1 2 3	AIR TOUR MANAGEMENT PLAN CANYONLANDS NATIONAL PARK
4	SUMMARY
5 6 7	This Air Tour Management Plan (ATMP) provides the terms and conditions for commercial air tours conducted over Canyonlands National Park (Park) pursuant to the National Parks Air Tour Management Act (Act) of 2000.
8	1.0 INTRODUCTION
9 10 11 12 13 14	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. <sup>1</sup>
15 16 17	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.
18	2.0 APPLICABILITY
19 20 21 22 23	This ATMP applies to all commercial air tours over the Park and commercial air tours within ½ mile outside the boundary of the Park, as depicted in Figure 1 below. A commercial air tour subject to this ATMP is any flight, conducted for compensation or hire in a powered aircraft where a purpose of the flight is sightseeing over the Park, during which the aircraft flies:
24 25 26 27	(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
28 29	(2) Less than one mile laterally from any geographic feature within the Park (unless more than ½-mile outside the Park boundary).
30	See 14 CFR § 136.33(d).

<sup>1</sup> 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to the ATMP requirement for parks with 50 or fewer commercial air tour operations each year unless the exemption is withdrawn by the Director of the NPS.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 prepare a voluntary agreement for the Park.

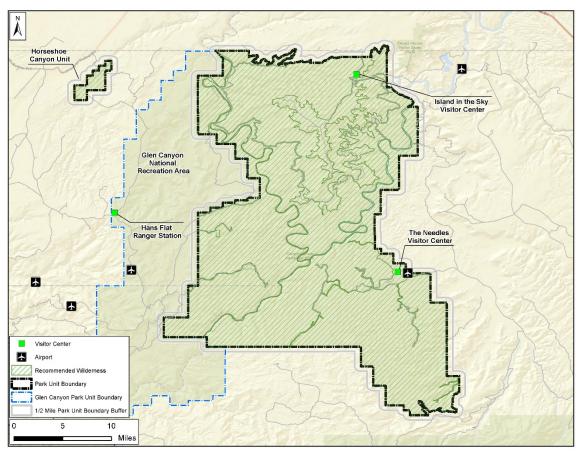


Figure 1. Map of area subject to this ATMP for Canyonlands National Park

#### 2.1 Park Overview

The Park preserves 337,598 acres of colorful canyons, mesas, buttes, fins, arches, and spires in the heart of southeast Utah's high desert. The confluence of the Colorado and Green Rivers lies within the Park, dividing the Park into four distinct districts: The Needles, Island in the Sky, The Maze, and The Rivers of Canyonlands. The Park protects a striking geologic landscape composed of a diverse and multilayered assemblage of canyons, mesas, buttes, and spires, as well as many notable features of great scientific interest including Grabens and Upheaval Domes. These landscapes and features were formed by geologic processes including sedimentation, erosion, salt dissolution and tectonics, and meteorite impacts operating over hundreds of millions of years. Approximately 85% of the land area of the Park is recommended wilderness which is managed as designated wilderness by the NPS, pursuant to the 2006 NPS Management Policies. Parts of the Park backcountry are free from human-caused sounds and natural sounds of the desert are predominant in these areas, providing opportunities to experience quiet and solitude in a remote natural setting.

- Federally designated threatened and endangered species have been identified within the
- 49 Park, including the Mexican spotted owl, southwestern willow flycatcher, and yellow-
- 50 billed cuckoo. Migratory birds identified within the Park include black-chinned sparrow,
- 51 brewer's sparrow, golden eagle, gray vireo, olive-sided flycatcher, pinyon jay, rufous

