

DRAFT COMMERCIAL AIR TOUR
VOLUNTARY AGREEMENT
FOR
LAKE MEAD NATIONAL
RECREATION AREA

Name of Operator



DRAFT

**COMMERCIAL AIR TOUR
VOLUNTARY AGREEMENT**

1
2
3

4 **SUMMARY**

5 This Air Tour Voluntary Agreement (Agreement) provides the terms and conditions for
6 commercial air tours conducted by NAME OF OPERATOR over Lake Mead National
7 Recreation Area (Park), which includes portions of Grand Canyon-Parashant National
8 Monument and Avi Kwa Ame National Monument, as an alternative to an Air Tour
9 Management Plan (ATMP), pursuant to the National Parks Air Tour Management Act
10 (Act) of 2000. As used in this Agreement the term "the Park" refers to all NPS-managed
11 lands within the Congressionally designated boundary of Lake Mead National Recreation
12 Area shown in Figure 1. The parties to this Agreement are the National Park Service
13 (NPS), the Federal Aviation Administration (FAA), and NAME OF OPERATOR
14 (collectively, the Parties).

15 **1.0 INTRODUCTION**

16 The Act requires that commercial air tour operators conducting or intending to conduct
17 commercial air tours over a unit of the National Park System apply to the FAA for
18 operating authority before engaging in that activity. The Act further requires the NPS
19 and the FAA to establish an ATMP for each National Park System unit for which one or
20 more applications has been submitted, unless that unit is exempt from this requirement.¹

21 As an alternative to an ATMP, the NPS and the FAA may enter into a voluntary
22 agreement with a commercial air tour operator who has applied to conduct commercial
23 air tour operations over a National Park System unit including an operator that has
24 Interim Operating Authority (IOA) for the park or a new entrant commercial air tour
25 operator.²

26 Voluntary agreements must address the management issues necessary to protect the
27 resources and visitor use of the park without compromising aviation safety or the air
28 traffic control system.³ A voluntary agreement may also include conditions for the
29 conduct of air tour operations and provisions to ensure the stability of, and compliance
30 with, the voluntary agreement. Each voluntary agreement reflects the provisions and
31 conditions appropriate for the particular national park to which the agreement applies.

32 Due to the complex nature of the Las Vegas Class B airspace around the Park, including
33 the connectivity with air tour operations to Grand Canyon National Park, coupled with
34 specific language in the Act regarding transportation routes for air tours from Clark
35 County, Nevada to Grand Canyon National Park, the Parties developed this Agreement to

¹ The Act provides an exemption to the ATMP and voluntary agreement requirement for parks with 50 or fewer commercial air tour operations each year unless the exemption is withdrawn by the NPS. *See* 49 U.S.C. § 40128(a)(5).

² *Id.* § 40128(b)(7)(A).

³ *Id.* § 40128(b)(7)(B).

DRAFT

36 address these unique challenges while improving the condition of the resources of the
37 Park and ensuring safe air tour operations.

38 **2.0 APPLICABILITY**

39 This Agreement applies only to commercial air tour operations conducted by NAME OF
40 OPERATOR in the area depicted in Figure 1 below, referred to as the voluntary
41 agreement boundary. This Agreement does not apply to the Grand Canyon National Park
42 or tribal lands within ½-mile of the Park boundary that abut the Grand Canyon National
43 Park.⁴ This Agreement does not make any adjustments to commercial air tours currently
44 conducted within the Grand Canyon National Park Special Flight Rules Area.⁵ A
45 commercial air tour subject to this Agreement is any flight, conducted for compensation
46 or hire in a powered aircraft where a purpose of the flight is sightseeing over the Park, or
47 within ½-mile of the boundary of the Park, during which the aircraft flies:

