
- The aircraft type authorized for commercial air tours include the fixed-wing GA-690-A and GA-690-D and helicopters AS350 and EC-130. Any new or replacement aircraft must not exceed the noise level produced by the aircraft being replaced;
- Commercial air tours may operate two hours after sunrise until two hours before sunset, as defined by the National Oceanic and Atmospheric Administration (NOAA).² Air tours may operate any day of the year except under circumstances provided in the bullet below;
- The NPS can 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 one week's notice to the operators in writing in advance of the no-fly period. Events may include tribal ceremonies or other similar events.;
- Operators are required to equip all aircraft used for air tours with flight monitoring technology, and to report flight monitoring data as an attachment to the operator's semi-annual reports;
- Park staff will provide interpretive and education materials at the request of the operators. Any materials provided by the Park will include information that operators can use to further their

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

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 local FAA Flight Standards District Office (FSDO), and all operators will meet 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 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.

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 have been made:

- As a result of consultation with the Timbisha Shoshone, coordination with the operators, and to provide more protection for wildlife, including nesting birds, the air tour routes were consolidated from seven to two, which follows along or near existing routes in the northern portion of the Park. In response to comments received from the Timbisha Shoshone, the designated routes do not fly within 30 miles of the Timbisha Village at Furnace Creek which is protective of tribal use of that area. The designated routes and limit of two flights per year also minimize the impacts of air tours on the Timbisha Shoshone Natural and Cultural Preservation Area. The designated routes are depicted in **Attachment C**;
- A new subsection was added to prohibit aircraft hovering in place.
- Helicopter tours will fly no lower than 2,000 ft. AGL, while fixed-wing aircraft may fly no lower than 2,500 ft. AGL. This raises the minimum altitudes required for tours flown using both helicopters and fixed wing aircraft 1,000 ft. from the altitudes in the draft ATMP;
- 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 tours 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 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 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 this 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:

This 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 conduct air tours beginning at sunrise or ending at 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;

- 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, including tribal lands within those areas.
- The agencies also clarified that a plan amendment to increase the number of authorized commercial air tours per year above the two authorized in the ATMP would require additional environmental review. The revised language is below:

Increases to the total number of 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 the ATMP and additional environmental review. Notice of all amendments to this ATMP will be published in the Federal Register for notice and comment.
- The agencies added a parenthetical statement in the section "Adaptive Management" within the language describing instances in which a modification to the ATMP may occur through adaptive management to make clear that adaptive management actions may be taken to address tribal input. The revised language is below:

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.
- The agencies added the following to the first paragraph of Appendix A: "IOA previously issued for the Park and Timbisha Shoshone tribal lands terminates on the effective date of this ATMP."

Area of Potential Effects

The APE for the undertaking was proposed in the Section 106 consultation letter dated July 30, 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 previously delineated APE for the undertaking comprises the commercial air tour routes over the Park and a ½ mile outside the boundary of the Park, plus an additional five-mile buffer extending from either side of the centerline of the air tour routes, as depicted in **Attachment B** below. The FAA

requested comments from all consulting parties including federally recognized tribes. We received no further comments from consulting parties regarding the APE.

The changes to the undertaking described above include reducing the number of air tour routes from seven to two, along or near existing air tour routes over the Park and ½ mile outside the boundary of the Park. As a result of the changes to the number and location of the air tour routes, the APE has also changed. The revised APE is defined in the same way and comprises the commercial air tour routes over the Park and a ½ mile outside the boundary of the Park, plus an additional five-mile buffer extending from either side of the centerline of the air tour routes. The revised APE is depicted in **Attachment C**.

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 California Office of Historic Preservation (CA SHPO), Nevada 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 Nevada Cultural Resources Information System on February 7, 2022 to collect GIS data for previously-identified properties both inside and outside the Park, and consulted with the tribes listed in **Attachment D** regarding the identification of any other previously unidentified historic properties that may also be located within the APE.

The FAA coordinated extensively with the CA SHPO's Eastern Information Center (EIC), but was unsuccessful in obtaining additional information about historic properties in the APE. The FAA first requested a Non-Confidential Extended record search on January 25, 2022. When the FAA did not receive a response from the EIC acknowledging the agency's request had been received, the FAA followed up with phone calls and emails. On February 14, 2022, the EIC replied indicating the request had been received and asked for PDF maps rather than the GIS shapefiles that were provided with the original request. The FAA prepared the requested PDFs and provided them to EIC on February 28, 2022. FAA again followed up with phone calls and emails to confirm receipt. EIC replied on March 23, 2022, indicating the maps had been received and noting the project was quite large and would take considerable time to complete.

On March 24, 2022, the FAA emailed EIC to inquire about a Confidential record search and refining the APE to reflect changes in the undertaking. The FAA followed up on March 29, 2022 and again on April 4, 2022. EIC provided the FAA with the materials to initiate a Confidential record search on April 7, 2022. Additional coordination regarding completing an Access and Use Agreement with EIC continued via email on April 20, 2022, and April 25, 2022. On April 26, 2022, the FAA asked for a legal contact at the EIC to discuss questions and options for next steps. On May 11, 2022, the Deputy SHPO responded that the CA SHPO does not authorize outside entities to work directly with their legal counsel. After more than four months of coordination with EIC and no discernible progress on the FAA's initial record search request, the FAA has determined that further coordination would not be productive.

Consequently, FAA is treating the Park as eligible for the purposes of Section 106 consultation for this undertaking. This is not a formal eligibility determination. **Attachment E** identifies the Park's significant characteristics based on currently available information.

In addition to the identification efforts outlined above, the Timbisha Shoshone and NPS park staff have informed FAA that there are TCPs present within the APE. In order to protect confidentiality, these TCPs are not shown on any of the attached maps.

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 11 historic properties. All historic properties identified within the APE are listed in **Attachment E** and shown in the APE map provided in **Attachment C**.

Summary of Section 106 Consultation with Tribes

The FAA contacted 26 federally recognized tribes via letter on March 26, 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. On July 30, 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 that same day, the FAA received a voicemail message from Barbra Durham, the Timbisha Shoshone Tribal Historic Preservation Officer (THPO), requesting that we add the Timbisha Indian Village, the Timbisha Historic District, and cemetery to our list of historic properties. These areas are included in the Tumpisa" proposed TCP that the NPS is currently drafting. The FAA added these to the list of historic properties in the APE. However, as a result of changes to the undertaking, these properties are no longer in the APE. THPO Durham expressed concern regarding aircraft that fly directly over residential areas within the village, which is located within the Park and, at that time, the APE. A portion of the Tumpisa" TCP remains within the revised APE.

At the request of Barbara Durham, the FAA and NPS subsequently met in person with representatives of the Timbisha Shoshone Tribe on December 16, 2021 to discuss the undertaking. Other senior FAA and NPS staff joined the meeting virtually. At that meeting, Chairman Jimmy-John Thompson stated that he intended to submit written comments to FAA and NPS regarding his concerns about the proposed ATMP. On February 9, 2022, the FAA followed up with the Timbisha Shoshone Tribe to inquire about the status of comments from the tribe. Chairman Thompson submitted a letter dated February 23, 2022, in which he stated the tribe's opposition to the planned ATMP. In the letter the tribe expressed that approval of the plan would disrupt cultural activities and endanger residents within the Timbisha Indian Village. Chairman Thompson is in favor of zero flights. The FAA responded to comments from the Timbisha Shoshone in a letter dated June 1, 2022 stating that routes that overflowed the southern portion of the park near Furnace Creek and Timbisha Village have been eliminated and noting that the ATMP allows the NPS to establish "no-fly periods" for special events such as tribal ceremonies at the request of the Timbisha Shoshone or other affected tribes.

On December 1, 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 14, 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 Bishop Paiute Tribe expressing interest in participating in the Section 106 consultation process. The Big Pine Paiute Tribe of the Owens Valley, Las Vegas Tribe of Paiute Indians, Los Coyotes Band of Cahuilla and Cupeno Indians, and Twenty-Nine Palms Band of Mission Indians of California requested that earlier consultation materials be resent. The FAA resent materials to those tribes on January 10, 2022. Additionally, the FAA received responses from the Kaibab Band of Paiute Indians, San Manuel Band of Mission Indians, and Soboba Band of Luiseno Indians opting out of additional consultation for the undertaking. The tribes whom the FAA has contacted as part of this undertaking are included in the list of consulting parties enclosed as **Attachment D**.

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 E**. 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 reduced the number of routes from seven to two and increased the minimum altitude of the routes in response to public comments and feedback received. The proposed routes are along or near existing air tour routes and would not move air tours closer to any historic properties. The consolidated routes in the ATMP fly over the Park and the area within ½ mile of its boundary for fewer flight miles at similar altitude to the modeled route, which would reduce the spatial footprint of the noise effects of the ATMP compared to that of the modeled routes.

The ATMP authorizes substantially the same number of flights per year as the average number of flights from 2017-2019 and reduces the number of routes flown under existing conditions, 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 fixed-wing GA-690-A and GA-690-D and helicopters AS350 and EC-130. Any new or replacement aircraft must not exceed the noise level produced by the aircraft being replaced.

The ATMP sets a minimum aircraft altitude; it requires commercial air tours to fly at a higher minimum altitude (2,000 ft. AGL for helicopters and 2,500 ft. AGL for fixed-wing aircraft) as compared to those reported to be flown under existing conditions (minimum 1,000 ft. AGL). The resulting increase in the minimum altitude 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 of the attenuation of the noise from the higher altitude and 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 Yearly³ Day Night Average Sound Level (Ldn 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.⁴

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

Attachment F 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. Note that, although the footprint of the noise contours for routes authorized by the ATMP may differ from those reflected in **Attachment F**, the modeled routes represent a conservative estimate of potential noise effects, and actual noise effects of the ATMP are expected to be similar or slightly decrease compared to those reflected in the noise modeling analysis. Noise related to commercial air tours is anticipated to be greater than 35 dBA for less than 5 minutes a day within the APE and greater than 52 dBA for less than 5 minutes a day within the APE on days when flights occur. The Death Valley/Scotty Historic District and a TCP are the only historic properties where the duration of noise is anticipated to be greater than 35 dBA and 52 dBA for less than 5 minutes a day on the maximum of two days per year on which commercial air tours could occur under the ATMP.

As the ATMP would result in similar or decreased 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

³ Yearly conditions are represented as the Average Annual Day (AAD)

⁴ Under FAA policy, an increase in the Day-Night Average Sound Level (DNL) of 1.5 dBA or more for a noise sensitive area that is exposed to noise at or above the DNL 65 dBA noise exposure level, or that will be exposed at or above the DNL 65 dBA level due to a DNL 1.5 dBA or greater increase, is significant. FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures*, Exhibit 4-1. Noise increases are “reportable” if the DNL increases by 5 dB or more within areas exposed to DNL 45-60 dB, or by 3 dB or more within areas exposed to DNL 60-65 dB. FAA Order 1050.1F, Appendix B, section B-1.4.

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 (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 topography.

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 one week's notice to the operator. It represents an improvement over existing conditions where no such provision exists.

The ATMP limits the number of commercial air tours to two tours per year, which is consistent with the average number of flights from 2017-2019, and requires each of the commercial air tour operators to fly on one of two consolidated routes, which are modified from an existing operator reported route. This modification protects, among other things, tribal use and the visitor experience at the Park. Therefore, impacts to viewsheds will be similar to or decrease compared to impacts currently occurring because the number of authorized flights under the ATMP is substantially the same as the average number of flights from 2017-2019, and routes will be reduced and consolidated, avoiding the majority of the Park.

The ATMP limits the number of commercial air tours to a maximum of two tours per year and consolidates routes from seven to two. The consolidated routes are not closer to any identified historic properties, and avoid historic properties that may have been overflown by the operator-reported existing routes that are not authorized by the ATMP. Therefore, visual effects to historic properties are expected to be similar or 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 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 no measurable change in audible or visual effects from existing conditions. Based on the above analysis, the FAA and NPS propose a finding of no adverse effect on

historic properties. We request that you review the information and respond whether you concur with the proposed finding within 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,

A handwritten signature in black ink, appearing to read 'Judith Walker', with a long, sweeping horizontal line extending to the right.

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

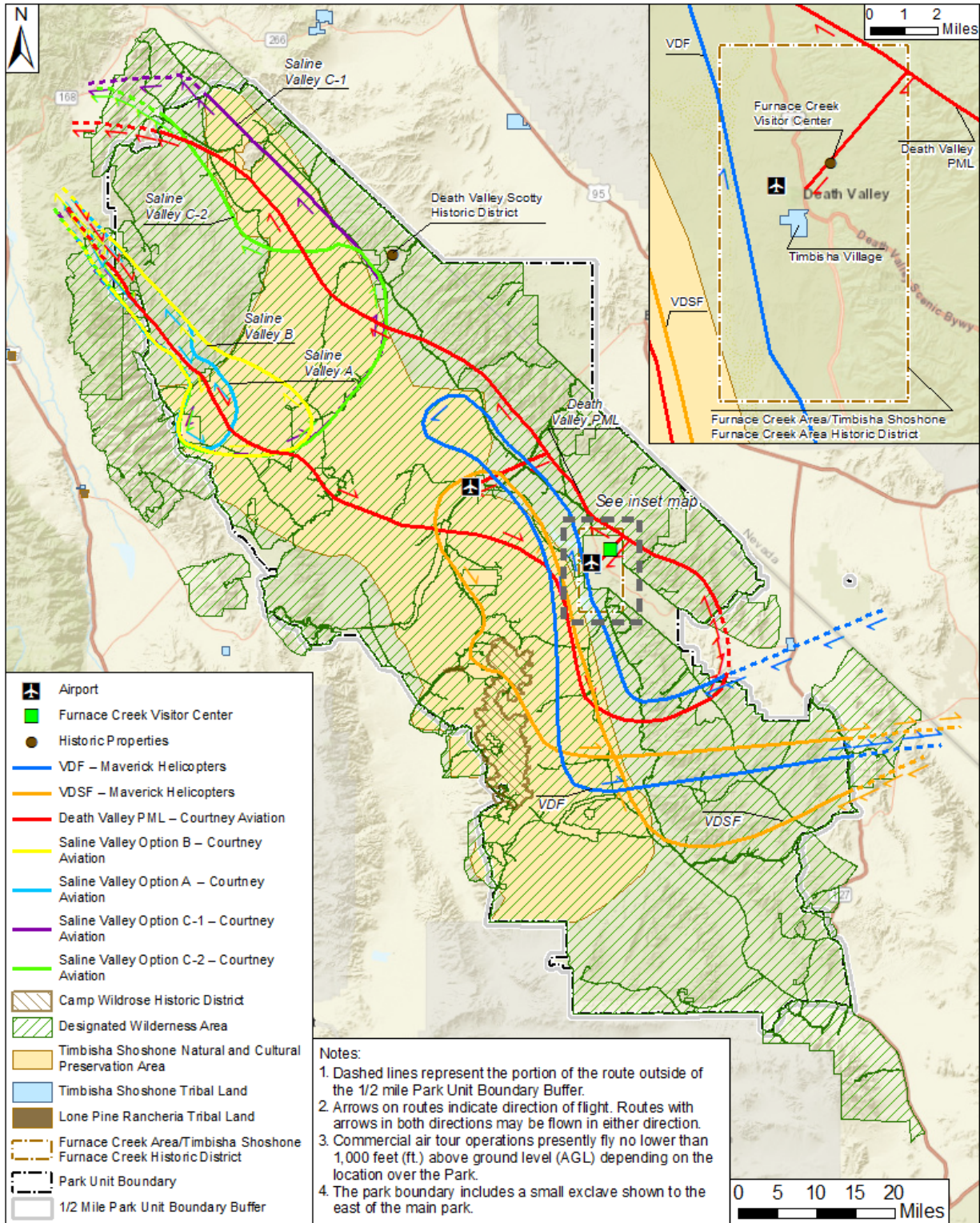
Attachments

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

ATTACHMENT A

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

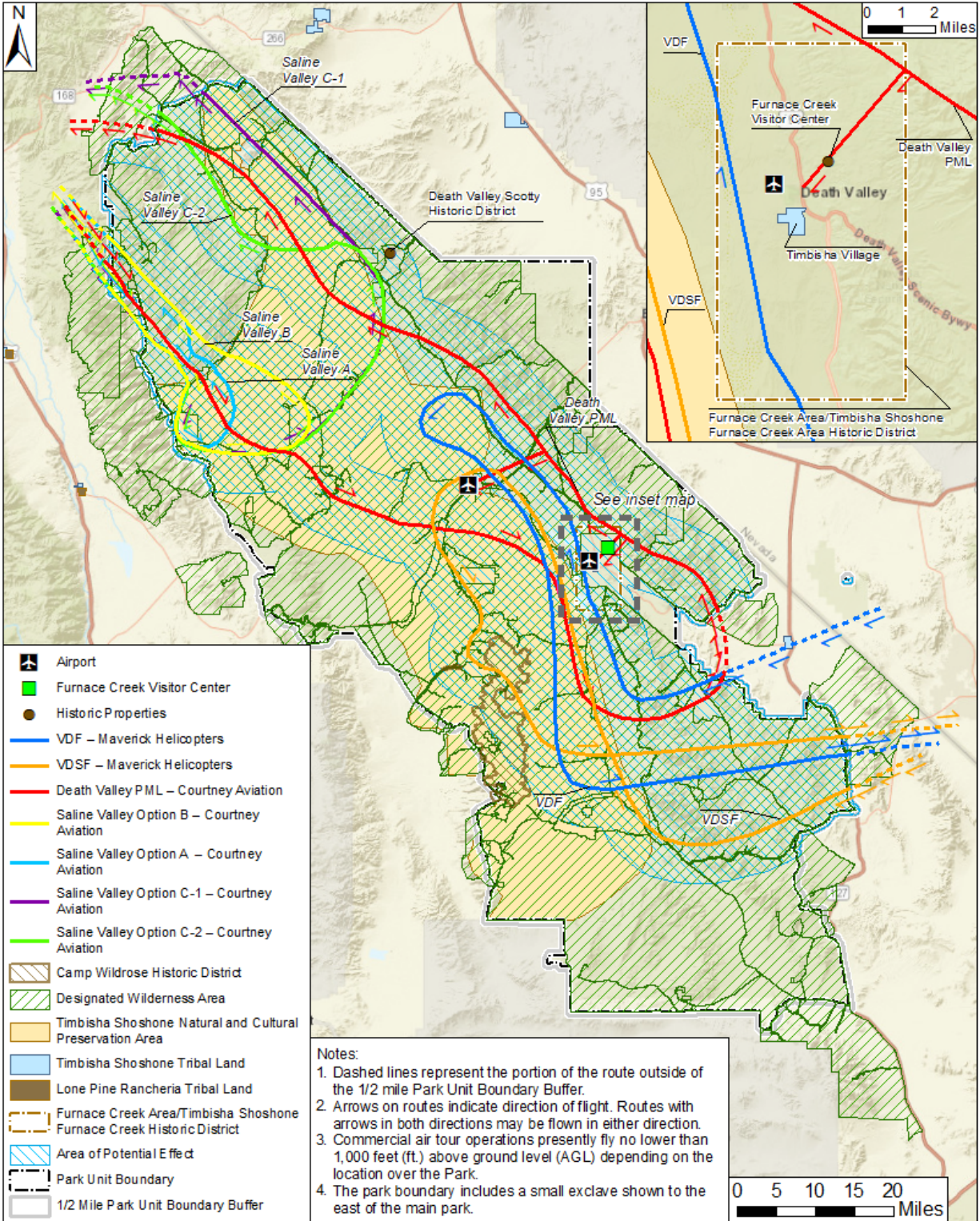
Map of Existing Air Tour Routes with Historic Properties