- 52 hummingbird, Virginia's warbler, and willow flycatcher. Other notable wildlife within
- 53 the Park includes bighorn sheep, birds of prey and other migrating birds, lizards, and
- rodents, many of which are either nocturnal or crepuscular (most active at dawn and
- dusk) in order to adapt to life in the desert environment within the Park.
- 56 Cultural resources in the Park span at least 10,000 years of human occupation and
- 57 activity. The Park contains petroglyphs, pictographs, masonry structures, and other
- 58 traces of Indigenous people who settled within the Park. The Salt Creek and Horseshoe
- 59 Canyon Archaeological Districts contain significant world-class archaeological resources
- as well as sites of rock imagery, including the Great Gallery, an archetype of Barrier
- 61 Canyon style pictographs. Numerous Native American tribes traditionally associate with
- 62 the landscapes within the Park. The Park also contains many other historic properties,
- 63 including twelve sites, one Historic District, and one Cultural Landscape listed on the
- National Register of Historic Places.
- 65 The Park offers a variety of recreational experiences including sightseeing, viewpoints
- and photography, hiking, interpretation, picnicking, camping, flatwater and white-water
- boating, and horseback riding for more than 73,000 annual visitors. The Park is primarily
- a backcountry park with limited accessibility.
- 69 The purpose of the Park is to preserve striking geologic landscapes and associated
- ecosystems in an area encompassing the confluence of the Green and Colorado rivers
- 71 possessing superlative scenic, scientific, and cultural features for the inspiration, benefit,
- and use of the public.

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- 73 The following Park management objectives relate to the development of this ATMP:
  - Protect individuals and populations of wildlife species known to be sensitive to the effects of aircraft overflights, including several species of diurnal raptors (such as the golden eagle and peregrine falcon) and the federally listed Mexican spotted owl, southwestern willow flycatcher, and the western yellow-billed cuckoo, as well as desert bighorn sheep, mule deer, mountain lion, black bear.
- Protect cultural resources and related cultural landscapes and ethnographic resources, such as viewscapes, that are important to Native American Tribes associated with the Park.
- Protect remote experiences for visitors and opportunities to experience quiet and solitude in a remote natural setting.

# 3.0 CONDITIONS FOR THE MANAGEMENT OF COMMERCIAL AIR TOUR

#### 85 **OPERATIONS AT THE PARK**

- 86 <u>3.1 Annual Commercial Air Tours Authorized</u>
- 87 Under this ATMP, 367 annual commercial air tours are authorized. Appendix A
- 88 identifies the operators authorized to conduct commercial air tours and annual flight
- 89 allocations.

### 90 3.2 Commercial Air Tour Routes and Altitudes

91 Commercial air tours authorized under this ATMP shall be conducted on the routes in 92 Figure 2 below for each operator (Appendix B contains an enlarged Figure 2). Altitude 93 expressed in units above ground level (AGL) is a measurement of the distance between 94 the ground surface and the aircraft, whereas altitude expressed in mean sea level (MSL) 95 refers to the altitude of an aircraft above sea level, regardless of the terrain below it. 96 Aircraft flying at a constant MSL altitude would simultaneously fly at varying AGL 97 altitudes, and vice versa, assuming uneven terrain is present below the aircraft. Based on 98 direction of flight, aircraft will be separated by altitude to de-conflict the airspace. The 99 direction of flight is indicated by a heading, measured in 0-360 degrees with 0/360 100 representing due north. Within the boundary of the Park and the ½ mi. buffer; for aircraft 101 between easterly headings 000-179, the route altitudes shall be 11,500 feet (ft.) MSL; and 102 for aircraft between westerly headings 180-359, the route altitudes shall be 10,500 ft. 103 MSL. The MSL altitudes prescribed are at or above 2,900 ft. AGL. Except in an 104 emergency or to avoid unsafe conditions, or unless otherwise authorized for a specified 105 purpose, operators may not deviate from these routes and altitudes.