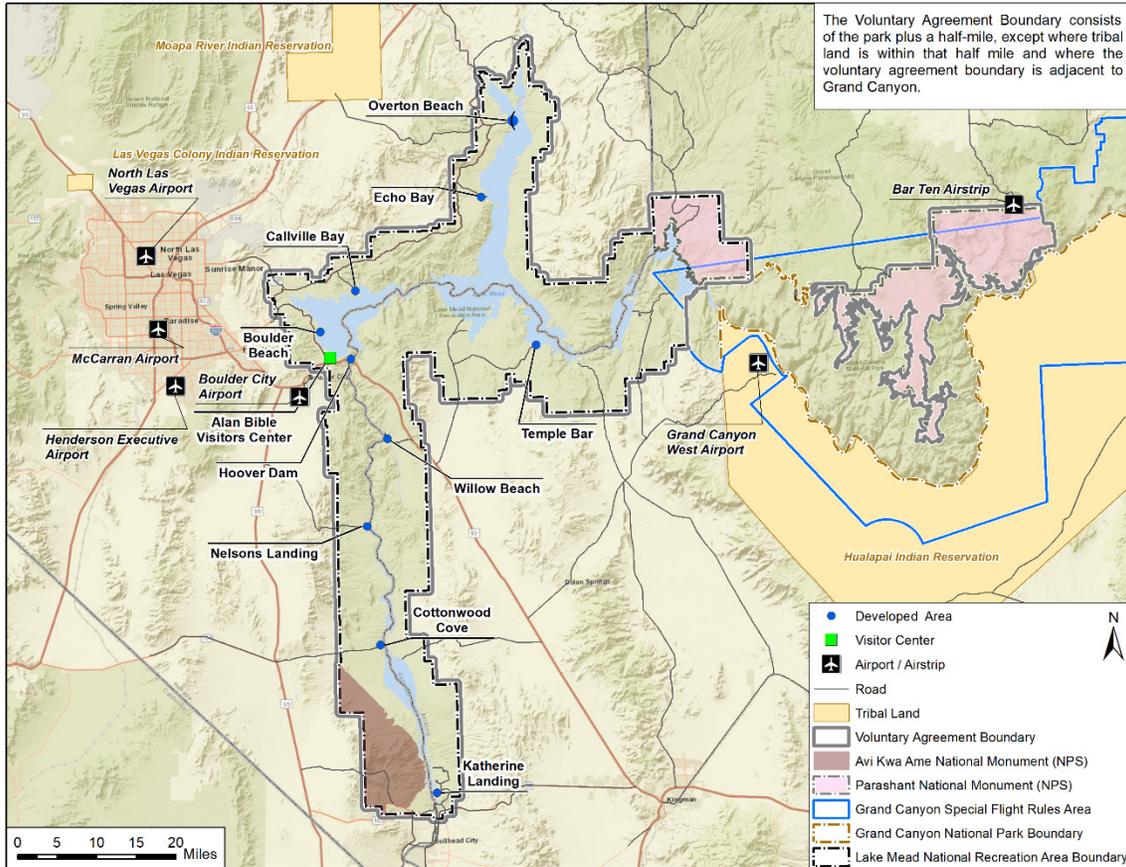
48 (1) Below 5,000 feet above ground level (except solely for the purposes of takeoff or
49 landing, or necessary for safe operation of an aircraft as determined under the rules and
50 regulations of the FAA requiring the pilot-in-command to take action to ensure the safe
51 operation of the aircraft);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

52 (2) Less than one mile laterally from any geographic feature within the Park (unless more
53 than ½-mile outside the boundary of the Park).⁶

⁴ See 49 U.S.C. § 40128(e).

⁵ See 14 CFR § 93 Subpart U—Special Flight Rules in the Vicinity of Grand Canyon National Park, AZ.

⁶ See 14 CFR § 136.33(d).



54
55 **Figure 1.** Map of area subject to this Agreement for Lake Mead National Recreation
56 Area.

57 **3.0 OVERVIEW OF THE PARK**

58 **Lake Mead National Recreation Area** was established when the enabling legislation
59 adopted by Congress was signed into law on October 8, 1964. The Park is located in
60 southeast Nevada and northwest Arizona and covers 1.5 million acres, which includes
61 more than 185,000 acres of designated Wilderness and more than 373,000 additional
62 acres of eligible Wilderness. The Park also includes portions of Grand Canyon-Parashant
63 National Monument and Avi Kwa Ame National Monument, each set aside by
64 Presidential Proclamation (Figure 1).

65 The geologic diversity and convergence of desert ecosystems provide habitat for a rich
66 diversity of plants and animals. Currently, 822 native plant species and 387 native
67 animal species have been officially documented in the Park, with 10 of these listed as
68 threatened, endangered, or candidate species, and 140 considered rare species. In
69 addition, the Park contains globally significant herds of desert bighorn sheep, with some
70 of the highest population numbers in the world.