ATTACHMENT B

**Previous Area of Potential Effect Map
Including
Existing Commercial Air Tour Routes**

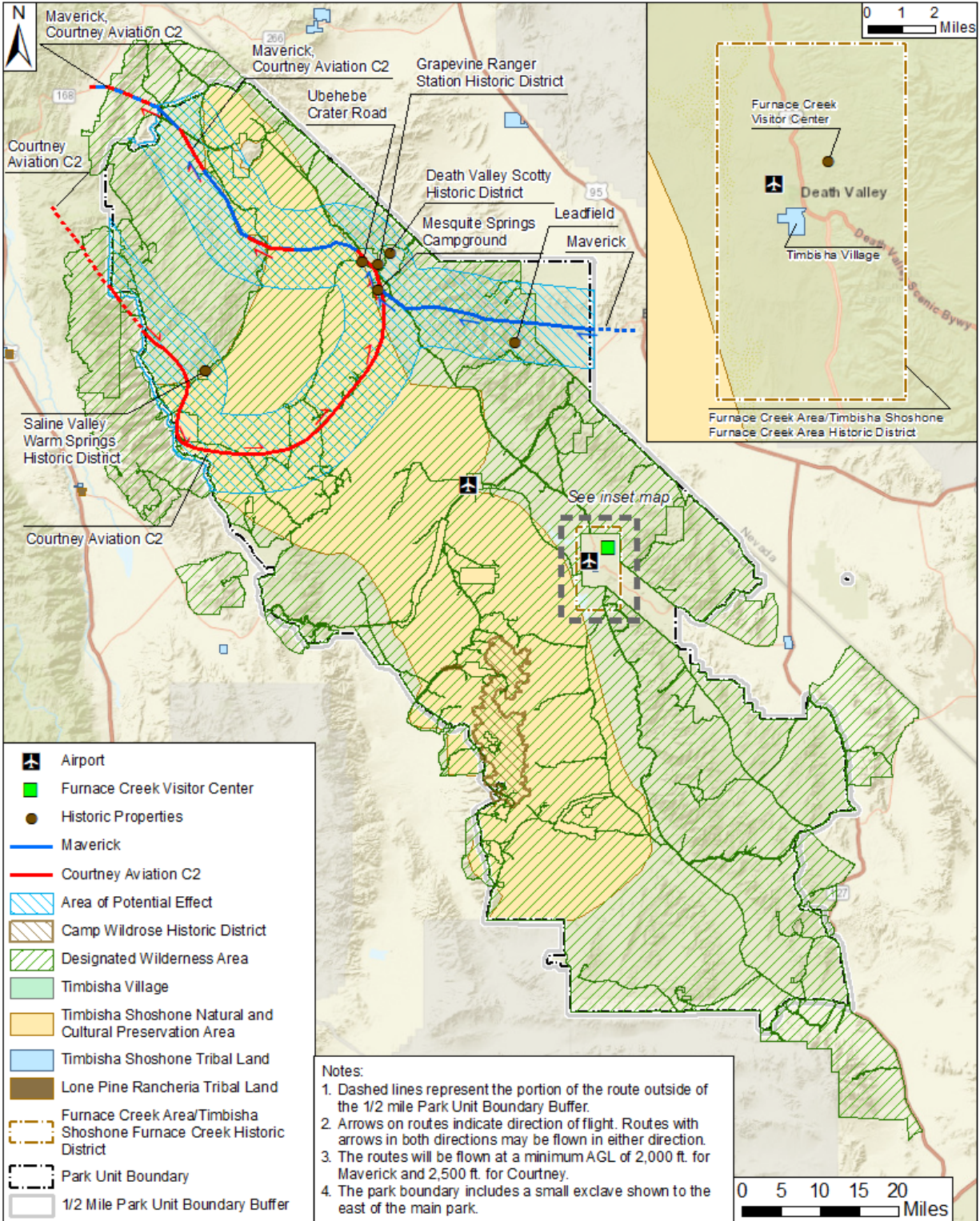
Previous Area of Potential Effects Map for ATMP at Death Valley National Park (Existing Routes)



ATTACHMENT C

**Revised Area of Potential Effect Map
Including
Proposed Commercial Air Tour Routes**

Area of Potential Effects Map for ATMP at Death Valley National Park (Proposed Air Tour Routes)



ATTACHMENT D

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

Big Pine Paiute Tribe of the Owens Valley
Bishop Paiute Tribe
Chemehuevi Indian Tribe of the Chemehuevi Reservation, California
Colorado River Indian Tribes of the Colorado River Indian Reservation, Arizona and California
Confederated Tribes of the Warm Springs Reservation of Oregon
Courtney Aviation, Inc. (Courtney Aviation, Yosemite Flight Tours)
Duckwater Shoshone Tribe of the Duckwater Reservation, Nevada
Fort Independence Indian Community of Paiute Indians of the Fort Independence Reservation, California
Fort McDermitt Paiute and Shoshone Tribes of the Fort McDermitt Indian Reservation, Nevada and Oregon
Fort McDowell Yavapai Nation, Arizona
Fort Mojave Indian Tribe of Arizona, California and Nevada
Inyo National Forest
Kaibab Band of Paiute Indians of the Kaibab Indian Reservation ¹
Las Vegas Tribe of Paiute Indians of the Las Vegas Indian Colony, Nevada
Lone Pine Paiute-Shoshone Tribe
Los Coyotes Band of Cahuilla and Cupeno Indians, California
Maverick Helicopters, Inc.
Moapa Band of Paiute Indians of the Moapa River Indian Reservation, Nevada
National Trust for Historic Preservation
NTC and Fort Irwin
Paiute-Shoshone Tribe of the Fallon Reservation and Colony, Nevada
Pyramid Lake Paiute Tribe of the Pyramid Lake Reservation, Nevada
Reno-Sparks Indian Colony, Nevada
San Manuel Band of Mission Indians, California ¹
Soboba Band of Luiseno Indians, California ¹
Te-Moak Tribe of Western Shoshone Indians of Nevada
Timbisha Shoshone Tribe
Tule River Indian Tribe of the Tule River Reservation, California
Twenty-Nice Palms Band of Mission Indians of California
Yerington Paiute Tribe of the Yerington Colony & Campbell Ranch, Nevada
Yomba Shoshone Tribe of the Yomba Reservation, Nevada

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

ATTACHMENT E

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

Property Name	Property Type	Eligibility Status	Description of Significant Characteristics
Death Valley Scotty Historic District	District	Eligible	The Death Valley Scotty Historic District is an area of Regional significance in the fields of 20 th century architecture, folklore and social history, and of local significance in the fields of archeology, art and invention. The Scotty's Castle complex serves as a reminder of the excesses of mining promotion during the early 20 th century, the frontier romanticism connected with it, and the conspicuous consumption practiced by the wealthy during the 1920's. The architecture typifies their values.
Ubehebe Crater/ Tumpingwosa TCP	TCP	Eligible	The Timbisha Shoshone and NPS park staff have informed FAA that there are TCPs present within the APE.
Saline Valley Warm Springs TCP	TCP	Eligible	The Timbisha Shoshone and NPS park staff have informed FAA that there are TCPs present within the APE.
Grapevine Ranger Station Historic District	District	Eligible	The potential historic district is associated with significant events in history (Criterion A) and the buildings embody the distinctive characteristics of NPS styles and methods of construction during the 1960s (Criterion C).
Grapevine Canyon Archeological District	District	Eligible	The Park is estimated to contain approximately 1,400 archeological sites, most of them prehistoric. Historic archeological sites in the Park are largely associated with transportation corridors, water sources, and mining and ranching operations of the late 19th and early 20th centuries.
Mesquite Springs Campground	Site	Eligible	Significant for its association to the Civilian Conservation Corps (CCC) crews, who were housed in 3 permanent camps at Wildrose, Funeral Range and Cow Creek and spike camps at Mesquite Springs, Emigrant Canyon, Daylight Pass and Butte Valley.

Property Name	Property Type	Eligibility Status	Description of Significant Characteristics
Saline Valley Warm Springs Historic District	District	Eligible	In 2014, the National Park Service completed a Determination of Eligibility (DOE). The DOE recommends that the area of historic significance for the recreational users is significant at the local level under Criterion A for recreation as a campground established around a hot springs site in use by Euro-Americans since 1955. Additionally, the DOE recommends that the area of historic significance is significant for social history
North Highway/ Bonnie Clare Road	Linear Feature	Eligible	The road qualifies under NRHP Criteria A and C for its association with significant events in local history (Criterion A) and embodiment of distinctive characteristics that represent distinctive design and artistic values (Criterion C). The road is associated with the early Mission 66 NPS improvement program; those improvements represent a formalization of the road as a major circulation feature of the park and the NPS's continued philosophy of unobtrusive development on the landscape.
Ubehebe Crater Road	Linear Feature	Eligible	The road qualifies under NRHP Criteria A and C for its association with significant events in local history (Criterion A) and embodiment of distinctive characteristics that represent distinctive design and artistic values (Criterion C). The road is associated with the early Mission 66 NPS improvement program; those improvements represent a formalization of the road as a major circulation feature of the park and the NPS's continued philosophy of unobtrusive development on the landscape.
Leadfield	District	Listed	Located in Titus Canyon, this mining town began in 1925 as a promotion scheme based on spurious claims. C.C. Julian advertised the town, making exaggerated claims. His advertising posters showed steamboats navigating the Amargosa River to Leadfield, ignoring the fact that the Amargosa River is dry much of the time and does not run within twenty miles of Leadfield. The mining town sparked to life but briefly, like a flame from a damp match. Julian disappeared and the inhabitants soon became disillusioned and quickly drifted away. The significance of the site lies in the fact it was an example of one of the get-rich-quick schemes of the 1920's.

Property Name	Property Type	Eligibility Status	Description of Significant Characteristics
Death Valley National Park	TCP	Eligible	<p>Death Valley National Park contains the lowest point in North America at 282 feet below sea level. The valley floor receives the least precipitation in the United States (average 1.84 inches per year) and is the site of the nation's highest and the world's second highest recorded temperature (134 degrees Fahrenheit or 57 degrees Celsius). The park is world renowned for its exposed, complex and diverse geology and tectonics, and for its unusual geologic features, providing a natural geologic museum that represents a substantial portion of the earth's history. The extremely colorful, complex, and highly visible geology and steep, rugged mountains and canyons provide some of the most dramatic visual landscapes in the United States.</p> <p>Death Valley National Park contains one of the nation's most diverse and significant fossil records and most continuous volcanic histories. It contains five major sand dune systems representing all types of dune structures, making it one of the only places on earth where this variety of dune types occurs in such close proximity. It also contains the highest dunes in California — Eureka Sand Dunes.</p> <p>Death Valley National Park is one of the largest expanses of protected warm desert in the world. Ninety-five percent of the Park is designated wilderness, providing unique opportunities for quiet, solitude, and primitive adventure in an extreme desert ecosystem.</p> <p>Death Valley has been the continuous home of Native Americans, from prehistoric cultures to the present-day Timbisha Shoshone Tribe.</p>

ATTACHMENT F

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
Time Above 35 dBA ⁵	<p>The amount of time (in minutes) that aircraft sound levels are above a given threshold (i.e., 35 dBA)</p> <p>In quiet settings, outdoor sound levels exceeding 35 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).</p>
Time Above 52 dBA	<p>The amount of time (in minutes) that aircraft sound levels are above a given threshold (i.e., 52 dBA)</p> <p>This metric represents the level at which one may reasonably expect interference with Park interpretive programs. At this background sound level (52 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).</p>
Equivalent sound level, $L_{Aeq, 12\text{ hr}}$	<p>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.</p>

⁵ dBA (A-weighted decibels): Sound is measured on a logarithmic scale relative to the reference sound pressure for atmospheric sources, 20 μ Pa. 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.

Day-night average sound level, L_{dn} (or DNL)	<p>The logarithmic average of sound levels, in dBA, over a 24-hour day, DNL takes into account the increased sensitivity to noise at night by including a ten dB penalty between 10 p.m. and 7 a.m. local time.</p> <p>For aviation noise analyses, the FAA (2015, Appendix. B, B-1) has determined that the cumulative noise energy exposure of individuals to noise resulting from aviation activities must be established in terms of day-night average sound level (DNL).</p> <p>Note: Both $L_{Aeq, 12hr}$ and L_{dn} characterize:</p> <ul style="list-style-type: none"> Increases in both the loudness and duration of noise events The number of noise events during specific time period (12 hours for $L_{Aeq, 12hr}$ and 24-hours for L_{dn}) <p>If there are no nighttime events, then $L_{Aeq, 12hr}$ is arithmetically three dBA higher than L_{dn}.</p> <p>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.</p>
Maximum sound level, L_{max}	<p>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.</p>

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 day⁶ 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 one flight on the Courtney Aviation, Inc. PML route using a Twin Commander AC-690 aircraft. Note that although the PML route is an operator reported route flown under existing conditions, the ATMP does not permit commercial air tour operators to fly over the Park or its ½ mile boundary using this route. Rather, the ATMP authorizes commercial air tours to fly on two consolidated routes, which are modified from an existing operator reported route. The consolidated routes in the ATMP fly over the Park and ½ mile boundary for fewer flight miles at similar altitude than the modeled PML route, which would reduce the spatial footprint of the noise effects of the ATMP compared to that of the modeled routes. Therefore, although the footprint of the noise contours for routes authorized by the ATMP may

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.

differ from those reflected in the noise analysis below, the modeled routes represent a conservative estimate of potential noise effects, and actual noise effects of the ATMP are expected to be similar or slightly decrease compared to those reflected in the noise modeling analysis below.

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 $L_{Aeq, 12hr}$
 - Note 1: Contours are not presented for $L_{Aeq, 12hr}$ as the average sound levels were below 35 dBA for the Proposed Action modeled at DEVA.
 - Note 2: Contours are not presented for L_{dn} (or DNL) as it is arithmetically 3 dBA lower than $L_{Aeq, 12hr}$ if there are no nighttime events, which is the case for the Proposed Action modeled at DEVA.
- Maximum sound level or L_{max} – see Figure 3