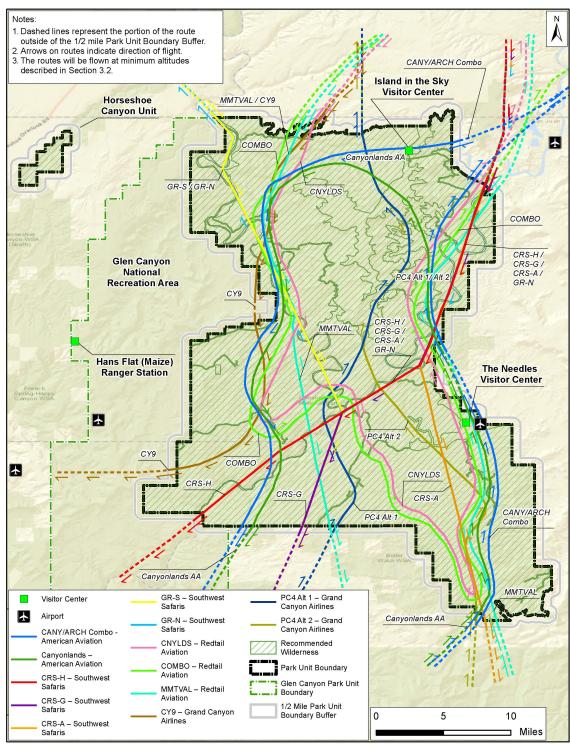


Figure 2. Commercial air tour routes at Canyonlands National Park

### 3.3 Aircraft Type

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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

112 113 114	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.
115	3.4 Day/Time
116 117 118 119 120	Except as provided in the section below entitled "Quiet Technology Incentives," air tours may operate two hours after sunrise until two hours before sunset, as defined by the National Oceanic and Atmospheric Administration (NOAA). <sup>2</sup> Air tours may operate any day of the year, except under circumstances provided in the following section entitled "Restrictions for Particular Events."
121	3.5 Restrictions for Particular Events
122 123 124 125 126 127	The NPS can establish temporary no-fly periods that apply to air tours for special events or planned Park management. Absent exigent circumstances or emergency operations, the NPS will provide a minimum of 15 days written notice to operators for any restrictions that temporarily restrict certain areas or certain times of day, or 60 days written notice to operators for any full-day restrictions in advance of the no-fly period. Events may include tribal ceremonies or other similar events.
128	3.6 Required Reporting
129 130 131 132 133 134 135 136	Operators will submit to the FAA and the NPS semi-annual reports regarding the number of commercial air tours over the Park that are conducted by the operator. These reports will also include the flight monitoring data required under Section 5.1 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.
137	3.7 Additional Requirements
138 139 140 141 142 143	3.7A Operator Training and Education: When made available by Park staff, operators/pilots will take at least one training course per year conducted by NPS staff. The training will include Park information that operators can use to further their own understanding of Park priorities and management objectives as well as enhance the interpretive narrative for air tour clients and increase understanding of parks by air tour clients.
144 145 146	3.7B Annual Meeting: At the request of either of the agencies, the Park staff, the local FAA Flight Standards District Office (FSDO), and all operators will meet once per year to discuss the implementation of this ATMP and any amendments

<sup>2</sup> Sunrise and sunset data are available from the NOAA Solar Calculator, <a href="https://www.esrl.noaa.gov/gmd/grad/solcalc/">https://www.esrl.noaa.gov/gmd/grad/solcalc/</a>

147 148	or other changes to the ATMP. This annual meeting could be conducted in conjunction with any required annual training.
149 150 151 152	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.
153 154 155 156 157	3.7D Wildlife Avoidance: California condors have not been found to be present in the Park and their presence is thus not a current resource condition requiring active mitigation. However, California condor habitat does exist in the Park, and protective measures are necessary should a condor be identified in the Park. This ATMP includes the following protective measures for California condors:
158 159 160	• Air tour operators are required to report visual identification of California condors to the NPS, with an optional notification to U.S. Fish and Wildlife Service (USFWS), within 24 hours of initial sighting.
161 162 163 164 165 166 167 168 169 170	• Once NPS becomes aware of the presence of California condor nests, notification and coordination will be conducted between the Park staff, the NPS Intermountain Region Wildlife Biologist and Threatened and Endangered Species Coordinator, the local USFWS field office, the air tour operators, and the FSDO, as necessary, to determine the best avoidance measures for operators to take. Generally, operators will be required to avoid identified nesting areas, feeding areas, or other known areas of congregation by 1 mile vertically or laterally as long as the NPS determines that other natural or cultural resources are not impacted or affected and such avoidance measures would not result in operating conditions deemed unsafe by the FAA.
172 173 174 175 176	• The agencies may temporarily restrict use of air tour routes over nesting areas, feeding areas, or other known areas of congregation while: 1) working with operators to modify air tour routes (i.e., 1 mile shifts away from sensitive condor areas); and 2) assessing the natural, cultural, and safety impacts of any changes.
177 178 179	<ul> <li>Avoidance measures will remain in effect until the NPS determines that condors are no longer present and the NPS notifies the operators in writing that avoidance measures are no longer necessary.</li> </ul>
180	3.8 Quiet Technology Incentives
181 182 183 184 185	This 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 will be allowed to conduct tours beginning one hour after sunrise until one hour before sunset on all days that flights are authorized. If implementation of this incentive results in a change in existing conditions or a change in