71 The inflow areas of Lake Mead, including the inflows of the Virgin and Muddy Rivers on
72 the north end of Overton Arm and the Colorado River inflow at Pearce Ferry, are of
73 particular importance. These areas contain riparian and stream communities, with

DRAFT

74 vegetation such as willows, cottonwood, sedges, and rushes. These areas provide
75 excellent habitat to a variety of bird species, including the southwestern willow flycatcher
76 and several species of shorebirds, herons, and egrets.

77 Also included in the Park's diverse natural resources are spectacular vistas including deep
78 canyons, sheer cliffs, layers of sharp and colorful mountain ridges and rock formations
79 and sweeping bajadas.

80 Evidence of 10,000 years of Native American civilization is found in the vicinity of the
81 Park. Fur trappers, Mormon settlers, prospectors, ranchers, and developers of riverboat
82 and railroad supply networks arrived later in attempts to survive and prosper in the
83 rugged desert environment. Architectural wonders such as the Hoover Dam, built in the
84 1930s, and the Mike O'Callaghan-Pat Tillman Memorial Bridge that opened in 2010, add
85 to the rich human history.

86 Today, the Park is an attraction to millions of people from large metropolitan
87 communities in the region as well as visitors from all over the world. Popular
88 destinations include Black Canyon, located between Hoover Dam and Willow Beach on
89 the northern end of Lake Mohave. The water temperature, narrow canyon environment,
90 river current, and extremely shallow waters at the upper reaches make it a unique place
91 within the Park. There are several hot springs located in Black Canyon, including
92 Arizona Hot Springs, the primary camping area in the canyon. These characteristics
93 attract nonmotorized boaters to Black Canyon, the only area of the Park where
94 nonmotorized boat use occurs in significant numbers.

95 The purpose of the Park, as stated in its Foundation Document, is to provide diverse
96 public recreation, benefit, and use on Lake Mead and Lake Mohave and surrounding
97 lands in a manner that preserves the ecological, geological, cultural, historical, scenic,
98 scientific, and Wilderness resources of the Park.

99 **Grand Canyon-Parashant National Monument** was designated by Presidential
100 Proclamation 7265 on January 11, 2000, under the authority of the Antiquities Act of
101 1906. NPS-managed lands within this Monument are included in Lake Mead's
102 Congressionally designated boundary. Monument headquarters are in St. George, Utah.
103 This Monument is jointly managed under a Service First agreement by both the NPS and
104 the Bureau of Land Management (BLM), although the voluntary agreement boundary
105 only includes NPS-managed lands plus the ½ -mile buffer. This Monument's purpose is
106 to cooperatively protect undeveloped, wild, and remote northwestern Arizona landscapes
107 and their resources, while providing opportunities for solitude, primitive recreation,
108 scientific research, and historic and traditional uses.

109 This Monument is in Mohave County, Arizona, immediately north of Grand Canyon
110 National Park and the Colorado River and east of the state of Nevada. Altogether, it
111 encompasses 1,048,321 acres: 208,449 acres administered by the NPS; 812,581 acres
112 administered by the BLM; 23,206 acres administered by the Arizona State Trust; and
113 4,085 acres of private land.

DRAFT

114 These lands include the ponderosa pine forested areas of Mount Trumbull, Mount Logan,
115 and Mount Dellenbaugh; the Mojave Desert in the Grand Wash and Pakoon areas; Kelly
116 and Twin Points overlooking the Grand Canyon; and the Shivwits and Uinkaret Plateaus.
117 Nearly 300,000 acres of the Monument are managed as Wilderness. Approximately
118 791,017 acres are allotted and/or leased for livestock grazing, and more than 14,000 head
119 of cattle roam monument lands. A number of main visitor destinations in the Monument
120 include Pakoon Springs, Tassi Ranch, Grand Gulch Mine, Mount Trumbull/Mount
121 Logan, Twin Point Overlook, Kelly Point Overlook, Whitmore Canyon Overlook, Hells
122 Hole, and Nampaweap.