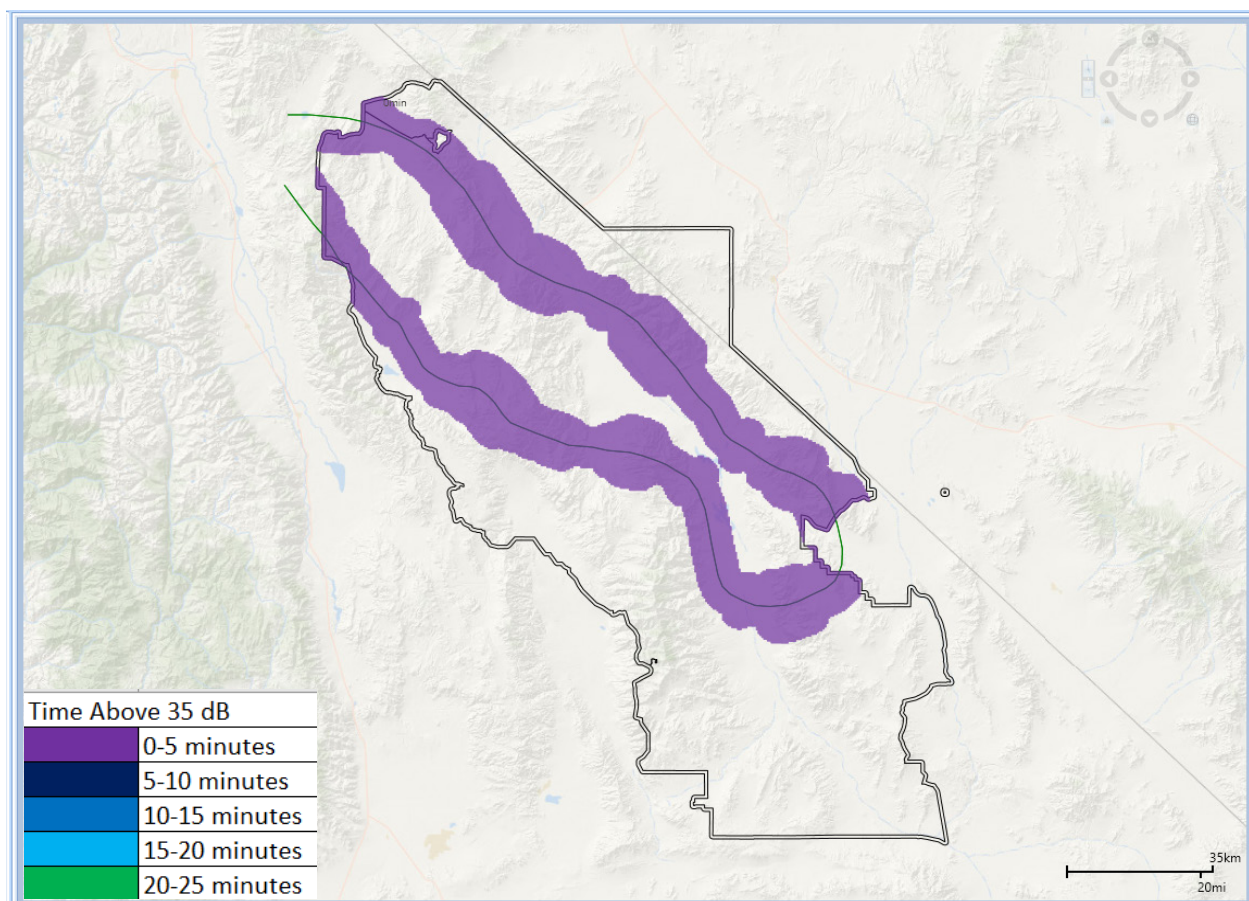


Figure 1. Noise contour results for Time Above 35 dBA

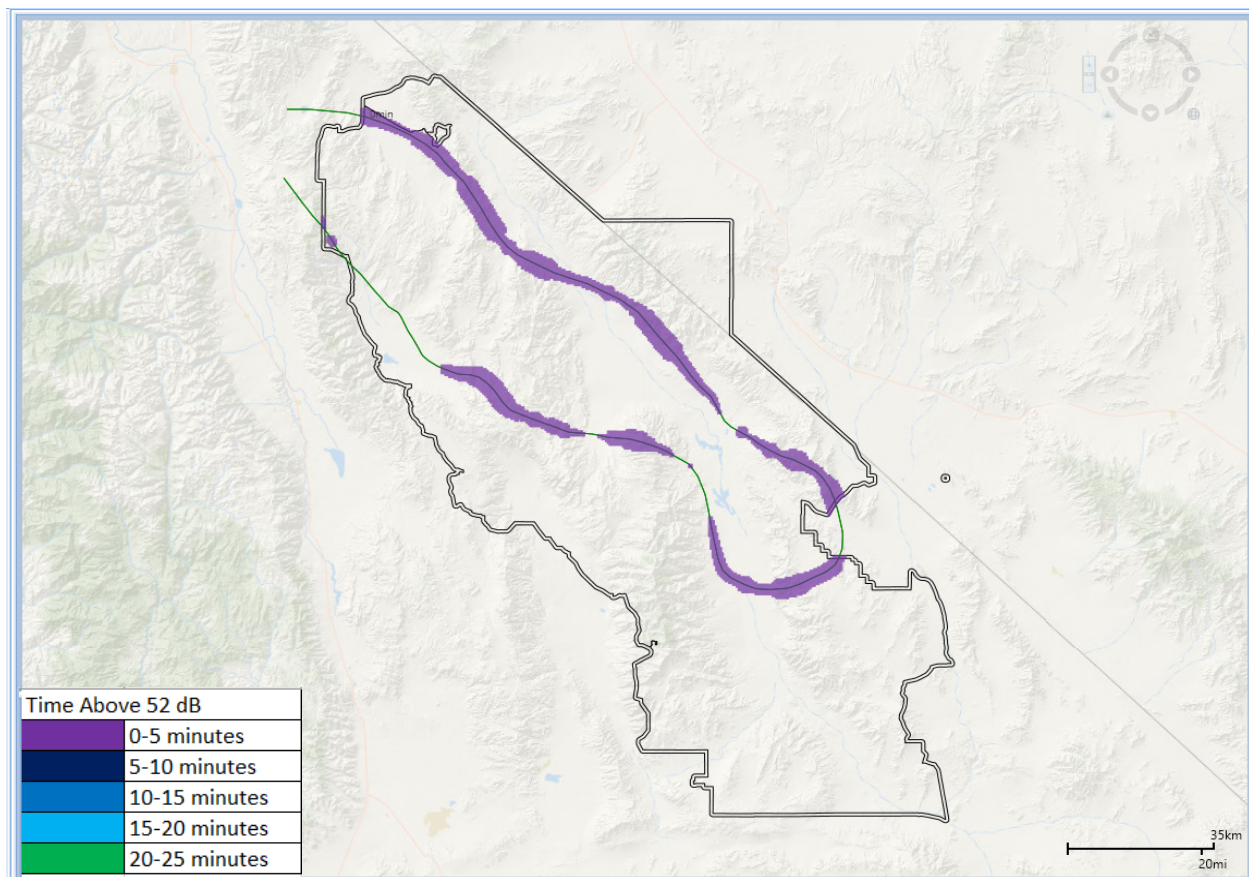


Figure 2. Noise contour results for Time Above 52 dBA

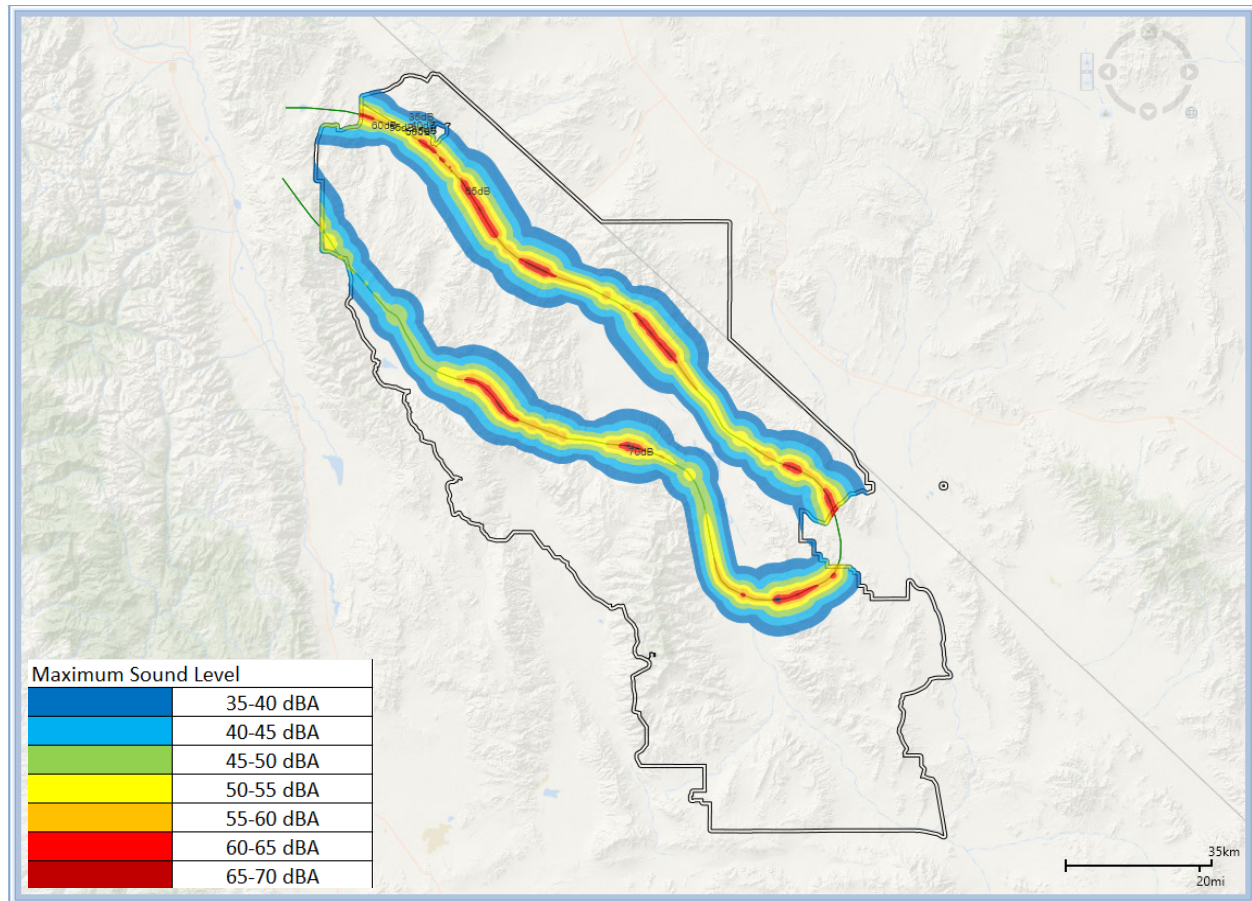


Figure 3. Noise contour results for L_{\max}



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

NATIONAL PARKS AIR TOUR MANAGEMENT PROGRAM

June 17, 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 Death Valley National Park (Project #: UT 2021-6699; 28051)

Robin Reed
Deputy State Historic Preservation Officer
Nevada State Historic Preservation Office
901 South Stewart Street, Suite 5004
Carson City, NV 89701

Dear Robin Reed:

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 Death Valley 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 July 30, 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 efforts to identify historic properties within the APE and invited and encouraged consulting parties to share any information about previously unidentified historic properties in our most recent correspondence dated March 7, 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 issued the draft ATMP on July 28, 2021, in the Federal Register. The public comment period on the draft ATMP was July 28, 2021, through August 28, 2021. A public meeting was held August 19, 2021.

The FAA and the NPS received three public comments about potential noise effects from commercial air tours on historic properties. Commenters expressed concern that aircraft noise from air tours could disrupt the character of cultural resources. Specific sites mentioned were Scotty's Castle and Lower Vine Ranch. Another commenter recommended a historic property to be considered during the ATMP planning process: the historic mining camp of Ryan, CA, which is within the ½-mile buffer of the Park.

The FAA and the NPS received seven comments from the public related to tribal concerns. Commenters expressed concern that air tours will violate the sanctity of Native American cultural values and practices at the Park, including the Timbisha Shoshone, Owens Valley Paiute, and other neighboring tribal communities. One commenter referenced the Timbisha Shoshone Natural and Cultural Preservation Area established by the Timbisha Shoshone Homeland Act (PL 106-423). Commenters questioned if the ATMP planning process included tribal consultation and expressed concern that a tribal consultation process in accordance with the NHPA and EO 13175 was not discussed in the draft ATMP.

Description of the Undertaking

The FAA and the NPS are developing ATMPs for multiple parks, including Death Valley National Park (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 operations over the Park date back more than 20 years. Since 2005, air tours have been authorized by interim operating authority (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 an annual limit of, currently 37 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 0.6 air tours per year, or .3 air tours per operator, which has been rounded up to one air tour per operator, or two air tours per year. 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. Currently, commercial air tours may be conducted using the fixed-wing GA-690-A and GA-690-D and helicopters AS350 and EC-130. Under existing conditions, commercial air tours may be conducted on the routes shown in **Attachment A**. Commercial air tour operators report that they presently fly no lower than 1,000 feet (ft.) above ground level (AGL) depending on the location over the Park.¹

Under existing conditions, operators report that commercial air tours over the Park may be flown on seven different routes shown in **Attachment A** though they are not required to fly on any particular route. The two operators fly variations of similar routes, some of which enter the Park from the southeastern corner and travel in a roughly northwest direction before returning to exit the Park along

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

the southeastern corner of the Park, while others enter the park at the northwest boundary, circle the park, and exit at the northwest boundary.

The undertaking for purposes of Section 106 is implementing the ATMP that applies to all commercial air tours over the Park and outside the Park but within ½ mile of its boundary. 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.

Following public comment, the FAA and NPS consolidated and modified commercial air tour routes, and raised the minimum altitudes. The undertaking would result in commercial air tours being conducted along the routes shown in **Attachment C**. The new routes are based on one of the existing operator-reported routes, and have been consolidated along areas of parallel flight paths. The ATMP will require each of the operators to conduct commercial air tours on one of the designated routes. Under existing conditions, operators are not required to adhere to routes.

The undertaking was previously described in detail in our Section 106 consultation letter dated July 30, 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=297&projectID=103441&documentID=114129>.

- A maximum of two commercial air tours are authorized per year on designated routes;
- The aircraft type authorized for commercial air tours include the fixed-wing GA-690-A and GA-690-D and helicopters AS350 and EC-130. Any new or replacement aircraft must not exceed the noise level produced by the aircraft being replaced;
- Commercial air tours may operate two hours after sunrise until two hours before sunset, as defined by the National Oceanic and Atmospheric Administration (NOAA).² Air tours may operate any day of the year except under circumstances provided in the bullet below;
- The NPS can 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 one week's notice to the operators in writing in advance of the no-fly period. Events may include tribal ceremonies or other similar events.;
- Operators are required to equip all aircraft used for air tours with flight monitoring technology, and to report flight monitoring data as an attachment to the operator's semi-annual reports;
- Park staff will provide interpretive and education materials at the request of the operators. Any materials provided by the Park will include information that operators can use to further their

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

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 local FAA Flight Standards District Office (FSDO), and all operators will meet 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 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.

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 have been made:

- As a result of consultation with the Timbisha Shoshone, coordination with the operators, and to provide more protection for wildlife, including nesting birds, the air tour routes were consolidated from seven to two, which follows along or near existing routes in the northern portion of the Park. In response to comments received from the Timbisha Shoshone, the designated routes do not fly within 30 miles of the Timbisha Village at Furnace Creek which is protective of tribal use of that area. The designated routes and limit of two flights per year also minimize the impacts of air tours on the Timbisha Shoshone Natural and Cultural Preservation Area. The designated routes are depicted in **Attachment C**;
- A new subsection was added to prohibit aircraft hovering in place.
- Helicopter tours will fly no lower than 2,000 ft. AGL, while fixed-wing aircraft may fly no lower than 2,500 ft. AGL. This raises the minimum altitudes required for tours flown using both helicopters and fixed wing aircraft 1,000 ft. from the altitudes in the draft ATMP;
- 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 tours 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 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 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 this 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:

This 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 conduct air tours beginning at sunrise or ending at 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;

- 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, including tribal lands within those areas.
- The agencies also clarified that a plan amendment to increase the number of authorized commercial air tours per year above the two authorized in the ATMP would require additional environmental review. The revised language is below:

Increases to the total number of 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 the ATMP and additional environmental review. Notice of all amendments to this ATMP will be published in the Federal Register for notice and comment.
- The agencies added a parenthetical statement in the section "Adaptive Management" within the language describing instances in which a modification to the ATMP may occur through adaptive management to make clear that adaptive management actions may be taken to address tribal input. The revised language is below:

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.
- The agencies added the following to the first paragraph of Appendix A: "IOA previously issued for the Park and Timbisha Shoshone tribal lands terminates on the effective date of this ATMP."

Area of Potential Effects

The APE for the undertaking was proposed in the Section 106 consultation letter dated July 30, 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 previously delineated APE for the undertaking comprises the commercial air tour routes over the Park and a ½ mile outside the boundary of the Park, plus an additional five-mile buffer extending from either side of the centerline of the air tour routes, as depicted in **Attachment B** below. The FAA

requested comments from all consulting parties including federally recognized tribes. We received no further comments from consulting parties regarding the APE.

The changes to the undertaking described above include reducing the number of air tour routes from seven to two, along or near existing air tour routes over the Park and ½ mile outside the boundary of the Park. As a result of the changes to the number and location of the air tour routes, the APE has also changed. The revised APE is defined in the same way and comprises the commercial air tour routes over the Park and a ½ mile outside the boundary of the Park, plus an additional five-mile buffer extending from either side of the centerline of the air tour routes. The revised APE is depicted in **Attachment C**.

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 California Office of Historic Preservation (CA SHPO), Nevada 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 Nevada Cultural Resources Information System on February 7, 2022 to collect GIS data for previously-identified properties both inside and outside the Park, and consulted with the tribes listed in **Attachment D** regarding the identification of any other previously unidentified historic properties that may also be located within the APE.

The FAA coordinated extensively with the CA SHPO's Eastern Information Center (EIC), but was unsuccessful in obtaining additional information about historic properties in the APE. The FAA first requested a Non-Confidential Extended record search on January 25, 2022. When the FAA did not receive a response from the EIC acknowledging the agency's request had been received, the FAA followed up with phone calls and emails. On February 14, 2022, the EIC replied indicating the request had been received and asked for PDF maps rather than the GIS shapefiles that were provided with the original request. The FAA prepared the requested PDFs and provided them to EIC on February 28, 2022. FAA again followed up with phone calls and emails to confirm receipt. EIC replied on March 23, 2022, indicating the maps had been received and noting the project was quite large and would take considerable time to complete.

On March 24, 2022, the FAA emailed EIC to inquire about a Confidential record search and refining the APE to reflect changes in the undertaking. The FAA followed up on March 29, 2022 and again on April 4, 2022. EIC provided the FAA with the materials to initiate a Confidential record search on April 7, 2022. Additional coordination regarding completing an Access and Use Agreement with EIC continued via email on April 20, 2022, and April 25, 2022. On April 26, 2022, the FAA asked for a legal contact at the EIC to discuss questions and options for next steps. On May 11, 2022, the Deputy SHPO responded that the CA SHPO does not authorize outside entities to work directly with their legal counsel. After more than four months of coordination with EIC and no discernible progress on the FAA's initial record search request, the FAA has determined that further coordination would not be productive.

Consequently, FAA is treating the Park as eligible for the purposes of Section 106 consultation for this undertaking. This is not a formal eligibility determination. **Attachment E** identifies the Park's significant characteristics based on currently available information.

In addition to the identification efforts outlined above, the Timbisha Shoshone and NPS park staff have informed FAA that there are TCPs present within the APE. In order to protect confidentiality, these TCPs are not shown on any of the attached maps.

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 11 historic properties. All historic properties identified within the APE are listed in **Attachment E** and shown in the APE map provided in **Attachment C**.