- the effects of air tour noise on Park resources or visitor enjoyment, additional analysis
- may be required in order to ensure the continued effectiveness of the incentive.

#### 188 4.0 JUSTIFICATION FOR MEASURES TAKEN

- The provisions and conditions in this ATMP are designed to protect Park resources and
- visitor experience from the effects of commercial air tours, and support NPS management
- 191 objectives for the Park.
- 192 Under the Act, the FAA granted Interim Operating Authority (IOA) for air tours over the
- 193 Park. IOA does not provide any operating conditions (e.g., routes, altitudes, time of day,
- etc.) for air tours other than an annual limit.
- 195 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
- 197 protect visitor experience, wildlife, and cultural resources, and backcountry character
- throughout the Park by limiting the number of potential disturbances caused by
- 199 commercial air tours.
- The conditions that commercial air tours will fly no lower than 2,900 ft. AGL complies
- with guidance for raptor protection including threatened, endangered and migratory birds,
- 202 notably the Mexican spotted owl, southwestern willow flycatcher, yellow-billed cuckoo.<sup>3</sup>
- Because raptor habitat exists throughout the Park and nests may change over time, the
- 204 minimum altitude restriction extends uniformly to all routes over the Park. It will further
- avoid or minimize potential effects on other avian species and wildlife by reducing the
- 206 noise intensity of air tour events in the areas nearest the routes. Additionally, this
- 207 provision improves visitor experiences on the ground, including opportunities for solitude
- and remoteness from sights and sounds in recommended wilderness by reducing the
- intensity of air tour noise at ground level. The altitude separation for commercial air tour
- operators, depending on the direction of the flight, is a safety measure necessary to de-
- 211 conflict the airspace over the Park and within ½-mile buffer, given the 2,900 ft. AGL
- 212 requirement on all air tour routes.
- 213 Sunrise and sunset are important times of the day for wildlife and visitor use and
- 214 experience. Biologically important behaviors for many species occur during this time,
- such as prime foraging, mating, and communication. The time restrictions have been
- 216 included in this ATMP to protect these Park resources. The hours of operation provide
- 217 quiet periods of the day during which visitors can enjoy natural sounds and preserves
- 218 opportunities for solitude in backcountry areas.
- 219 Restrictions for particular events are intended to prevent noise interruptions of Park
- events or tribal practices.
- Operator training and education facilitates effective implementation of the ATMP by
- 222 making sure that operators remain informed regarding the requirements of this ATMP

<sup>&</sup>lt;sup>3</sup> Utah Field Office Guidelines for Raptor from Human and Land Use Disturbances, U.S. Fish and Wildlife Service, Utah Field Office, Salt Lake City, January 2002 update, L.A. Romin & J.A. Muck.

- 223 including any adaptive management measures or amendments, advances operator
- 224 understanding of Park management objectives and priorities including noise sensitive
- areas and provides opportunities to enhance the interpretive narrative for air tour clients
- and increases understanding of parks by air tour clients. The annual meeting will be used
- 227 to review and discuss implementation of this ATMP between Park staff, local FAA
- FSDO, and all operators and will serve to ensure that air tour operators are aware of the
- terms and conditions of this ATMP and are made aware of new or reoccurring concerns
- 230 regarding Park resources.