123 With the Grand Canyon plunging thousands of feet deep along the south perimeter and
124 only rough, unpaved roads providing entry from the north, west, and northeast, Grand
125 Canyon- Parashant National Monument is one of the most remote areas within the 48
126 contiguous states. No towns or communities lie within its boundaries. The nearest towns
127 (Littlefield, Beaver Dam, Scenic, Fredonia, Colorado City, and Centennial, Arizona;
128 Mesquite and Bunkerville, Nevada; and St. George, Utah) are all more than an hour's
129 drive from Monument boundaries. Traveling anywhere in this Monument, except its
130 outermost edges, requires slow driving over rough terrain, often in a high-clearance, four-
131 wheel-drive or off-highway vehicle.

132 The Grand Canyon Special Flights Rule Area (SFRA) establishes policy and procedures
133 for operations in and around Grand Canyon National Park. The SFRA covers a large
134 portion of Grand Canyon-Parashant National Monument (Figure 1).⁷

135 **Avi Kwa Ame National Monument** was designated by Presidential Proclamation 10533
136 on March 21, 2023 under the authority of the Antiquities Act of 1906. NPS-managed
137 lands within this Monument are included in Lake Mead's Congressionally designated
138 boundary and within the voluntary agreement boundary. This Monument contains a
139 variety of cultural resources, including traditional cultural areas and sacred sites such as
140 the Spirit Mountain traditional cultural property, located in the Newberry Mountains,
141 which is listed on the National Register of Historic Places. This Monument's importance
142 to Yuman-speaking and other Tribal Nations transcends generations. Spiritual and
143 cultural significance is found in the landscape, mountains, water, sky, plants, and
144 animals. Traditional knowledge of resources and significant sites is passed through each
145 generation through song and oral histories among Tribal members. Songs and traditional
146 knowledge allow for deep connections with Avi Kwa Ame and its surrounding landscape
147 which provide healing, visual, and spiritual connections for Tribal Nations now and
148 forevermore.

149

⁷ The Grand Canyon National Park Special Flight Rules Area (Grand Canyon SFRA) Manual is available here: https://www.faa.gov/about/office_org/field_offices/fsdo/las

DRAFT

150 3.1 Management Issues Addressed by this Agreement

151 The Park offers dramatic scenery and a diverse array of land- and water-based recreation
152 opportunities in close proximity to several large urban centers. With approximately
153 seven million visitors each year, the Park supports some of the nation’s highest levels of
154 water recreation and backcountry use. The part of the Park that includes Grand Canyon-
155 Parashant National Monument is one of the most rugged and remote landscapes
156 remaining in the southwestern United States. This Monument provides iconic western
157 viewsheds in a setting known for its solitude, natural soundscapes, internationally
158 recognized night skies, and Wilderness values. Conditions for the management of
159 commercial air tour operations, contained in Section 4.0, are intended to reduce effects of
160 noise to the natural acoustic environment from commercial air tours that include impacts
161 to Wilderness, wildlife, cultural resources, and visitor experience.

162 Acoustic Environment

- 163
- 164 • The Park preserves the natural soundscape and has collected data from over 20
165 acoustic monitoring sites to characterize existing sound levels and understand the
166 impacts of noise on the acoustic environment. While many areas of the Park have
167 an incredible natural soundscape unique to quiet desert environments, all of the
168 acoustic monitoring locations had audible aircraft. Throughout the Park’s
169 terrestrial environment aircraft is the most common source of noise. Air tours
170 occur frequently over the Park and noise from helicopters are a common source of
171 daytime noise.^{8,9}
 - 172 • On a year-round basis, the loudest and most frequent noise in several of the
173 Wilderness areas, specifically Pinto Valley, Black Canyon, and Muddy Mountains
174 Wilderness, is from air tours. Many of these aircraft fly from Clark County, NV
to Grand Canyon National Park.¹⁰

175 Wilderness

- 176
- 177 • Over 56% of the Park is managed as Wilderness. These vast backcountry and
178 Wilderness lands, including nine congressionally designated Wilderness areas,
179 serve to preserve ecological resources and processes and provide exemplary
180 opportunities for primitive recreation and desert solitude as described in the
Foundation Document.

⁸ Gurung, B., Peterson, B.A., Becco, J.A., Anderson, S.J., & Joyce, D. (2023). Exploring spatial patterns of overflights at Lake Mead National Recreation Area. Natural Resource Report NPS/LAKE/NRR—2023/2489. National Park Service, Fort Collins, Colorado.