Summary of Section 106 Consultation with Tribes

The FAA contacted 26 federally recognized tribes via letter on March 26, 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. On July 30, 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 that same day, the FAA received a voicemail message from Barbra Durham, the Timbisha Shoshone Tribal Historic Preservation Officer (THPO), requesting that we add the Timbisha Indian Village, the Timbisha Historic District, and cemetery to our list of historic properties. These areas are included in the Tumpisa" proposed TCP that the NPS is currently drafting. The FAA added these to the list of historic properties in the APE. However, as a result of changes to the undertaking, these properties are no longer in the APE. THPO Durham expressed concern regarding aircraft that fly directly over residential areas within the village, which is located within the Park and, at that time, the APE. A portion of the Tumpisa" TCP remains within the revised APE.

At the request of Barbara Durham, the FAA and NPS subsequently met in person with representatives of the Timbisha Shoshone Tribe on December 16, 2021 to discuss the undertaking. Other senior FAA and NPS staff joined the meeting virtually. At that meeting, Chairman Jimmy-John Thompson stated that he intended to submit written comments to FAA and NPS regarding his concerns about the proposed ATMP. On February 9, 2022, the FAA followed up with the Timbisha Shoshone Tribe to inquire about the status of comments from the tribe. Chairman Thompson submitted a letter dated February 23, 2022, in which he stated the tribe's opposition to the planned ATMP. In the letter the tribe expressed that approval of the plan would disrupt cultural activities and endanger residents within the Timbisha Indian Village. Chairman Thompson is in favor of zero flights. The FAA responded to comments from the Timbisha Shoshone in a letter dated June 1, 2022 stating that routes that overflowed the southern portion of the park near Furnace Creek and Timbisha Village have been eliminated and noting that the ATMP allows the NPS to establish "no-fly periods" for special events such as tribal ceremonies at the request of the Timbisha Shoshone or other affected tribes.

On December 1, 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 14, 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 Bishop Paiute Tribe expressing interest in participating in the Section 106 consultation process. The Big Pine Paiute Tribe of the Owens Valley, Las Vegas Tribe of Paiute Indians, Los Coyotes Band of Cahuilla and Cupeno Indians, and Twenty-Nine Palms Band of Mission Indians of California requested that earlier consultation materials be resent. The FAA resent materials to those tribes on January 10, 2022. Additionally, the FAA received responses from the Kaibab Band of Paiute Indians, San Manuel Band of Mission Indians, and Soboba Band of Luiseno Indians opting out of additional consultation for the undertaking. The tribes whom the FAA has contacted as part of this undertaking are included in the list of consulting parties enclosed as **Attachment D**.

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 E**. 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 reduced the number of routes from seven to two and increased the minimum altitude of the routes in response to public comments and feedback received. The proposed routes are along or near existing air tour routes and would not move air tours closer to any historic properties. The consolidated routes in the ATMP fly over the Park and the area within ½ mile of its boundary for fewer flight miles at similar altitude to the modeled route, which would reduce the spatial footprint of the noise effects of the ATMP compared to that of the modeled routes.

The ATMP authorizes substantially the same number of flights per year as the average number of flights from 2017-2019 and reduces the number of routes flown under existing conditions, 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 fixed-wing GA-690-A and GA-690-D and helicopters AS350 and EC-130. Any new or replacement aircraft must not exceed the noise level produced by the aircraft being replaced.

The ATMP sets a minimum aircraft altitude; it requires commercial air tours to fly at a higher minimum altitude (2,000 ft. AGL for helicopters and 2,500 ft. AGL for fixed-wing aircraft) as compared to those reported to be flown under existing conditions (minimum 1,000 ft. AGL). The resulting increase in the minimum altitude 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 of the attenuation of the noise from the higher altitude and 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 Yearly³ Day Night Average Sound Level (Ldn 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.⁴

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

Attachment F 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. Note that, although the footprint of the noise contours for routes authorized by the ATMP may differ from those reflected in **Attachment F**, the modeled routes represent a conservative estimate of potential noise effects, and actual noise effects of the ATMP are expected to be similar or slightly decrease compared to those reflected in the noise modeling analysis. Noise related to commercial air tours is anticipated to be greater than 35 dBA for less than 5 minutes a day within the APE and greater than 52 dBA for less than 5 minutes a day within the APE on days when flights occur. The Death Valley/Scotty Historic District and a TCP are the only historic properties where the duration of noise is anticipated to be greater than 35 dBA and 52 dBA for less than 5 minutes a day on the maximum of two days per year on which commercial air tours could occur under the ATMP.

As the ATMP would result in similar or decreased 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

³ Yearly conditions are represented as the Average Annual Day (AAD)

⁴ Under FAA policy, an increase in the Day-Night Average Sound Level (DNL) of 1.5 dBA or more for a noise sensitive area that is exposed to noise at or above the DNL 65 dBA noise exposure level, or that will be exposed at or above the DNL 65 dBA level due to a DNL 1.5 dBA or greater increase, is significant. FAA Order 1050.1F, *Environmental Impacts: Policies and Procedures*, Exhibit 4-1. Noise increases are “reportable” if the DNL increases by 5 dB or more within areas exposed to DNL 45-60 dB, or by 3 dB or more within areas exposed to DNL 60-65 dB. FAA Order 1050.1F, Appendix B, section B-1.4.

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 (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 topography.

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 one week's notice to the operator. It represents an improvement over existing conditions where no such provision exists.

The ATMP limits the number of commercial air tours to two tours per year, which is consistent with the average number of flights from 2017-2019, and requires each of the commercial air tour operators to fly on one of two consolidated routes, which are modified from an existing operator reported route. This modification protects, among other things, tribal use and the visitor experience at the Park. Therefore, impacts to viewsheds will be similar to or decrease compared to impacts currently occurring because the number of authorized flights under the ATMP is substantially the same as the average number of flights from 2017-2019, and routes will be reduced and consolidated, avoiding the majority of the Park.

The ATMP limits the number of commercial air tours to a maximum of two tours per year and consolidates routes from seven to two. The consolidated routes are not closer to any identified historic properties, and avoid historic properties that may have been overflown by the operator-reported existing routes that are not authorized by the ATMP. Therefore, visual effects to historic properties are expected to be similar or 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 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 no measurable change in audible or visual effects from existing conditions. Based on the above analysis, the FAA and NPS propose a finding of no adverse effect on

historic properties. We request that you review the information and respond whether you concur with the proposed finding within 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,

A handwritten signature in black ink, appearing to read 'Judith Walker', with a long horizontal flourish extending to the right.

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

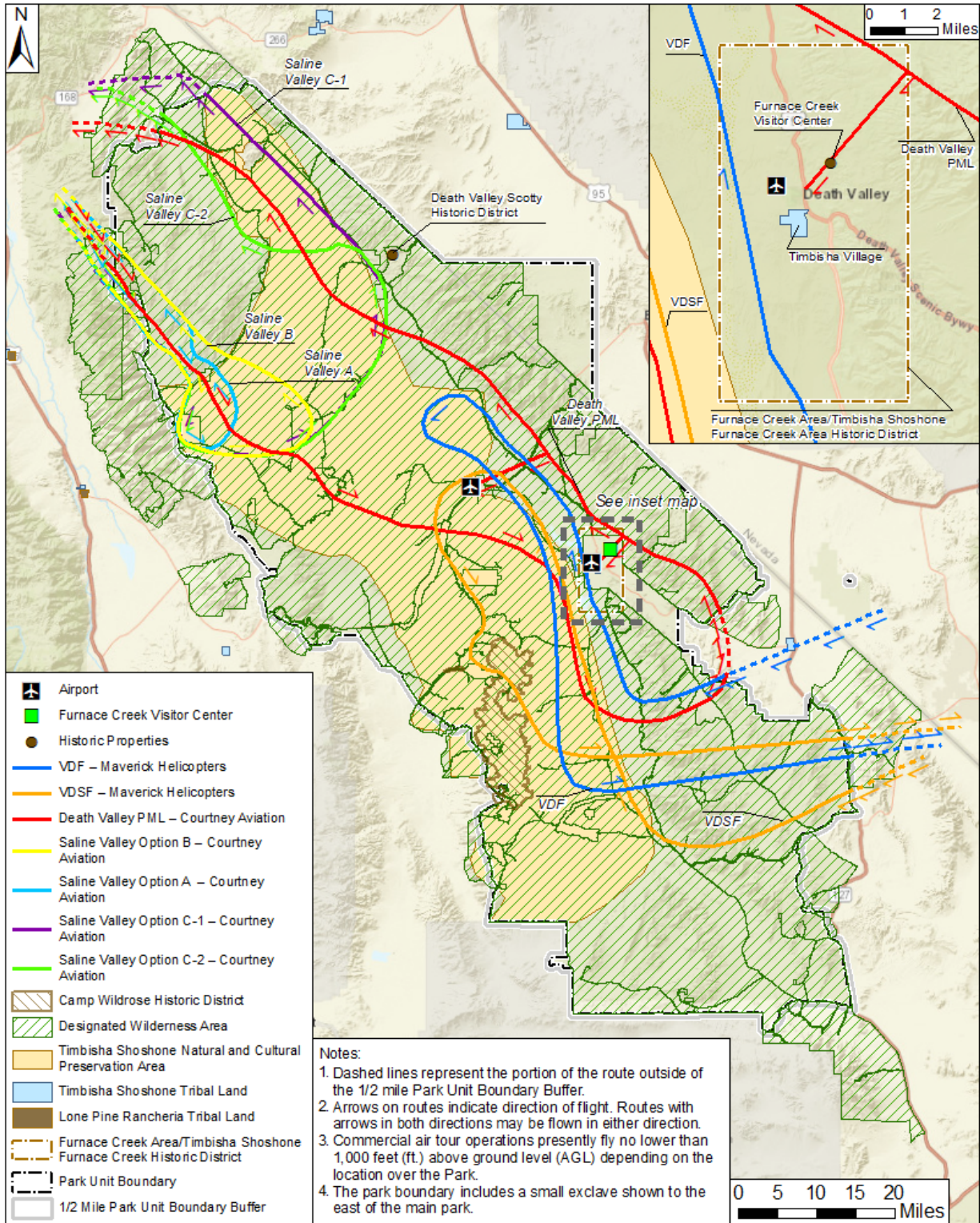
Attachments

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

ATTACHMENT A

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

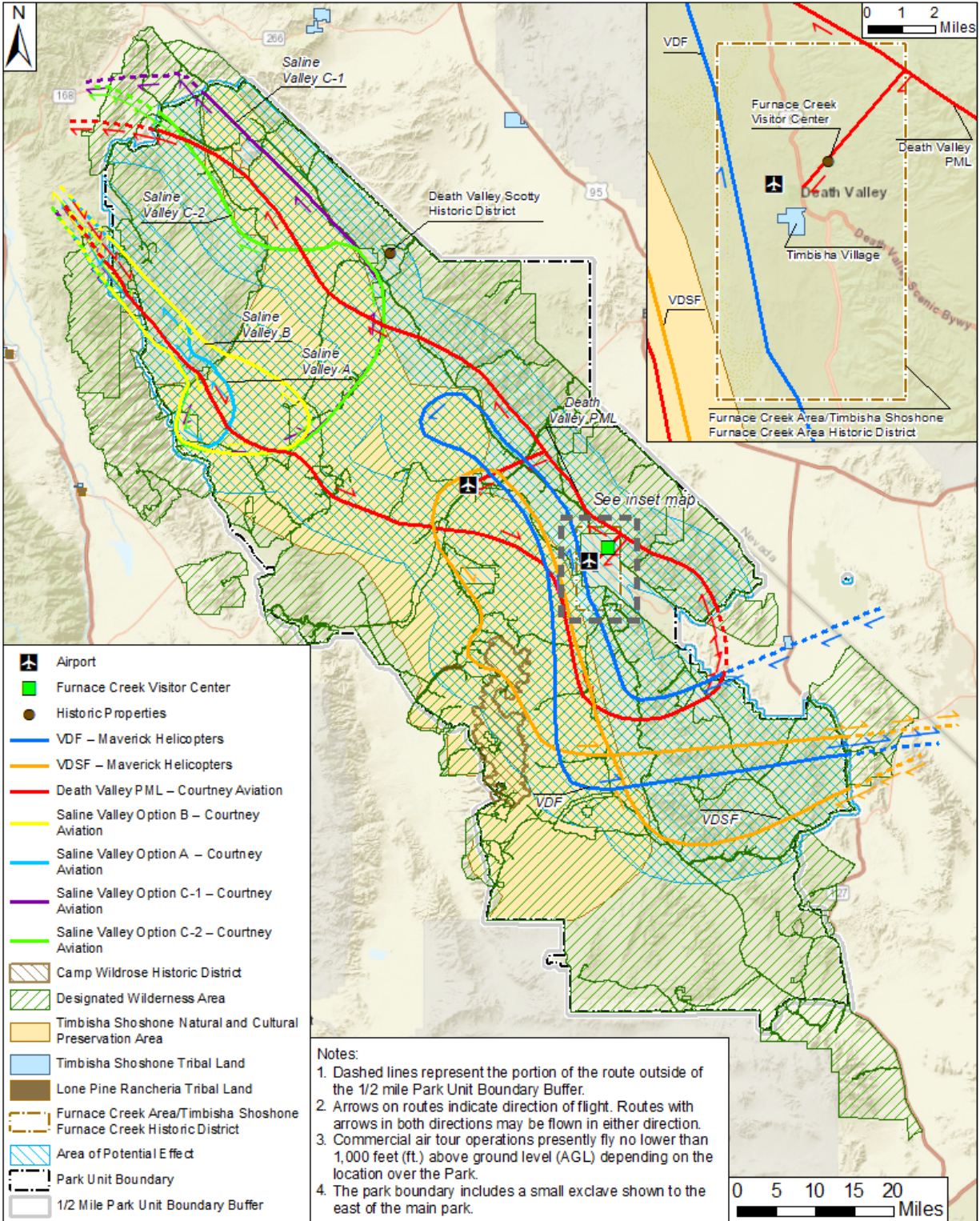
Map of Existing Air Tour Routes with Historic Properties



ATTACHMENT B

**Previous Area of Potential Effect Map
Including
Existing Commercial Air Tour Routes**

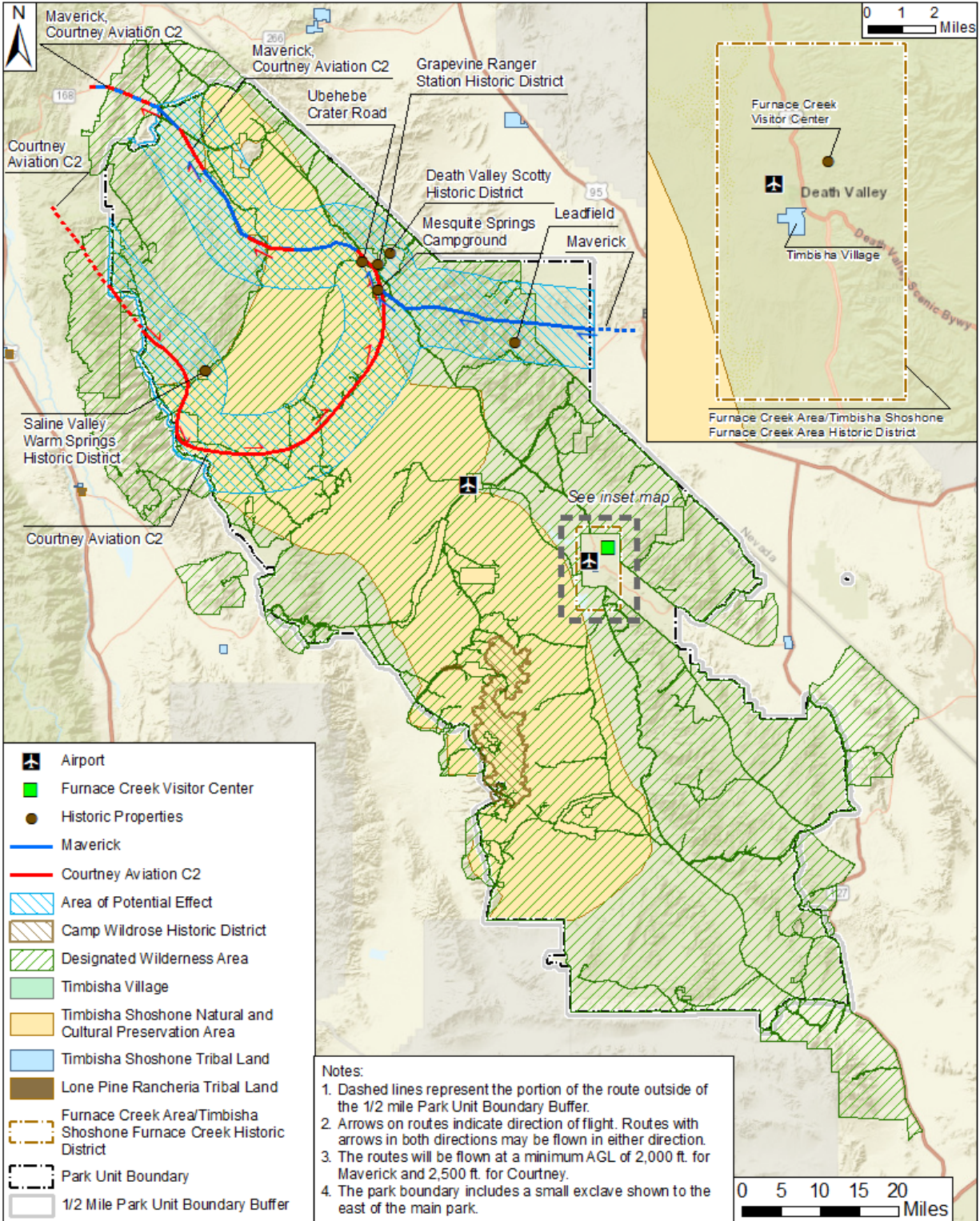
Previous Area of Potential Effects Map for ATMP at Death Valley National Park (Existing Routes)



ATTACHMENT C

**Revised Area of Potential Effect Map
Including
Proposed Commercial Air Tour Routes**

Area of Potential Effects Map for ATMP at Death Valley National Park (Proposed Air Tour Routes)