#### 5.0 COMPLIANCE

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- On the effective date of this ATMP, all commercial air tours over the Park must comply
- 233 with the terms of this ATMP in all respects, except that operators may continue to
- 234 conduct the number of air tour operations authorized under IOA as reflected in their
- existing Operations Specifications (OpSpecs) until such OpSpecs are modified to require
- compliance with this ATMP. The NPS and the FAA are both responsible for the
- 237 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 having geographic
- oversight for the Park. The FSDO will investigate all reports of noncompliance. The
- public may also report allegations of non-compliance with this ATMP to the FSDO
- which may result in an investigation by the FAA.
- 242 Investigative determination of non-compliance may result in partial or total loss of
- 243 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
- 245 Enforcement Program.

### 246 5.1 Aircraft Monitoring Technology

- Operators are required to equip all aircraft used for air tours with flight monitoring
- 248 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
- 250 required flight monitoring data shall be provided in a file format approved by the
- agencies, such as a .cvs 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
- 258 Date
- Time stamp
- Operator and Doing Business As (DBA), if different
- Aircraft type
- Aircraft model

263 264 265 266 267 268	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.
269	6.0 NEW ENTRANTS
270 271 272 273 274	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.
275 276 277 278 279 280 281	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.
282 283 284 285 286	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.
287	7.0 COMPETITIVE BIDDING
288 289 290 291 292 293	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 also 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.
294 295 296	The agencies will request information necessary for them to undertake the competitive bidding process from existing operators. Failure to provide such information in a timely manner may result in the disqualification of any such operator.
297 298 299 300	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 of the effective date of this ATMP.

301	8.0 ADAPTIVE MANAGEMENT
302 303 304 305 306 307 308 309 310 311 312 313	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 or changed circumstances.
314	9.0 AMENDMENT
315 316 317 318 319 320 321	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.
322 323 324 325 326 327 328 329	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 will publish additional information for interested parties about the form and manner for submitting a request.
330 331 332	Increases to the total number of annual air tours authorized under this ATMP resulting from accommodation of a new entrant application or a request by an existing operator will require an amendment to this ATMP.
333 334	Notice of all Amendments to this ATMP will be published in the Federal Register for notice and comment.
335	10.0 CONFORMANCE OF OPERATIONS SPECIFICATIONS
336 337	New OpSpecs that incorporate the operating parameters set forth in this ATMP will be issued within 90 days of the effective date of this ATMP.

338	11.0 EFFECTIVE DATE	
339	This ATMP is effective [date].	
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	<insert name="">, Superintendent, Southeast Utah Group National Park Service</insert>	<insert name="">, <insert title=""> <insert faa="" name="" of="" office=""> Federal Aviation Administration</insert></insert></insert>
	<insert name="">, Regional Director Unified Interior Regions 6, 7, &amp; 8 National Park Service</insert>	
	<insert name="">, Associate Director Natural Resource Stewardship and Science Directorate National Park Service</insert>	
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345 APPENDIX A

# 346 1.0 COMMERCIAL AIR TOUR ALLOCATIONS

Table 1 provides allocations of the annual operations along with authorized aircraft type by operator.

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

Air Tour Operator	Annual Operations	Daily Operations	Aircraft Type
Arrow West Aviation, Inc. / Slickrock Air Guides, Inc. (Redtail Aviation)	357	No set limit	CE-172-N CE-207-207 CE-207-T207 CE-207-T207A GIPPS-GA-8 Kodiak-100-100
Adams, Bruce M. (Southwest Safaris)	7	No set limit	CE-182-R
American Aviation, Inc. (Frog Air, American Air Charter)	1	1	CE-172-N CE-207-207 CE-207-T207A
Grand Canyon Airlines, Inc. (Grand Canyon Airlines, Scenic Airlines, Grand Canyon Scenic Airlines)	2	No set limit	CE-208-B DHC-6-300

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# **2.0 DAY/TIME RESTRICTIONS**

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

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

Air Tour Operator	Time-of-Day	Day-of-Week
Arrow West Aviation, Inc. / Slickrock Air Guides, Inc. (Redtail Aviation)	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.
Adams, Bruce M. (Southwest Safaris)	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.
American Aviation, Inc. (Frog Air, American Air Charter)	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.
Grand Canyon Airlines, Inc. (Grand Canyon Airlines, Scenic Airlines, Grand Canyon Scenic Airlines)	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.

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		358
APPENDIX B		359
	Enlarged Figure 1 and 2	360