⁹ Rinella, J. (2013). Acoustic monitoring 2007-2012: Lake Mead National Recreation Area. Natural Resource Technical Report NPS/NRSS/NRTR—2013/785. National Park Service, Fort Collins, Colorado

¹⁰ Lake Mead National Recreation Area Final Jimbilnan, Pinto Valley, Black Canyon, Eldorado, Iretaba Peaks, Nellis Wash, Spirit Mountain and Bridge Canyon Wilderness Areas, Wilderness Management Plan Environmental Impact Statement
<https://parkplanning.nps.gov/document.cfm?parkID=317&projectID=16820&documentID=64482>

DRAFT

- 181 • The ability to experience solitude is an integral component of Wilderness
182 character in these iconic western viewsheds and natural soundscapes. In
183 preserving this Wilderness quality, the NPS places importance on considering the
184 value of maintaining these places where present and future generations have the
185 opportunity to feel free, at peace, and observe landscapes without modern human
186 effects.

187 Wildlife

- 188 • Noise from commercial air tours has been documented to impact wildlife in a
189 number of ways, including altered vocal behavior, breeding relocation, changes in
190 vigilance and foraging behavior, and impacts on individual fitness and the
191 structure of ecological communities.^{11,12,13,14} Protections for wildlife include
192 consideration of all wildlife generally but many of the recommendations in this
193 Agreement are based off protections for desert bighorn sheep and their lambing
194 areas, bald eagle wintering habitat, and California condors specifically.

195 Cultural Resources

- 196 • The NPS-managed portion of Avi Kwa Ame National Monument includes Spirit
197 Mountain. This area is one of several traditional cultural properties in the Park
198 listed on the National Register of Historic Places and is also designated
199 Wilderness. Spirit Mountain, referred to as Avi Kwa Ame by Yuman Tribes, is
200 considered a cultural and spiritual birthplace and is sacred ground. Avi Kwa Ame
201 is in continuous use by tribes.

202 Visitor Experience

- 203 • In the Lake Mead National Recreation Area Foundation Document, a Park
204 purpose is to provide diverse public recreation, benefit, and use on Lake Mead
205 and Lake Mohave and surrounding lands. The Park's Foundation Document
206 describes fundamental resources and values which are those features, systems,

¹¹ Shannon, G., McKenna, M.F., Angeloni, L.M., Crooks, K.R., Fristrup, K.M., Brown, E., Warner, K.A., Nelson, M.D., White, C., Briggs, G., McFarland, S., & Wittemyer, G. (2016). A synthesis of two decades of research documenting the effects of noise on wildlife. *Biological Reviews* 91(4), 982-1005. <https://doi.org/10.1111/brv.12207>

¹² Kunc, H.P., McLaughlin, K.E., & Schmidt, R. (2016). Aquatic noise pollution: Implications for individuals, populations, and ecosystems. *Proceedings of the Royal Society B: Biological Sciences* 283(1836). <https://pubmed.ncbi.nlm.nih.gov/27534952/>

¹³ Kunc, H.P., and Schmidt, R. (2019). The effects of anthropogenic noise on animals: A meta-analysis. *Biology Letters* 15(11), 20190649. <https://doi.org/10.1098/rsbl.2019.0649>

¹⁴ Dolbeer, R.A., Begier, M.J., Miller, P.R., Weller, J.R. & Anderson, A.L. (2021). Wildlife strikes to civil aircraft in the United States, 1990–2019 (No. DOT/FAA/TC-21/19). United States. Department of Transportation. Federal Aviation Administration. William J. Hughes Technical Center.

DRAFT

207 processes, experiences, stories, scenes, sounds, smells, or other attributes
208 determined to warrant primary consideration during planning and management
209 processes because they are essential to achieving the purpose of the Park and
210 maintaining its significance. Fundamental resources and values are closely
211 related to a Park’s legislative purpose. The Foundation Document also describes
212 “other important resources and values” that are not fundamental to the purpose of
213 the Park and may be unrelated to its significance, but are important to consider in
214 planning processes. These other important resources and values identified for the
215 Park include “Experiential Opportunities,” which means that the Park provides
216 opportunities for Park visitors to experience the natural world and cultural context
217 through important visual connections, dark night skies, natural sounds, and
218 natural smells. The NPS considers balancing the diverse ground-based
219 experiential opportunities with air tour customers important to the planning
220 process.