ATTACHMENT D

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

Big Pine Paiute Tribe of the Owens Valley
Bishop Paiute Tribe
Chemehuevi Indian Tribe of the Chemehuevi Reservation, California
Colorado River Indian Tribes of the Colorado River Indian Reservation, Arizona and California
Confederated Tribes of the Warm Springs Reservation of Oregon
Courtney Aviation, Inc. (Courtney Aviation, Yosemite Flight Tours)
Duckwater Shoshone Tribe of the Duckwater Reservation, Nevada
Fort Independence Indian Community of Paiute Indians of the Fort Independence Reservation, California
Fort McDermitt Paiute and Shoshone Tribes of the Fort McDermitt Indian Reservation, Nevada and Oregon
Fort McDowell Yavapai Nation, Arizona
Fort Mojave Indian Tribe of Arizona, California and Nevada
Inyo National Forest
Kaibab Band of Paiute Indians of the Kaibab Indian Reservation ¹
Las Vegas Tribe of Paiute Indians of the Las Vegas Indian Colony, Nevada
Lone Pine Paiute-Shoshone Tribe
Los Coyotes Band of Cahuilla and Cupeno Indians, California
Maverick Helicopters, Inc.
Moapa Band of Paiute Indians of the Moapa River Indian Reservation, Nevada
National Trust for Historic Preservation
NTC and Fort Irwin
Paiute-Shoshone Tribe of the Fallon Reservation and Colony, Nevada
Pyramid Lake Paiute Tribe of the Pyramid Lake Reservation, Nevada
Reno-Sparks Indian Colony, Nevada
San Manuel Band of Mission Indians, California ¹
Soboba Band of Luiseno Indians, California ¹
Te-Moak Tribe of Western Shoshone Indians of Nevada
Timbisha Shoshone Tribe
Tule River Indian Tribe of the Tule River Reservation, California
Twenty-Nice Palms Band of Mission Indians of California
Yerington Paiute Tribe of the Yerington Colony & Campbell Ranch, Nevada
Yomba Shoshone Tribe of the Yomba Reservation, Nevada

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

ATTACHMENT E

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

Property Name	Property Type	Eligibility Status	Description of Significant Characteristics
Death Valley Scotty Historic District	District	Eligible	The Death Valley Scotty Historic District is an area of Regional significance in the fields of 20 th century architecture, folklore and social history, and of local significance in the fields of archeology, art and invention. The Scotty's Castle complex serves as a reminder of the excesses of mining promotion during the early 20 th century, the frontier romanticism connected with it, and the conspicuous consumption practiced by the wealthy during the 1920's. The architecture typifies their values.
Ubehebe Crater/ Tumpingwosa TCP	TCP	Eligible	The Timbisha Shoshone and NPS park staff have informed FAA that there are TCPs present within the APE.
Saline Valley Warm Springs TCP	TCP	Eligible	The Timbisha Shoshone and NPS park staff have informed FAA that there are TCPs present within the APE.
Grapevine Ranger Station Historic District	District	Eligible	The potential historic district is associated with significant events in history (Criterion A) and the buildings embody the distinctive characteristics of NPS styles and methods of construction during the 1960s (Criterion C).
Grapevine Canyon Archeological District	District	Eligible	The Park is estimated to contain approximately 1,400 archeological sites, most of them prehistoric. Historic archeological sites in the Park are largely associated with transportation corridors, water sources, and mining and ranching operations of the late 19th and early 20th centuries.
Mesquite Springs Campground	Site	Eligible	Significant for its association to the Civilian Conservation Corps (CCC) crews, who were housed in 3 permanent camps at Wildrose, Funeral Range and Cow Creek and spike camps at Mesquite Springs, Emigrant Canyon, Daylight Pass and Butte Valley.

Property Name	Property Type	Eligibility Status	Description of Significant Characteristics
Saline Valley Warm Springs Historic District	District	Eligible	In 2014, the National Park Service completed a Determination of Eligibility (DOE). The DOE recommends that the area of historic significance for the recreational users is significant at the local level under Criterion A for recreation as a campground established around a hot springs site in use by Euro-Americans since 1955. Additionally, the DOE recommends that the area of historic significance is significant for social history
North Highway/ Bonnie Clare Road	Linear Feature	Eligible	The road qualifies under NRHP Criteria A and C for its association with significant events in local history (Criterion A) and embodiment of distinctive characteristics that represent distinctive design and artistic values (Criterion C). The road is associated with the early Mission 66 NPS improvement program; those improvements represent a formalization of the road as a major circulation feature of the park and the NPS's continued philosophy of unobtrusive development on the landscape.
Ubehebe Crater Road	Linear Feature	Eligible	The road qualifies under NRHP Criteria A and C for its association with significant events in local history (Criterion A) and embodiment of distinctive characteristics that represent distinctive design and artistic values (Criterion C). The road is associated with the early Mission 66 NPS improvement program; those improvements represent a formalization of the road as a major circulation feature of the park and the NPS's continued philosophy of unobtrusive development on the landscape.
Leadfield	District	Listed	Located in Titus Canyon, this mining town began in 1925 as a promotion scheme based on spurious claims. C.C. Julian advertised the town, making exaggerated claims. His advertising posters showed steamboats navigating the Amargosa River to Leadfield, ignoring the fact that the Amargosa River is dry much of the time and does not run within twenty miles of Leadfield. The mining town sparked to life but briefly, like a flame from a damp match. Julian disappeared and the inhabitants soon became disillusioned and quickly drifted away. The significance of the site lies in the fact it was an example of one of the get-rich-quick schemes of the 1920's.

Property Name	Property Type	Eligibility Status	Description of Significant Characteristics
Death Valley National Park	TCP	Eligible	<p>Death Valley National Park contains the lowest point in North America at 282 feet below sea level. The valley floor receives the least precipitation in the United States (average 1.84 inches per year) and is the site of the nation's highest and the world's second highest recorded temperature (134 degrees Fahrenheit or 57 degrees Celsius). The park is world renowned for its exposed, complex and diverse geology and tectonics, and for its unusual geologic features, providing a natural geologic museum that represents a substantial portion of the earth's history. The extremely colorful, complex, and highly visible geology and steep, rugged mountains and canyons provide some of the most dramatic visual landscapes in the United States.</p> <p>Death Valley National Park contains one of the nation's most diverse and significant fossil records and most continuous volcanic histories. It contains five major sand dune systems representing all types of dune structures, making it one of the only places on earth where this variety of dune types occurs in such close proximity. It also contains the highest dunes in California — Eureka Sand Dunes.</p> <p>Death Valley National Park is one of the largest expanses of protected warm desert in the world. Ninety-five percent of the Park is designated wilderness, providing unique opportunities for quiet, solitude, and primitive adventure in an extreme desert ecosystem.</p> <p>Death Valley has been the continuous home of Native Americans, from prehistoric cultures to the present-day Timbisha Shoshone Tribe.</p>

ATTACHMENT F

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
Time Above 35 dBA ⁵	<p>The amount of time (in minutes) that aircraft sound levels are above a given threshold (i.e., 35 dBA)</p> <p>In quiet settings, outdoor sound levels exceeding 35 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).</p>
Time Above 52 dBA	<p>The amount of time (in minutes) that aircraft sound levels are above a given threshold (i.e., 52 dBA)</p> <p>This metric represents the level at which one may reasonably expect interference with Park interpretive programs. At this background sound level (52 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).</p>
Equivalent sound level, $L_{Aeq, 12\text{ hr}}$	<p>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.</p>

⁵ dBA (A-weighted decibels): Sound is measured on a logarithmic scale relative to the reference sound pressure for atmospheric sources, 20 μ Pa. 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.

Day-night average sound level, L_{dn} (or DNL)	<p>The logarithmic average of sound levels, in dBA, over a 24-hour day, DNL takes into account the increased sensitivity to noise at night by including a ten dB penalty between 10 p.m. and 7 a.m. local time.</p> <p>For aviation noise analyses, the FAA (2015, Appendix. B, B-1) has determined that the cumulative noise energy exposure of individuals to noise resulting from aviation activities must be established in terms of day-night average sound level (DNL).</p> <p>Note: Both $L_{Aeq, 12hr}$ and L_{dn} characterize:</p> <ul style="list-style-type: none"> Increases in both the loudness and duration of noise events The number of noise events during specific time period (12 hours for $L_{Aeq, 12hr}$ and 24-hours for L_{dn}) <p>If there are no nighttime events, then $L_{Aeq, 12hr}$ is arithmetically three dBA higher than L_{dn}.</p> <p>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.</p>
Maximum sound level, L_{max}	<p>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.</p>

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 day⁶ 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 one flight on the Courtney Aviation, Inc. PML route using a Twin Commander AC-690 aircraft. Note that although the PML route is an operator reported route flown under existing conditions, the ATMP does not permit commercial air tour operators to fly over the Park or its ½ mile boundary using this route. Rather, the ATMP authorizes commercial air tours to fly on two consolidated routes, which are modified from an existing operator reported route. The consolidated routes in the ATMP fly over the Park and ½ mile boundary for fewer flight miles at similar altitude than the modeled PML route, which would reduce the spatial footprint of the noise effects of the ATMP compared to that of the modeled routes. Therefore, although the footprint of the noise contours for routes authorized by the ATMP may

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.

differ from those reflected in the noise analysis below, the modeled routes represent a conservative estimate of potential noise effects, and actual noise effects of the ATMP are expected to be similar or slightly decrease compared to those reflected in the noise modeling analysis below.

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 $L_{Aeq, 12hr}$
 - Note 1: Contours are not presented for $L_{Aeq, 12hr}$ as the average sound levels were below 35 dBA for the Proposed Action modeled at DEVA.
 - Note 2: Contours are not presented for L_{dn} (or DNL) as it is arithmetically 3 dBA lower than $L_{Aeq, 12hr}$ if there are no nighttime events, which is the case for the Proposed Action modeled at DEVA.
- Maximum sound level or L_{max} – see Figure 3

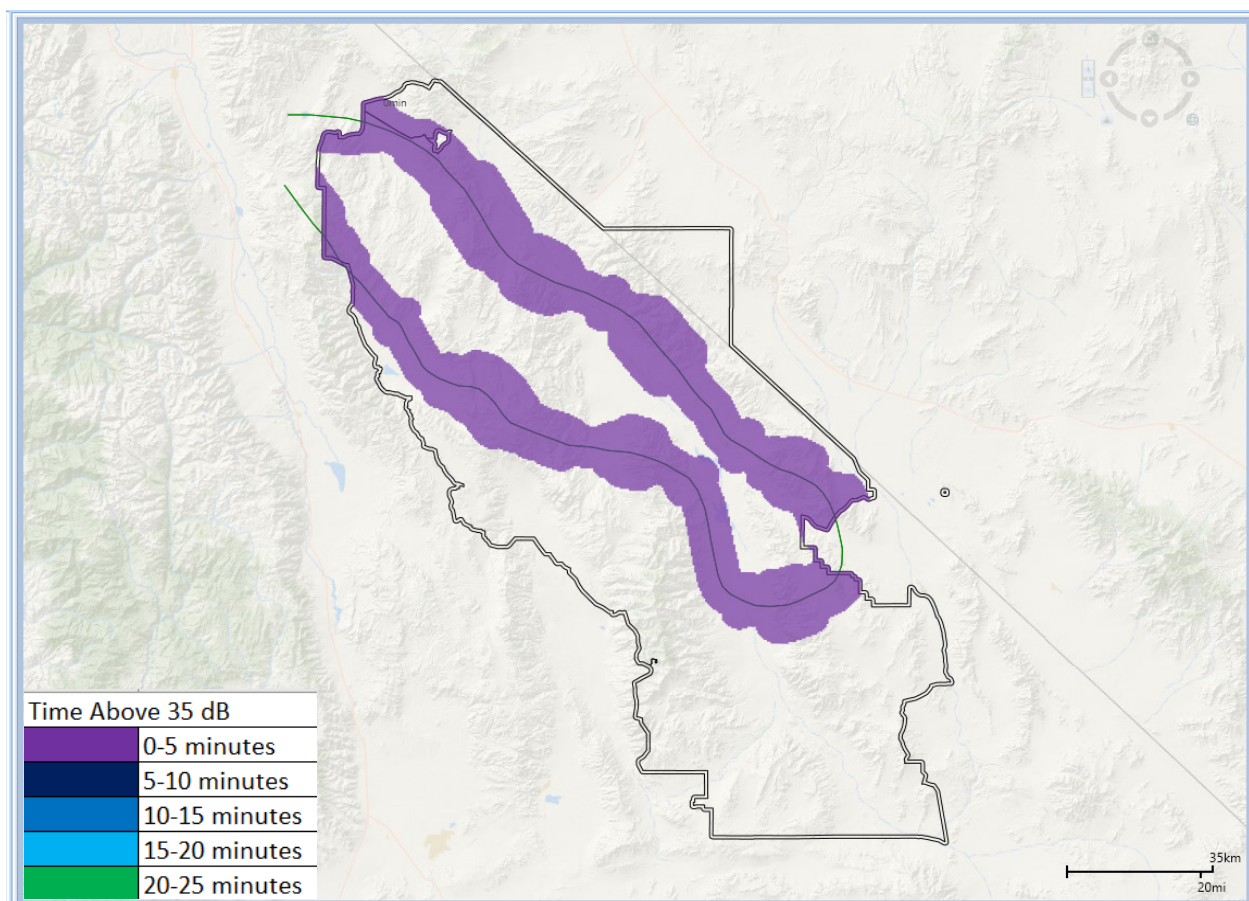


Figure 1. Noise contour results for Time Above 35 dBA

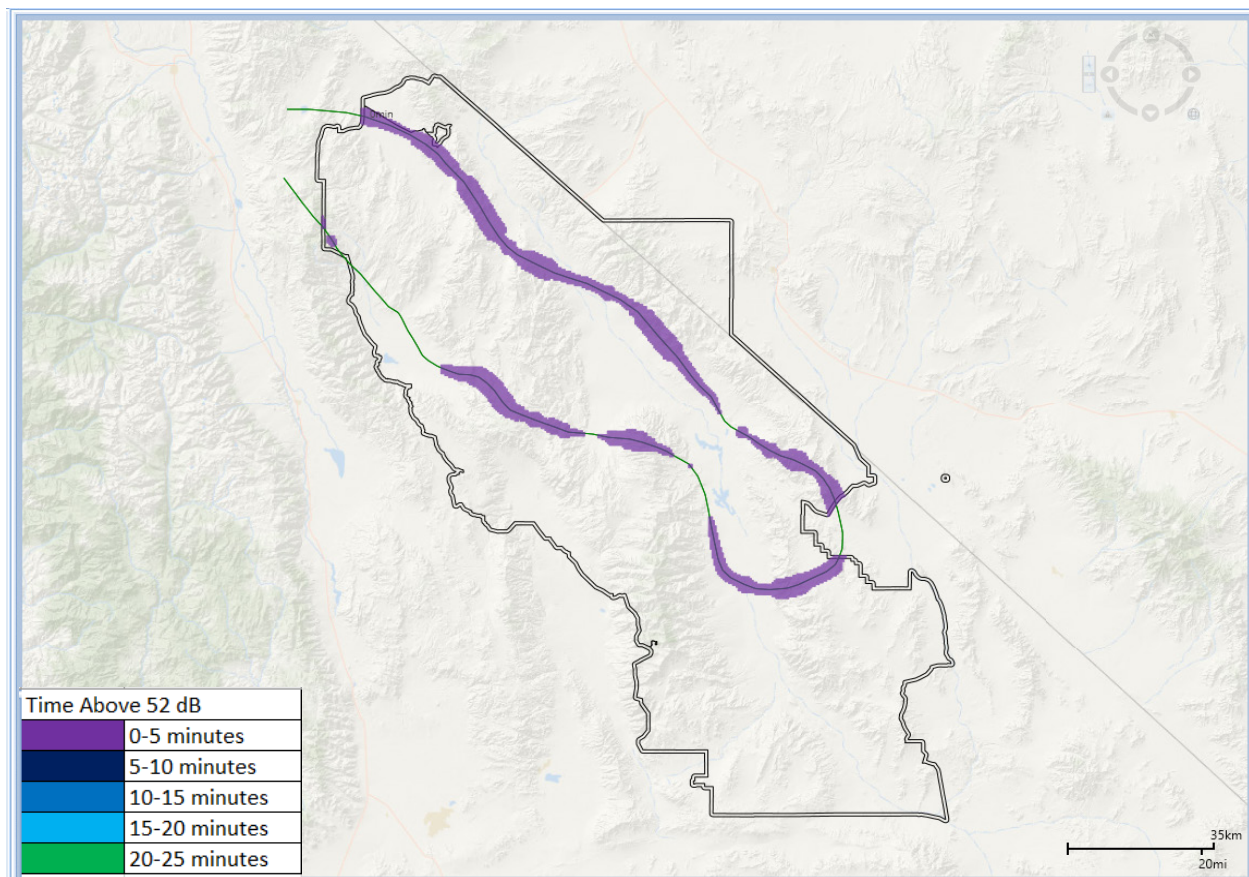


Figure 2. Noise contour results for Time Above 52 dBA

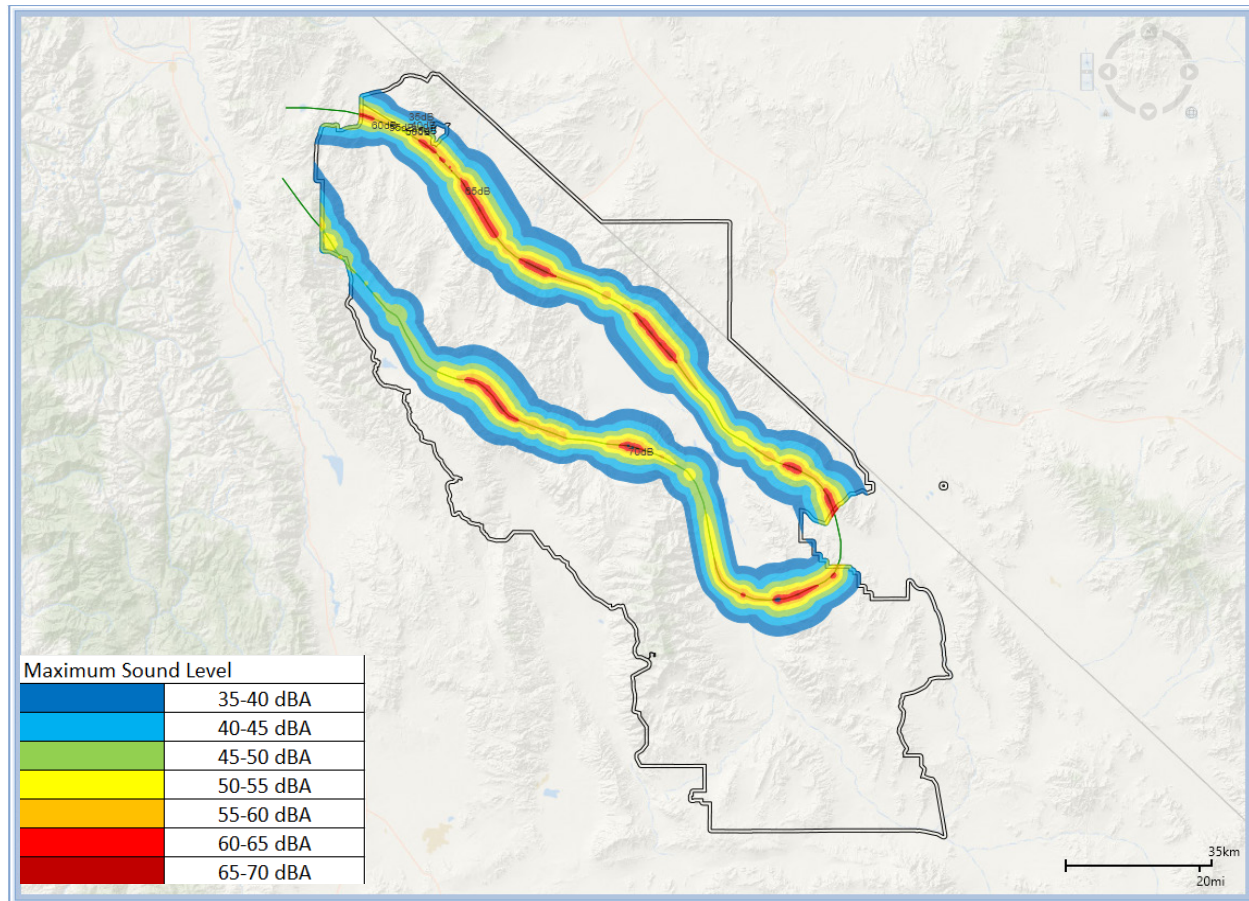


Figure 3. Noise contour results for L_{\max}



NEVADA
**STATE HISTORIC
PRESERVATION OFFICE**

STATE OF NEVADA
Department of Conservation & Natural Resources

Steve Sisolak, *Governor*
James R. Lawrence, *Acting Director*
Rebecca Palmer, *Administrator*

July 26, 2022

Judith Walker
Federal Preservation Officer
Senior Environmental Policy Analyst
Federal Aviation Administration
800 Independence Ave. SW
Washington, DC 20591

RE: Continuing Consultation under Section 106 of the National Historic Preservation Act for the Development of Air Tour Management Plan (ATMP) for Death Valley National Park (UT 2021-6699; 29435)

Dear Ms. Walker:

The Nevada State Historic Preservation Office (SHPO) has reviewed the subject documents received June 23 and July 21, 2022 in accordance with Section 106 of the National Historic Preservation Act (NRHP) of 1966, as amended.

The current submission is in response to previous SHPO correspondence dated September 7 and April 13, 2022. The Federal Aviation Administration (FAA) has provided additional information regarding the project and is requesting SHPO concurrence of the Finding of Effect.

Area of Potential Effect (APE)

The FAA has clarified that the revised APE includes lands in Nevada within Death Valley National Park that are displayed on the map in Attachment C.

The FAA has defined the APE to include the air tour routes of the helicopter and fixed-wing aircraft flights with an additional half-mile outside of the Death Valley National Park Boundary. The visual, auditory, atmospheric, and cumulative APE includes five miles beyond the centerline of the proposed flight routes based on results of noise analysis that showed aircraft noise is audible five miles from the route centerline.

Identification and Evaluation of Historic Properties

The FAA is treating the entire Death Valley National Park as a National Register-eligible Traditional Cultural Property (TCP), Death Valley National Park TCP, for the purpose of this undertaking.

The FAA states that no additional TCPs have been identified within the Nevada portions of Death Valley National Park.

Native American Consultation

The FAA has submitted the summary of consultation with the affected Native American tribes (Tribes) for this undertaking pursuant to 36 C.F.R. §800.2(c)(2). The FAA has identified the

Death Valley National Park TCP that could be affected by this undertaking. The FAA and the National Park Service (NPS) have agreed to establish “no-fly periods” for special events such as tribal ceremonies at the request of the Timbisha Shoshone or other affected tribes.

Consultation with Interested Parties

The SHPO acknowledges receipt of documentation that consultation with the public and representatives of organizations that have a demonstrated interest in historic properties has been concluded per 36 CFR §800.2(c)(5) and 36 CFR §800.2(d). This consultation did not result in the identification of historic properties that could be affected by the undertaking.

Finding of Effect

The SHPO **concurs** with FAA’s finding of **No Adverse Effect** for this undertaking.

Unanticipated Discovery

If any buried and/or previously unidentified resources are located during the project activities, the SHPO recommends that all work in the vicinity of the find cease and this office be contacted for additional consultation per 36 CFR §800.13(b)(3).

Should you have questions concerning this correspondence, please contact SHPO staff archaeologist Ashley Wiley at (775) 684-3450 or email awiley@shpo.nv.gov.

Sincerely,



Robin K. Reed
Deputy State Historic Preservation Officer

APPENDIX G

NPS Statement of Compliance

APPENDIX G

NATIONAL PARK SERVICE STATEMENT OF COMPLIANCE

Death Valley 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 Death Valley 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 Death Valley National Park ATMP

The purposes of Death Valley National Park, along with Park significance statements and a description of the Park's fundamental resources and values, are described in the Park's Foundation Statement. *Foundation Document for Death Valley National Park (Foundation Document)*, February 2017:

The purpose of Death Valley National Park, homeland of the Timbisha Shoshone, is to preserve natural and cultural resources, exceptional wilderness, scenery, and learning experiences within the nation's largest conserved desert landscape and some of the most extreme climate and topographic conditions on the planet. *Foundation Document*, page 4.

The Park's significance statements highlight several resources which may be impacted by commercial air tours including wilderness and cultural and ethnographic resources (*Foundation Document*, page 5). Endemic wildlife, cultural resources, viewsheds, and natural soundscapes, are listed as fundamental resources and values of the Park, all of which are potentially impacted by air tours (*Foundation Document*, pages 7-8).

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 Death Valley National Park Air Tour Management Plan Section 7 Endangered Species No Effect Determination (Appendix E to the ROD); and, the 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 Death Valley National Park (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; lightscares; wilderness; visitor experience; and viewsheds. The ESF considers both the change from current conditions as well the impact from the commercial air tour authorized under the ATMP. *See* ESF, Appendix B to the ROD.

The ATMP would result in limited impacts to the Park's natural and cultural soundscapes. Acoustic conditions in the Park were measured in 2008 (Lee and MacDonald, 2011). 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. Noise modeling for the ATMP discloses that noise from two commercial air tours would be present only near the designated air tour route. *See* ESF, Appendix B to the ROD. Areas near the designated route would experience noise above 35 decibels, a level at which quieter natural sounds may be masked, for 0-5 minutes two days a year. A smaller area would experience noise above 52 decibels, the level at which one may reasonably expect interference with Park interpretive programs, for between 0-5 minutes two days a year. *ESF, Figures 3. and 4. Noise Technical Analysis*, Appendix B to the ROD. Because there are only two commercial air tours authorized under the ATMP, the area beneath or near the designated routes would not have any noise from commercial air tours for at least 363 days per year. Therefore, the natural and cultural soundscapes of the Park remain unimpaired and without unacceptable impacts under the ATMP since noise impacts would occur only twice a year and be short in duration, and impacts would occur in only those areas along the designated route, leaving the Park's natural and cultural soundscape largely unimpacted by commercial air tours.

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. 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). However, again, 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. Because only two commercial air tours are authorized, the impacts would be experienced for only a few minutes twice a year. The minimum altitude of the authorized tours, 2,000 ft. and 2,500 ft. above ground level (AGL), minimizes the potential for bird strikes. The NPS concluded, in consultation with experts at the U.S. Fish and Wildlife Service, that the commercial air tours authorized by the ATMP would not affect listed species within the Park.¹ *No Effect Determination*, Appendix E to the ROD. In conclusion, the ATMP will not impair the Park's wildlife or its habitat because the impacts from two commercial air tours does not rise above 35 decibels in most places affected, are extremely short in duration and would only occur two days a year. Impacts to wildlife, if any, would occur on an individual level

¹ A no effect determination means there will be no consequences to listed species or critical habitat from the ATMP.

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. 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 NPS concluded, and the California and Nevada State Historic Preservation Officers concurred, that there would be no adverse effects on historic properties from the two commercial air tours authorized under the ATMP. The ESF and 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 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, these resources would maintain their integrity and purpose and therefore remain unimpaired under the ATMP.

As disclosed in the ESF, the ATMP may have very limited impacts on the Park's viewshed. 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. As noted above, due to the short duration of these tours as well as the limited frequency, impacts to the Park's viewshed will be limited. Visitors will continue to be able to enjoy the Park's beautiful views unimpaired.

The NPS completed an air quality analysis and determined that the two 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.

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 further explains:

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.

Death Valley 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), the Death Valley National Park Air Tour Management Plan Section 7 Endangered Species No Effect Determination (Appendix E to the ROD), the 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 Death Valley

National Park (Appendix F to the ROD), and the unacceptable impact and non-impairment analysis above and the language in NPATMA as a basis for finding that the ATMP's authorization of two commercial air tours over Death Valley National Park is an appropriate use.

- The ATMP for Death Valley 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 two 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 route, and setting minimum altitudes, limit impacts to public use and other resources.
- The effects of the two 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. Impacts would occur only twice a year and be 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 two 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. In future planning documents, the Park may set management direction to work with the FAA to eliminate all commercial air tours over the Park, in furtherance of other Park management objectives. However, the NPS has determined that because the ATMP authorizes two commercial air tours, because those tours are restricted to designated routes and at sufficiently high 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.

Death Valley National Park ATMP – consistency with NPS Management Policies for Soundscape 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 Death Valley National Park Air Tour Management Plan Section 7 Endangered Species No Effect Determination (Appendix E to the ROD), the 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 Death Valley National Park (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 two per year, which is a reduction from the current authorized number (37) under IOA. *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 Tribal, cultural, and natural resources, and areas where tours could disrupt educational opportunities. The ATMP requires the commercial air tours occur along the designated route specific to each operator, which protects these areas from noise.

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.” Baseline acoustic conditions in the Park were measured in 2008 (Lee and MacDonald, 2011). At the locations nearest commercial air tour route, the existing ambient daytime was reported to be 15 – 38 decibels, while the natural ambient daytime was reported to be 13 – 33 decibels. 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. In this case, there is minimal difference between natural and existing soundscape conditions for median measures. As discussed above under the non-impairment discussion, the noise from commercial air tours is limited. 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. For all these reasons, the ATMP complies with § 8.4, § 4.9, and § 5.3.1.7 of the Management Policies, since 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 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 where possible.

Death Valley 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.

The Park includes designated wilderness. The NPS considered the impact of two commercial air tours on wilderness character. The ESF acknowledges noise from aircraft could impact wilderness character although the analysis demonstrates that the impact is extremely limited. As described in detail above and in the ESF, noise from the commercial air tours over wilderness will be infrequent, short, and limited to the area along the designated route. 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 wilderness, and the natural and cultural soundscape will remain largely unmarred by air tour noise the vast majority of time and in most of the Park's wilderness.

Consistent with Director's Order #41, § 7.3, the ATMP includes mitigations which minimize impacts to wilderness character including limiting commercial air tours to two per year, requiring aircraft to fly above 2,000 ft. AGL, and requiring the commercial air tours to stay on a designated route. *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 Death Valley National Park

**US Department of Transportation
Federal Aviation Administration**



**US Department of the Interior
National Park Service**



Death Valley National Park

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

July 2022

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INTRODUCTION

An Air Tour Management Plan (ATMP) would provide the terms and conditions for commercial air tours conducted over Death Valley 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)). On September 15, 2015, NPS notified FAA that an ATMP was necessary to protect Park resources and values and withdrew the exemption for the Park.

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 July 29 through August 29, 2021. In addition, the agencies held a virtual public meeting for the Parks' draft ATMP on August 17, 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, 1,259 correspondences were received providing 1,428 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 424 signatories. The form letter expressed opposition to air tours, requested the consideration of a “no air tour” alternative, and noted that helicopter aircraft could negatively impact cultural values and result in greater impacts to wildlife and visitor experience than fixed-wing aircraft.

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	39	2.7%
ADV200	Adverse Impacts: Wildlife/biological impacts	19	1.3%
ADV300	Adverse Impacts: Endangered species impacts	9	0.6%
ADV400	Adverse Impacts: Wilderness character impacts	61	4.3%
ADV500	Adverse Impacts: Cultural resource impacts	3	0.2%
ADV510	Adverse Impacts: Visual impacts	6	0.4%
ADV520	Adverse Impacts: Equity	4	0.3%
ADV530	Adverse Impacts: Climate change/ greenhouse gases / air quality	5	0.4%
ADV600	Adverse Impacts: Other	16	1.1%
ELE100	ATMP Elements: Annual number of air tours	25	1.8%
ELE200	ATMP Elements: Routes and altitudes	34	2.4%
ELE300	ATMP Elements: Aircraft type	133	9.3%
ELE400	ATMP Elements: Day/time	16	1.1%
ELE500	ATMP Elements: Other	30	2.1%
FAV100	Benefits of air tours	2	0.1%
NS100	Non-substantive comment: Support air tours	5	0.4%
NS150	Non-substantive comment: Other	32	2.2%
NS200	Non-substantive comment: Oppose air tours continuing	25	1.8%
NS300	Non-substantive comment: Oppose air tours introduction	568	40%
PRO100	Process comments: Impact analysis	45	3.2%
PRO200	Process comments: Public review	6	0.4%
PRO300	Process comments: Alternatives considered	295	21%
PRO400	Process comments: Other	11	0.8%
PRO500	Process comments: NEPA	32	2.2%
TRIBE	Tribal concerns	7	0.5%

*In alphabetical order by code name

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 that the Park's naturally quiet soundscape is a primary, unique appeal of visiting the Park, and expressed concern that any amount of air tours would result in noise pollution to this increasingly rare resource.^{1,2} Some commenters noted specific locations of concern, including Saline Valley, Eureka Valley, and Grapevine Mountains (Fall Canyon, Red Wall Canyon, Titus Canyon, Furnace Creek Campground).
2. Commenters noted that Death Valley is considered one of the most naturally quiet landscapes in the continental US due to its natural dryness and geography and expressed concern that noise carries particularly far within the Park. Commenters noted that the ATMP did not adequately describe or consider, in quantitative terms, the remarkable natural quiet that currently exists at the Park.³
3. Commenters expressed concern that the soundscapes in the Park are already impacted by military aircraft and that air tours would compound those impacts. Some commenters acknowledged that while military aircraft are outside the scope of the ATMP, air tours and their resultant contribution to the Park's soundscape are administratively controllable.
4. Commenters requested more information on soundscape impact data associated with the proposed action. See also "Impact Analysis" category.

ADV200 Adverse Impacts: Wildlife/Biological Impacts

1. Commenters expressed concern that aircraft noise will be disturbing to wildlife.⁴ Specifically, aircraft noise could negatively affect wildlife by resulting in increased blood pressure, increased

¹ One commenter provided recommended literature in support of the importance of natural sounds on the visitor experience: "Protecting National Park Soundscapes", Reid and Steve Olson, Rapporteurs; National Park Services; John A. Volpe National Transportation Systems Center. 2013. ISBN 978-0-309-28542-1

² One commenter provided a recommended citation on the impacts of overflights on National Parks: National Park Service. September 12, 1994. Report on effects of aircraft overflights on the National Park System. Report to Congress. Prepared pursuant to Public Law 100-91, The National Parks Overflights Act of 1987. Accessed August 27, 2021. <https://www.nonoise.org/library/npreport/intro.htm>

³ Commenters provided recommended references, including <https://www.nps.gov/deva/learn/nature/soundscapes.htm> and <https://wildstore.wildsanctuary.com/collections/soundscape-albums/death-valley>

⁴ Commenters provided the following studies as recommended references: Gladwin, D.N., K.M. Mancini, and R. Vilella, 1988. Effects of aircraft noise and sonic booms on domestic animals and wildlife: bibliographic abstracts. U.S. Fish Wildl. Serv. National Ecology Research Center, Ft. Collins, CO. NERC-88/32. 78 pp. Accessed August 27, 2021. <https://www.nonoise.org/library/animbib/animbib.htm>; Mancini, K.M., D.N. Gladwin, R. Vilella, and M.G. Cavendish, 1988. Effects of aircraft noise and sonic booms on domestic animals and wildlife: a literature synthesis. U.S. Fish and Wildl. Serv. National Ecology Research Center, Ft. Collins, CO. NERC-88/29. 88 pp. Accessed August 27, 2021. <https://www.nonoise.org/library/animals/litsyn.htm>; Gladwin, D.N., D.A. Asherin, and K.M. Mancini, 1987. Effects of aircraft noise and sonic booms on fish and wildlife: results of a survey of U.S. Fish

stress chemicals, avoidance of particular habitat areas⁵, and impacts to navigation, feeding, breeding, predator avoidance, communication,⁶ and growth. Other specific effects noted by commenters included alterations in bird behavior (migrating, resting, feeding, breeding, and communication), impacts to bighorn sheep which are already under stress from respiratory diseases, and amphibians. Locations of particular concern where wildlife impacts could be experienced include Salt Creek, Claire Spring, Mesquite Flat, Grapevine Canyon (springs areas), Mesquite Springs (campground area), Sheep Canyon (springs areas and potential impacts to bighorn sheep), Willow Springs Canyon, Gold Valley, Scotty's Canyon, Lemonade Canyon, and Virgin Springs Canyon. Commenters noted species that could be affected including spotted owl, coyotes, bobcats, desert bighorn sheep, nine species of bats, gophers, kangaroo rats, mountain and desert cottontails, foxes, badgers, ringtails, and mountain lions to be able to conduct their life survival activities.