- 221 • The Lake Mead National Recreation Area Lake Management Plan designates the
222 portion of Lake Mohave adjacent to the Black Canyon Wilderness south of the
223 Hoover Dam and north of Willow Beach as a primitive water recreation area with
224 temporal zoning in order to provide for a range of recreational settings. This
225 portion of Black Canyon is managed for a primitive setting two days per week
226 (Sunday and Monday) on a year-round basis to allow for natural sounds to be the
227 primary sounds during those periods and to benefit nonmotorized recreationists as
228 well as wildlife species in the canyon. Only nonmotorized watercraft and electric
229 trolling motor use is allowed in the canyon during these times to preserve the
230 area’s tranquil qualities and to provide opportunities for solitude and quiet
231 exploration.
- 232 • Grand Canyon-Parashant National Monument’s purpose is to cooperatively
233 protect undeveloped, wild, and remote northwestern Arizona landscapes and their
234 resources, while providing opportunities for solitude, primitive recreation,
235 scientific research, and historic and traditional uses. This Monument is one of the
236 most rugged and remote landscapes remaining in the southwestern United States.
237 This Monument provides iconic western viewsheds in a setting known for its
238 solitude, natural soundscapes, internationally recognized night skies, and
239 Wilderness values. This Monument provides the opportunity to continue historic
240 and traditional uses of the landscape, including ranching and hunting and
241 American Indian practices. This Monument also provides exemplary
242 opportunities for diverse primitive recreation, including horseback riding,
243 camping, internationally renowned mule deer trophy hunting, and more than
244 1,386 miles of off-highway vehicle routes.

245 3.2 Transportation Routes

246 The Act exempts transportation routes over or near Lake Mead National Recreation Area,
247 stating that the Act:

248 “...shall not apply to any air tour operator while flying over or near the Lake
249 Mead National Recreation Area, solely as a transportation route, to conduct an air

DRAFT

250 tour over the Grand Canyon National Park. For purposes of this subsection, an air
251 tour operator flying over the Hoover Dam in the Lake Mead National Recreation
252 Area en route to the Grand Canyon National Park shall be deemed to be flying
253 solely as a transportation route.”

254 Transportation flights as described in Section 6.0 are exempt from Annual
255 Authorizations, however they can still have impacts on Park resources and visitor
256 enjoyment. This Agreement provides clarification on the Act’s definition of
257 transportation routes as they apply to the Park.

258 To provide an accurate and fair assessment of air tour activity over the Park, the agencies
259 will use a three-year period, from 2025-2027, to capture operator-reported air tour
260 numbers based on definitions and reporting requirements in this Agreement (Section 6.0).
261 The three-year reporting period process will provide data for Final Authorizations and is
262 discussed in Section 4.6. As used in this Agreement the three-year reporting period is
263 defined as the monitoring period between 2025-2027.

264 Except as necessary for safety, the initial number of annual air tours authorized for
265 NAME OF OPERATOR under the Agreement will not be reduced during the three-year
266 reporting period while the agencies gather data. Because transportation routes impact
267 Park resources, and even though the Act does not require mitigation related to
268 transportation routes, mitigation of impacts from all air tour activity including both
269 transportation routes and Park air tours are included in this Agreement to protect sensitive
270 resources of the Park.

271 Sections 4.1-4.5 detail mitigations put into place by this Agreement to improve protection
272 of Park resources. Over the entire Park, with the exceptions noted in Section 4.7, a
273 minimum of 1,000 feet (ft.) above ground level (AGL) will be maintained by helicopter
274 air tours and a minimum of 1,500 ft. AGL will be maintained by fixed-wing air tours to
275 reduce noise and visual intrusions from low flying air tours.¹⁵

276 **4.0 CONDITIONS FOR THE MANAGEMENT OF COMMERCIAL AIR TOUR** 277 **OPERATIONS WITHIN THE VOLUNTARY AGREEMENT BOUNDARY**

278 This Agreement includes the following provisions and conditions. The attached
279 appendices, incorporated by reference to this Agreement, include additional provisions
280 and conditions.