2. Commenters expressed concern that the noise from air tours and resultant stress to wildlife will compound the stress animals are already experiencing due to environmental change such as climate change and loss of biodiversity. Commenters emphasized the importance of providing spaces for wildlife to safely survive wherever possible.
3. One commenter noted that noise attenuates with distance, and if citing the endangered species northern spotted owl and the marbled murrelet as reason for flight altitudes, there is a need to reference a document by the Fish and Wildlife Service office at Arcadia CA. entitled: Revised Transmittal of Guidance: Estimating the Effects of Auditory and Visual Disturbance to Northern Spotted Owls and Marbled Murrelets in Northwestern California. The commenter also noted the FAA document (UScert_Appendix_07) on certified aircraft noise limits, which indicates the noise of most air tour aircraft to be in the Very Low category of the above stated document at a flight altitude of 1500 ft. AGL. (See also Adverse Impacts: Endangered Species Impacts and ATMP Elements: Routes and Altitudes.)

ADV300 Adverse Impacts: Endangered Species Impacts

1. One commenter noted that noise attenuates with distance, and if citing the endangered species northern spotted owl and the marbled murrelet as reason for flight altitudes, there is a need to reference a document by the Fish and Wildlife Service office at Arcadia CA. entitled: Revised Transmittal of Guidance: Estimating the Effects of Auditory and Visual Disturbance to Northern Spotted Owls and Marbled Murrelets in Northwestern California. The commenter also noted the FAA document (UScert_Appendix_07) on certified aircraft noise limits, which indicates the noise

and Wildlife Service Endangered Species and Ecological Services Field Offices, Refuges, Hatcheries, and Research Centers. NERC-88/30. U.S. Fish Wildl. Serv., National Ecology Research Center, Fort Collins, CO. 24 pp.; Dooling, R.J., M. R. Leek, and A. N. Popper, 2015. Effects of noise on fishes: What we can learn from humans and birds. *Integr Zool.* 2015 January; 10(1): 29-37. doi:10.1111/1749-4877.12094; and National Park Service. September 12, 1994. Report on effects of aircraft overflights on the National Park System. Report to Congress. Prepared pursuant to Public Law 100-91, The National Parks Overflights Act of 1987. Accessed August 27, 2021. <https://www.nonoise.org/library/npreport/intro.htm>.

⁵ One commenter provided the following studies as recommended references: McClure, Christopher J. W., et al., "An Experimental Investigation into the Effects of Traffic Noise on Distributions of Birds: Avoiding the Phantom Road." *Proceedings of the Royal Society B: Biological Sciences*, vol. 280, no. 1773, 22 Dec. 2013, pp. 1-9 <http://wildlensinc.org/eoc-single/the-phantom-road>; and Caorsi VZ, Both C, Cechin S, Antunes R, Borges-Martins M., 2017. Effects of traffic noise on the calling behavior of two Neotropical hyliid frogs. *PLOS ONE* 12(8): e0183342. <https://doi.org/10.1371/journal.pone.0183342>

⁶ One commenter provided the following recommended reference: Lynch, E, D. Joyce, and K. Fristrup, 2011. An assessment of noise audibility and sound levels in U.S. National Parks. *Landscape Ecol* 26:1297-1309.

of most air tour aircraft to be in the Very Low category of the above stated document at a flight altitude of 1500 ft. AGL. (See also Adverse Impacts: Wildlife/Biological Impacts and ATMP Elements: Routes and Altitudes.)

2. Commenters expressed concern that the noise of aircrafts is not merely an annoyance to visitors, it is a stressful disturbance to the wildlife that make their homes in these lands, and that over endangered species habitat, this harassment of wildlife violates the Endangered Species Act. Commenters referenced the following endangered or sensitive animals will be disrupted: spotted owls, marbled murrelets, coyotes, bobcats, desert bighorn sheep, nine species of bats, gophers, kangaroo rats, mountain and desert cottontails, foxes, badgers, ringtails, and mountain lions. (See also ADV200 Adverse Impacts: Wildlife/biological impacts.)
3. Several commenters stated that there is extensive scientific research on impacts to wildlife, including threatened and endangered species, and social science surveys on the impacts to wilderness visitors, but that none of the ATMPs engage in the kind of analysis that references the large body of scientific studies and that without data or proposed numbers to share on effects to these species this is not accomplishing NEPA objectives.

ADV400 Adverse Impacts: Wilderness Character Impacts

1. Commenters expressed concern that noise from air tours diminishes and/or is incompatible with wilderness character, no matter the number of tours. Specifically, commenters noted that air tours are at odds with the stated purpose of the Wilderness Act and Keeping it Wild 2: An Updated Interagency Strategy to Monitor Trends in Wilderness Character Across the National Wilderness Preservation System (Landres et al., 2015, RMRS GTR-340). Commenters emphasized the need to protect wilderness given the relative rarity and uniqueness of these spaces, and equated this to protecting the Park, given that the majority of the Park comprises congressionally designated wilderness.
2. Commenters requested information on if/how the PWR Draft Wilderness Air Tour Noise Assessment Strategy (2015) was considered in the development of the Park's ATMP.
3. Commenters requested that the protection of wilderness be added as an objective to Section 1.0 of the ATMP, and to define and analyze flight routes that keep the sight and sound of air tour noise away from designated wilderness (see also ELE200 ATMP Elements: Routes and altitudes.)
4. One commenter provided the following reference when stating that the park visitor is not protected from aircraft noise in the wilderness designated areas: Interagency stewardship priorities for America's National Wilderness Preservation System; https://www.nps.gov/orgs/1981/upload/Interagency-2020-Vision_508.pdf.

ADV500 Adverse Impacts: Cultural Resource Impacts

1. Commenters expressed concern that aircraft noise from air tours could disrupt the character of cultural resources. Specific sites mentioned include Scotty's Castle and Lower Vine Ranch.
2. Commenters recommended a historic property to be considered during the ATMP planning process (historic mining camp of Ryan, CA - within ½ mile buffer of the Park).

ADV510 Adverse Impacts: Visual Impacts

1. Commenters noted that the Park has broad and dramatic scenic vistas that would be reduced by the presence of air tours, creating unwanted visual impacts.
2. One commenter stated that members of its organization visit this Park for the wilderness experience and to enjoy views that are free from human intervention with natural quiet. The

commenter does not believe that there are any acceptable or effective measures to mitigate the visual blight and disruptive noise of aircraft flying at low altitude in a wilderness environment.

3. One commenter stated that helicopters are visually out of place compared to fixed wing aircraft that have been around for 100 years, and that fixed wing aircraft help keep alive the idea that the Park is “frozen” at an earlier time such as the early 20th century.
4. One commenter supported reasonable restrictions to commercial tours noting that noise and the visual presence of helicopters and jet contrails are disturbances that detract from an experience of enjoying nature as it might be if it were pristine.

ADV520 Adverse Impacts: Equity

1. Commenters noted that air tours disproportionately benefit wealthy populations due to their high cost, and impact lower income ground-based visitors that cannot afford to pay for an air tour.
2. One commenter stated that our parks should be able to be equally enjoyed by all regardless of income and that this is an environmental justice issue. (See also ADV510 Adverse Impacts: Visual impacts.)
3. One commenter stated that allowing air tours over Death Valley reinforces the class divide already plaguing national park visitation.

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

1. Commenters expressed concern that GHG emissions from air tours will contribute to climate change nothing that aircraft are particularly disproportionate emitters on a per-passenger basis. In accordance with EO 14008, commenters requested that the Park work to reduce GHG emissions associated with park tourism.
2. One commenter stated that air tours will violate future NEPA guidelines on climate change impacts, and that customers of air tours arriving in internal combustion engine vehicles will increase vehicle-miles-traveled and contribute negatively to the environment and climate change.
3. One commenter stated that aircraft release toxic pollution which causes cancer, and that aviation pollution toxic gases will be trapped in the earth’s atmosphere for over 100 years.

ADV600 Adverse Impacts: Other

Commenters expressed concern regarding the potential for the following adverse impacts resulting from air tours at the Park:

1. Health and safety impacts
 - a. Commenters noted that hot temperatures and geologic conditions (e.g., high rocky canyons, blowing sand) within the Park create challenging conditions to conduct safe aviation.
 - b. Commenters expressed concern over the potential for air tours to conflict with military aircraft at the Park. Commenters specifically noted that the R-2508 Complex includes airspace down to 200 ft. AGL and operations are frequently conducted at this altitude. The commenters expressed the opinion that the largest area for potential conflict would be within the Saline Military Operations Area (MOA). Coordination with the U.S. military was recommended.
 - c. One commenter expressed concern that excess noise may lead to cognitive impairment.
2. Economic impacts
 - a. Commenters expressed concern that limits on flights and/or the elimination of IOA will result in economic harm to air tour operating companies and other pass-through vendors

such as fuel companies, mechanics, and aircraft manufacturers. The harm done to air tour companies will also have ripple effects through the aviation industry. Three examples were provided, the first, noting that air tour companies commonly support the emergency medical services (EMS) industry, as most EMS helicopter pilots get the required flight hour experience from flying helicopter tours. The second noted that air tour operators also support the U.S. Government (BLM and U.S. Forest Service) in wildfire suppression and also prescribed burns to reduce wildfires. Helicopter support is also used by state governments, including Division of Wildlife, Game and Fish, and local law enforcement search and rescue operations. These are three examples of services provided by helicopter companies that are also in the air tour industry, and that the air tour industry allows these companies to remain in business. Commenters requested data or a study to quantify the economic impacts associated with the ATMP.

- b. One commenter noted that if air tours led to adverse impacts on visitor experience, visitors might avoid the parks which may reduce visitation fees paid to the Park.

FAV100 Benefits of Air Tours

1. Commenters expressed their support of air tours and noted that air tours do not result in physical impacts to the landscape in the way that ground-based visitors do (e.g., foot traffic, erosion, automobiles).
2. Commenters expressed their support of air tours and noted that air tours allow visitors to see the Park, and in particular, remote areas of the Park, that may not otherwise have the physical capabilities to access those places.

PRO100 Process Comments: Impact Analysis

1. Commenters expressed concern that the environmental impacts of the draft ATMP, nor the significance of those impacts, if any, were not disclosed in accordance with the National Environmental Policy Act (NEPA) (see also Public Review and NEPA Process categories). Commenters noted that it was unclear how the overall number of flights and other ATMP parameters were determined to be the acceptable parameters that would provide protection to park resources. Commenters further noted that per the National Parks Air Tour Management Act of 2000 (the Act), the burden of proof rests on the NPS to demonstrate why air tours do not impair park resources or visitor experience opportunities at the parks in question.
2. Commenters requested specific impact analyses for the following Park resources: visitor experience (acceptable number of flights per day), soundscapes (noise associated with the ATMP⁷; noise comparison of helicopter vs. fixed-wing aircraft; analysis of the Park's carrying capacity for noise; acoustic monitoring beyond the sunrise/sunset timeframes), wilderness, cumulative impacts (related to military aircraft, other general aviation including aircraft that use the Park's airstrips⁸, and the implementation of ATMPs across 23 national parks (e.g., cumulative

⁷ One commenter suggested the following sources for scientific information and technical analysis to include in the ATMP to support the noise-related proposed provisions:

https://www.nps.gov/subjects/sound/acousticmonitoring_reports.htm, and https://www.faa.gov/documentLibrary/media/Advisory_Circular/AC-93-2.pdf

⁸ One commenter noted that the FAA was ordered by the U.S. Court of Appeals for the District of Columbia Circuit in the case *United States Air Tour Association v. FAA*, 298 F. 3d 997 (D.C. Cir. 2002), court ruling to consider all aviation noise over Grand Canyon National Park.

economic impacts to operators that hold IOA at multiple national parks; wilderness across the national park system), economic impacts, and GHG/climate change impacts.

PRO200 Process comments: Public Review

1. Commenters expressed concern that the draft ATMPs were being released for public review and comment without simultaneously disclosing environmental impacts in a single document in accordance with Council on Environmental Quality (CEQ) regulations with one commenter specifically referencing the requirements of 40 CFR §1501.2(b)(2). Commenters requested the agencies to pause, extend, or re-initiate public review until environmental compliance and impacts can be simultaneously disclosed. See also NEPA Process and Impact Analysis categories.
2. Commenters expressed that the comment period was too short, as many people travel during summer.
3. One commenter expressed concern that questions were hand-picked by the agencies during the public meeting, and that certain questions went unanswered.

PRO300 Process Comments: Alternatives Considered

1. Commenters requested that the agencies consider and evaluate a “no air tours” alternative. Commenters cited the following reasons for consideration: provide maximum protection to Park resources, other parks have banned air tours (Crater Lake, Rocky Mountain), it would simplify reporting and monitoring burdens, the majority of the public supports this alternative, and the Act states that a ban on air tours is permissible.
2. Commenters proposed an alternative to create a video of an air tour or aerial view of the Park for showcasing to the public at the visitor center (perhaps using virtual reality headsets) or visitor points of interest.
3. A commenter proposed an alternative to specify a rotation of the permitted routes in the ATMP on an annual basis, allowing only one or two routes to be used in a given year. The rotation would, over time, allow the full variety of available route experiences.
4. Commenters requested the ATMP to consider a range of alternatives and expressed concern that no alternatives other than the status quo appeared to have been considered.
5. One commenter suggested an alternative that included daily or monthly caps on air tours.

PRO400 Process Comments: Other

1. Timeline
 - a. Commenters expressed concern that the timeframe for the ATMP planning process is being rushed without a regard for the consequences of the ATMP (safety, economic, other) due to the court order. The D.C. Circuit’s ruling advised the agencies that if more time were needed to put ATMPs in place that they could return to the court for additional time.
2. Parties consulted
 - a. Commenters expressed concern that the National Parks Overflights Advisory Group (NPOAG), operators, and other users of the Park’s airspace Department of Defense) had not been consulted during the development of the draft ATMP.
3. Regulations
 - a. Commenters questioned the draft ATMP’s consistency with the following regulations:
 - i. FAA Rule 14 CFR Part 93 - mandates that aircraft not overfly urban communities. The commenter provided the following references with this

comment:

https://www.faa.gov/regulations_policies/rulemaking/media/NYNShoreHelicopterFinalRule.pdf; and <https://www.planenoise.com/docs/12-1335-1446255.pdf>

- ii. NPS Management Policies 2006, Sections 1.5 and 8.1.2 – Specifically, the commenter noted that air tours are not park operations, as they are typically initiated outside of parks; they are not managed like concessions; and they are not inherently related to park operations or visitor services. Therefore, it would be very difficult for NPS to justify allowing air tours if NPS were to prepare an appropriate use analysis as described in NPS Management Policies 2006, Sections 1.5 and 8.1.2. The commenter emphasized the need to prepare an appropriate use analysis.

PRO500 Process Comments: NEPA

1. Commenters expressed concern that a proposed action has been released without disclosing the environmental impacts of those actions as required by the CEQ NEPA implementing regulations⁹, and the agencies' own NEPA procedures.¹⁰ Commenters expressed uncertainty if the ATMPs themselves are considered NEPA documents, and how the agencies plan to achieve compliance with NEPA, noting lack of information on the agencies' websites (https://www.faa.gov/about/office_org/headquarters_offices/arc/programs/air_tour_management_plan/; <https://www.nps.gov/subjects/sound/airtours.htm>; and https://www.peer.org/wp-content/uploads/2020/05/5_1_20-Court-Decision-Overflights.pdf).
2. Commenters questioned whether the process followed by the agencies is consistent with representations made to the D.C. Circuit in court filings.
3. Commenters expressed concern that the draft ATMP does not include a discussion of compliance with Section 106 of the National Historic Preservation Act (NHPA) (including tribal consultation) in accordance with associated regulations and agencies' policies¹¹; Section 7 of the Endangered Species Act (ESA); the Wilderness Act; the Organic Act of 1916; or other federal statutes. Under both NPS and FAA policies, such information should be integrated into one comprehensive document that provides information related to the necessary consultations and gives the public the opportunity to review and comment on all of this in one document.
4. Commenters requested consideration of a range of alternatives and the environmental impacts of each disclosed. Particularly in the case of Death Valley, where the exemption from the requirement to prepare an ATMP was withdrawn, the PWR regional director requested the preparation of an ATMP for the purpose of considering a range of alternatives.
5. Commenters expressed concern about how ATMP amendments would be analyzed and the effects disclosed in the context of the NEPA process.
6. Commenters questioned if the two-year court-ordered timeline is forcing the agencies to prepare CEs when they would otherwise prepare EAs for the ATMPs.
7. Commenters suggested the need for a higher level of compliance:
 - a. One commenter questioned the need for a higher compliance bar since NEPA compliance has never been done on any of the existing IOAs, citing the requirements to publish IOA in the Federal Register for comment in accordance with 49 USC 40128 (c) (2) (C), and based on the commenter's interpretation of 70 FR 36456-36463, June 23, 2005.

⁹ 40 CFR §1501.2(b)(2)

¹⁰ FAA Order 1050.1F, Sections 1-8, 2-3.1, 2-5; NPS NEPA Handbook 2015, Section 1.4.A.

¹¹ 40 CFR §1502.25; FAA Order 1050.1F, Section 2-4.4; FAA Order 1210.20; NPS NEPA Handbook 2015, Section 4.14.