281 4.1 Whitmore Canyon (Bar Ten Airstrip)

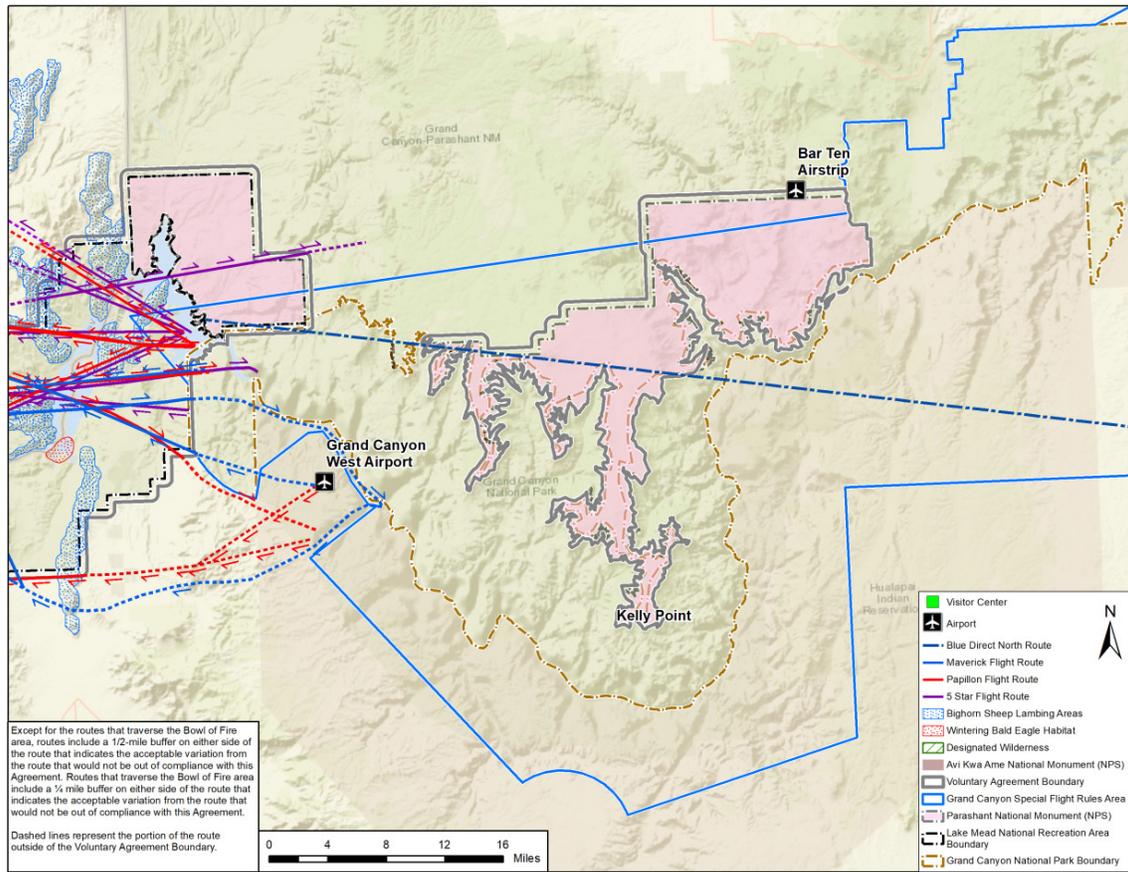
282 While operating within the voluntary agreement boundary over Grand Canyon-Parashant
283 National Monument the fixed-wing operators will preferentially not use the Grand
284 Canyon SFRA Blue Direct North Route when flying into the Bar Ten Airstrip to reduce
285 impacts to Whitmore Canyon, an area managed as Wilderness with California condor

¹⁵ National Park Service Management Policies § 4.9.

DRAFT

286 habitat. This area also includes Kelly Point and the Waring Ranch which is a traditional
287 cultural property.

- 288 • Helicopter air tours are prohibited within the eastern NPS-managed portion of
289 Grand Canyon-Parashant National Monument outside of the Grand Canyon SFRA
290 boundary.
- 291 • Fixed-wing air tours shall be conducted at a minimum altitude of 1,500 ft. AGL
292 except for takeoff and landing from the Bar Ten Airstrip, depicted in Figure 2.
- 293 • After takeoff from the Bar Ten Ranch or Bar Ten Airstrip, local loop tours not
294 entering the Grand Canyon SFRA will fly outside of the voluntary agreement
295 boundary to the north.
- 296 • Fixed-wing operators will preferentially avoid flying the Blue Direct North route
297 within the Grand Canyon SFRA in order to avoid Kelly Point. Instead, fixed-
298 wing operators will fly north of the Blue Direct North route, adjacent to the Grand
299 Canyon SFRA boundary.
- 300 • See Figure 2 for a depiction of this area.