- b. One commenter stated that the actions being proposed for the ATMPs do not fall under those listed for "Actions categorically excluded from further NEPA review" under 43 CFR Part 46 Part 516 Chapter 12. As such, an Environmental Assessment (EA) would need to be conducted.

ELE100 ATMP Elements: Annual Number of Air Tours

1. Commenters requested an increase in the annual number of air tours, giving consideration to the following:
 - a. Other national parks allow more flights than is currently proposed at Death Valley.
 - b. In general, ground-based visitors only notice the effects of an air tour for a very short duration.
 - c. The size of the Park allows air tours and any resultant impacts to be spread out and thereby reduced.
 - d. An increase in air tours would allow for fluctuating demand (due to, for example, a particular event such as dramatic flash flooding) and/or expansion of air tour companies, particularly given that demand for air tours has greatly increased across the national park system in recent years. Commenters that specified a number associated with this justification requested 12 and 15 flights per year per operator.
 - e. An increase in the annual number of air tours would increase the availability of opportunities for visitors to take an air tour, rather than allowing only two flights per year that will likely go to the well-connected and wealthy.
 - f. More flights would promote multiple uses of the Park.
 - g. Two annual flights is not worth the administrative hassle to enforce and monitor. Instead, the annual number of tours should be increased in order to increase the public benefit in relation to the cost to administer the ATMP.
 - h. The amount of ongoing military aircraft operations that already occur at the Park.
2. Commenters requested a decrease in the annual number of air tours, giving consideration to the following:
 - a. Two flights does not provide much of a viable economic opportunity for operators and therefore, there is little benefit to allowing any flights at all.
 - b. Two flights is not worth the administrative hassle that it would take to monitor and enforce the ATMP.
 - c. Two flights sets a precedent for more flights to occur at the Park in the future.
 - d. IOA is not a justification to continue the status quo, particularly since IOA never represented actual existing operations.
 - e. Two flights cannot be redistributed among new entrants.
 - f. Two flights indicates very little demand for air tours at the Park.
3. One commenter stated that a requirement should be added that no more than two of the authorized flights annually may be operated in any one day, noting impacts to natural habitat and visitor experience.
4. Commenters expressed agreement with the proposed number of flights, noting that basing the annual number on existing conditions indicates that the ATMP would not cause economic impacts to operators.
5. One commenter requested the calculation of the annual number of flights to consider the past decade, rather than just the past three years, to fully account for fluctuating demand.
6. One commenter noted that the maximum 64 annual commercial air tours appears to arise from a calculation of the three year average of total air tours reported in 2017, 2018 and 2019, not usage

based on enactment of the Act, which is not consistent 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." (106th Congress, H.R. 717, H.Rept. 106-273). The commenter stated that the authorized number of air tours should be no more than the lesser of actual usage in 2000 or the more recent three year window average.

7. One commenter stated there should be no right at all to amend the ATMP to increase the total number of annual air tours, in reference to Section 9.0 of the ATMP.

ELE200 ATMP Elements: Routes and Altitudes

1. One commenter expressed that specifying routes is unnecessary for such low numbers of air tours each year. Specifying routes prohibits air tour companies to adjust to customer demand and preference.
2. Commenters recommended selecting one or just a few routes for inclusion in the ATMP to maximize resource protection given the low number of annual flights. The number of flight routes in the ATMP as written is unnecessarily complicated given the low number of annual flights.
3. Commenters expressed concern about flight routes in specific areas of the Park, including Saline Valley (due to military operations and remote nature), near IFR/VFR military training routes, unpaved areas of the Park, and wilderness areas. Commenters recommended designating certain areas of the Park as "no-fly areas", and defining and analyzing flight routes that keep the sight and sound of air tour noise away from designated wilderness (see also ADV400 Adverse Impacts: Wilderness character impacts).
4. Regarding Section 3.2, first sentence (authorized route), one commenter questioned the basis for this specific route, whether it is to maximize the scenic opportunities of the commercial air passengers (and profit of the operator) or if it is to minimize actual ground disruptions to the natural habitat and visitor experience. The commenter stated that it should be the latter and if not the approved route should be modified to that effect.
5. Commenters provided feedback on specific routes proposed in the ATMP. Specifically, one commenter noted that the VDF route (blue) seems more acceptable, because a substantial part of the trip seems to follow roads (such as northbound in the Park). A commenter also noted that the VDSF (orange) route seems unacceptable because of its intrusiveness on the backcountry, in particular its possible proximity to the Panamint ridge, visibility or noise on the Wildrose/Telescope Pk. trails or at Mahogany Flats campground, which disturbs the wilderness experience.
6. Commenters recommended consideration of different altitudes than were proposed in the draft ATMP. Specifically, commenters recommended 1,500 ft., 2,000 ft. (in accordance with FAA Advisory Circular (AC) No. 91-36D and the definition of noise-sensitive area provided in FAA Order 1050.1F, p. 11-3), 3,000 ft., (to protect wilderness), 5,000 ft. (to protect habitat and visitor experience), and 7,500 ft. AGL.
 - a. One commenter 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 so

are far more impactful at any altitude, approaching if not exceeding the cited 92 dB injury level.

7. One commenter referenced that in Section 2.0(1), with respect to the phrase "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", that the FAA has used similar language elsewhere to allow for aircraft operation at less than 5,000 feet (or other purported minimum altitude requirement) above actual ground level, under visual flight rules or otherwise, (1) where cloud cover is lower than the otherwise minimum altitude, or (2) where terrain is uneven as in ridges and valleys and the aircraft is flying over the higher terrain. The commenter stated that these exceptions gut the rule and allow for much if not most of flight operations to occur at less than stated minimum altitude, right down to very low altitudes, with resultant significantly amplified ground disturbances. The commenter stated that this and all other minimum altitude requirements should eliminate the exception and replace it 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.
8. Commenters recommended increasing the altitude of helicopter aircraft in relation to fixed-wing aircraft as they generate more noise and move slower than fixed-wing aircraft. The draft ATMP requires helicopter aircraft to fly at a lower AGL than fixed-wing aircraft citing the following references for technical details regarding the noise standards applicable to helicopters vs. airplanes: FAA regulations at Title 14 CFR Part 36 Subpart F and Appendix F, noise standards for small propeller driven planes; and Subpart H and Appendix H, noise standards for helicopters.
9. Commenters requested the ATMP to specify horizontal setbacks from features such as mountains in addition to altitude requirements.
10. One commenter requested clarification on why the draft ATMP would allow fixed wing aircraft being able to fly no lower than 1,500 ft. AGL under this ATMP when they are already flying between 2,400 ft. and 5,000 ft. AGL.
11. One commenter noted that noise attenuates with distance, and if citing the endangered species northern spotted owl and the marbled murrelet as reason for flight altitudes, there is a need to reference a document by the Fish and Wildlife Service office at Arcadia CA. entitled: Revised Transmittal of Guidance: Estimating the Effects of Auditory and Visual Disturbance to Northern Spotted Owls and Marbled Murrelets in Northwestern California. The commenter also noted the FAA document (UScert_Appendix_07) on certified aircraft noise limits, which indicates the noise of most air tour aircraft to be in the Very Low category of the above stated document at a flight altitude of 1500 ft. AGL. (See also Adverse Impacts: Wildlife/Biological Impacts and Adverse Impacts: Endangered Species Impacts.)

ELE300 ATMP Elements: Aircraft Type

1. Commenters expressed concern that helicopter flights would result in greater impacts to park resources than fixed-wing flights. Specifically, commenters noted helicopter impacts could include visitor experience (including inflicting trauma on veterans by invoking memories of war; provoking speculation of an emergency operation), wildlife, and cultural values.
2. One commenter requested the ATMP to specify the use of only electric aircraft to reduce the amount of noise emissions.
3. Regarding Section 3.3, 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, not

simply not exceed the prior noise levels, and this should be an express requirement for any FAA/NPS concurrence.

ELE400 ATMP Elements: Day/Time

1. Commenters noted concern with no limits on trip duration, which could result in a helicopter hovering over a single area for some time affecting wildlife or humans.
2. Commenters provided feedback on consideration of timeframes:
 - a. Commenters questioned how air tours operating two hours after sunrise until two hours before sunset any day of the year allows for opportunities for visitors to enjoy natural sounds and aligns with objectives for areas managed as wilderness.
 - b. Commenters questioned allowing air tours to begin at sunrise and end at sunset if using quiet technology, as well as the proposed timing for aircraft that do not have quiet technology, noting that the hours after sunrise and before sunset are the most special hours of the day in the Wilderness and backcountry.
 - c. Commenters suggested limiting the time when tours can take place from 10 a.m. to one hour before sunset local time, posted in advance.
 - d. Commenters suggested restricting air tours to two-hour window twice a month.
 - e. Commenters suggested allowing flights either during the Park's lightly visited December 1-19 time period, or during the Summer Solstice lightly visited month of June to best avoid visitor use conflict with those on the ground. The commenters suggested requiring three days' advance notice of any such flight.
 - f. One commenter stated that in Section 3.4, the allowable hours of operation during the day are too broad to adequately minimize disruption to the natural habitat and visitor experience, and that there should be a far 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 the 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." Commenters suggested including an alternative that includes at least two no fly days per week.
3. Commenters suggested including seasonal and safety-related limitations:
 - a. Suggestions to allow tours any day of the years disregards the needs of breeding animals and of the additive safety risks of heat and stress caused by noise.
 - b. Suggestions to not allow tours in the hottest months, during breeding seasons, within 2 weeks of another flight, over sensitive areas of the Park, and at a minimum elevation.
 - c. Suggestions to limit tours seasonally to exclude mating season, hibernation season and other inappropriate times that can adversely affect wildlife, as determined by Park specialists.
4. Commenters expressed concern that prohibiting standard aircraft from operating until 2 hours after sunset and the period after 2 hours before sunset is unreasonable given the other altitude and route restrictions being proposed.

ELE500 ATMP Elements: Other

1. Training and Education
 - a. Commenters suggested that the ATMP require operators to provide passengers with an educational brochure or rack card (e.g., jointly prepared by the FAA and NPS) that informs the public they will be flying over a noise sensitive area, which may include wildlife habitat, wilderness areas and cultural sites, and that special restrictions (such as AGL requirements) are in effect to minimize the adverse impacts of aircraft noise on the environment below.

- b. Commenters requested a revision in the ATMP language from “may” to “is required on at least an annual basis” where the ATMP references pilot training and safety briefings. Commenters recommended that both NPS resource management scientists and administrative personnel be involved.
- 2. New Entrants and Additional Flights
 - a. Commenters noted that Section 6: New Entrants seems to leave open the possibility of additional flights above the annual cap established in Section 3.1 of the ATMP. Commenters recommended that NPS clarify in Section 6 that the designated annual cap remains in effect no matter how many New Entrants are granted air tour permits. Commenters noted that lacking such clarification, the ATMP creates the impression that NPS may or could increase the number of air tours allowed without further planning or compliance.
- 3. Quiet Technology
 - a. Commenters expressed that flights should be required - not incentivized - to use quiet technology aircraft.
 - b. Commenters requested that the Section 3.8 of the ATMP include a definition of quiet technology or reference to existing definition. One commenter speculated on NPS intent for this section to adopt FAA Advisory Circular No. AC-93-2 guidance for quiet aircraft technology designation status for each aircraft used for air tours at Grand Canyon National Park, or some other FAA guidance.¹²
 - c. Regarding Section 3.8, one commenter stated there should be no enhanced operation incentive for quieter aircraft, as they will still have a negative impact during hours of operation. The commenter stated that the quiet technology incentive should instead apply solely to the ability to replace aircraft. The commenter noted there is no definition provided for "quiet technology aircraft", and therefore one should be added that quantifies specifically the maximum noise standards that qualify as such, and the standard should be a significant reduction of at least 50% to qualify for ability to replace.
- 4. Ensuring Competition and Preventing a Monopoly
 - a. Commenters requested that the ATMP include a detailed competitive bidding process for flights into National Parks in every ATMP to prevent a monopoly as stated in the plain law and not an amendment as proposed, citing 49 U.S.C. § 40128(a)(2)(B). Commenters emphasized that the need for competition and competitive bidding to prevent a monopoly language is reiterated in 14 CFR 136.41(c), New entrant operators, and that the intent of the 106th Congress was not to monopolize National Parks but to protect them.
 - b. Commenters expressed their opinion that the draft ATMPs will solidify the monopoly held by a select few operators who were allegedly operating when the Act was passed on 4/5/2000; over 21 years ago, and that the notion was reiterated by the FAA's Final Ruling on IOAs by Deputy Chief Counsel James W. Whitlow in the Federal Register/Vol. 72, No. 29.
 - c. Commenters expressed their concern that since the ATMPs do not specifically address the issue of competitive bidding in detail, the timeline for amendment could prolong these monopolies for at least another 21 years. The public will not be granted the ability to freely choose amongst operators for reasons of safety and financial feasibility as set forth in the provision of commercial air tour operations over the Parks citing: 49 USC 40128, Title 14 CFR Part 136, Mr. Whitlow's findings in the Federal Register Vol. 72/No. 29, FAA Order 8900.1, FAA N8900.312 and FAA AC 136-1.

¹² Comment referenced the following link: https://www.faa.gov/documentLibrary/media/Advisory_Circular/AC-93-2.pdf

- d. Commenters noted that competitive bidding may necessitate an amendment to the ATMP, additional environmental review, and/or the issuance of new or revised OpSpecs. Commenters noted that since it is unclear what the NEPA public review will be for this draft ATMP (citing 85 Federal Register 55060 - 55061, September 4, 2020), that it is uncertain what a future environmental review will look like for competitive bidding. Commenters expressed that a flexible plan that allows new entrants and potentially permitting requests by an existing operator for additional operating authority is not reasonable nor environmentally just.
- 5. Compliance and Enforcement
 - a. Commenters requested the ATMP to provide stiff penalties for violations, ensure stringent enforcement, and besides enforcement by authorities, provide easy and prompt methods for the public to report violators, including a phone number capable of receiving text messages for each park directly to the park authorities, and requiring that the messages are immediately responded to by the Department.
 - b. Commenters requested that the ATMP charge licensing/certification fees to tour operators to cover costs of monitoring and enforcement of the program.
 - c. Regarding Section 5.1, 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 fully 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 and the FAA has unfortunately concurred and not required full transmit mode, that this is not acceptable; there is no expectation of privacy by any operator in such operations.
- 6. Adaptive Management
 - a. Commenters requested adaptive management that allows the NPS to close airspace in critical habitat areas.
 - b. Regarding Section 8.0 "Adaptive Management", one commenter stated this should not be authorized in the event it would increase the number of commercial air tours allocated or decrease minimum altitude or other mitigation requirements or otherwise increase noise emission or other negative impacts on the natural habitat and visitor experience, and that any proposed modifications under "adaptive management" should be available to the public for advance comment.
- 7. Commenters requested the FAA to adopt best practices for NPSs overflights beyond the Fly Neighborly program.
- 8. Commenters requested the ATMP to mandate decibel levels. Specifically, commenters requested the ATMP to require annual aircraft certification to levels of less than 100 decibels within 10 feet of the aircraft, or that all land and air vehicles be mandated to remain below a designated decibel level.
- 9. One commenter requested information on the definition of a transportation flight.
- 10. Regarding Section 3.7B, one commenter stated that the meeting should be fully open to the public for participation.
- 11. Regarding Section 5.0, first sentence, one commenter stated there should be a date by which the operator must modify the OpSpecs to comply with the ATMP or cease any operations, and that deadline should be a matter of a few months maximum.
- 12. Reporting

- a. Commenters requested removal of the reporting requirement from the ATMP unless the number of flights are increased, as it is not worth the public burden to report such a low number of flights.
 - b. Regarding Section 3.6, 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.
13. Regarding Sections 6.0 and 7.0, 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.

TRIBE: Tribal Concerns

1. Commenters expressed concern that air tours will violate the sanctity of native American cultural values and practices at the Park, including the Timbisha Shoshone, Owens Valley Paiute, and other neighboring tribal communities. One commenter referenced the Timbisha Shoshone Natural and Cultural Preservation Area established by the Timbisha Shoshone Homeland Act (PL 106-423).
2. Commenters questioned if the ATMP planning process included tribal consultation and expressed concern that a tribal consultation process in accordance with the NHPA, and associated regulations and agencies' policies¹³, was not discussed or disclosed in the ATMP. See also NEPA Process and Impact Analysis categories.

NS100 Non-Substantive Comment: Support Air Tours

1. For many commenters, seeing aircraft tours of national parks adds to the excitement and enjoyment of the national park experience.
2. Commenters expressed that air tours provide a valued service to the public.

NS150 Non-Substantive Comment: Other

1. Commenters, in general, expressed support for the ATMP as written, for restricting commercial flights over Death Valley, for restricting low-flying air travel, enforcing restrictions on noise, limiting air tours, and the protection of parks and wildernesses from the noise and intrusion of commercial air tours.
2. One commenter requested that all existing exemptions to the ATMP requirement should be withdrawn by the National Park Service Director, and that no further voluntary agreements should be adopted which have the effect of providing fewer restrictions on commercial air tour overflights than an otherwise-applicable ATMP.
3. Noting the Park's limited funding and staff, one commenter stated the time and cost of managing an air tour program with virtually no public demand which still has the potential to harm park resources is not worth it.

¹³ 40 CFR §1502.25; FAA Order 1050.1F, Section 2-4.4; FAA Order 1210.20; NPS NEPA Handbook 2015, Section 4.14.

NS200 Non-Substantive Comment: Oppose Air Tours Continuing

1. Commenters expressed their opposition to air tours continuing to occur at the Park and cited to concerns about wildlife impacts, cultural resource impacts, air pollutants, and impacts to visitor experience.

NS300 Non-Substantive Comment: Oppose Air Tours Introduction

1. Commenters expressed their opposition to air tours being introduced at the Park, citing concerns about wilderness, wildlife impacts, soundscapes, and visitor experience. One commenter stated that air tours over our national parks and other sensitive lands offer no appreciable competing public benefit and in fact are inherently contradictory, and that national parks were never intended for profit extraction at the expense of preservation of the natural habitat and visitor experience.