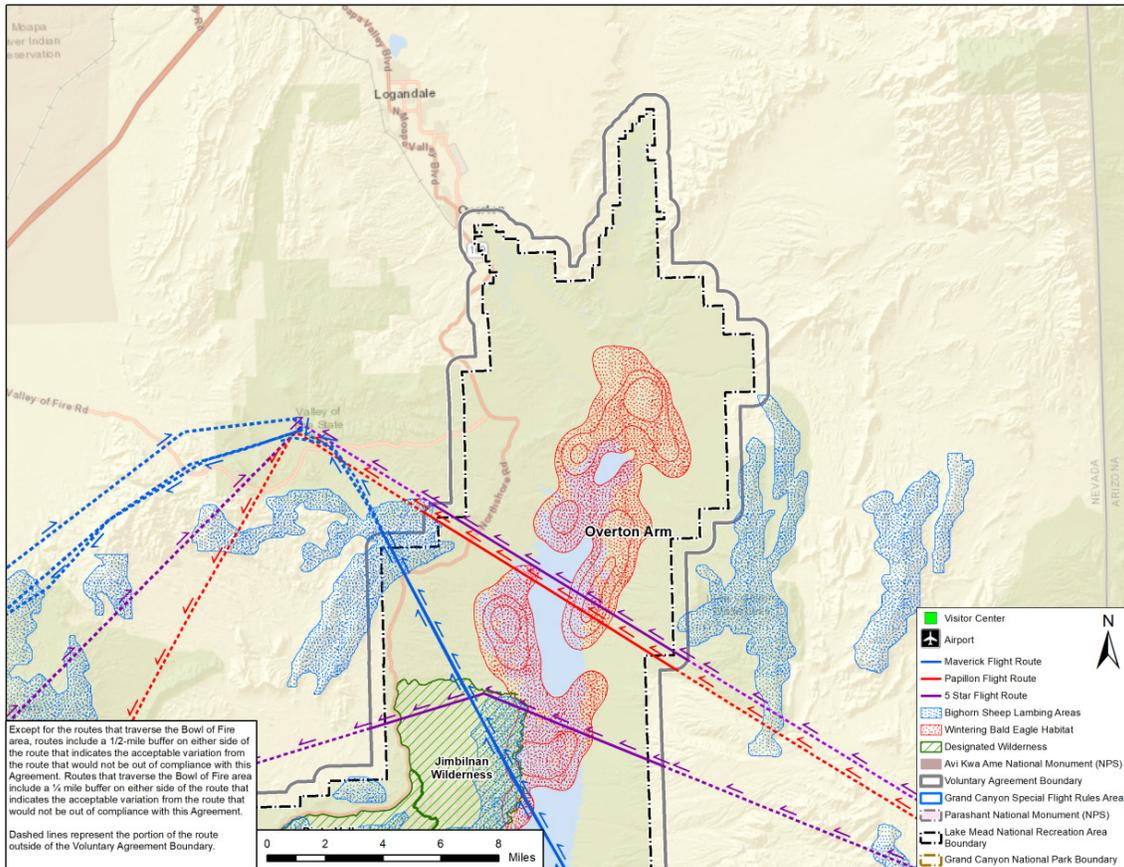
301
302 **Figure 2.** Whitmore Canyon (Bar Ten Airstrip) commercial air tour operating area.

DRAFT

303 4.2 Overton Arm

304 At Overton Arm the altitude AGL for aircraft is increased by 500 ft. to 1,500 ft. to
305 additionally reduce noise and visual intrusions to bighorn sheep and wintering bald
306 eagles.

- 307 • Air tours shall be conducted at a minimum altitude of 1,500 ft. AGL for
308 helicopters and a minimum altitude of 2,000 ft. AGL for fixed-wing aircraft
309 which exceeds U.S. Fish and Wildlife Service guidance for bald eagles¹⁶ and
310 supports recommendations for bighorn sheep.¹⁷
- 311 • See Figure 3 for a depiction of this area.



312
313 **Figure 3.** Overton Arm commercial air tour operating area.

314 4.3 Bowl of Fire

315 At Bowl of Fire aircraft will increase altitudes by 500 ft. to maintain 1,000 ft. AGL,
316 which will reduce noise impacts by 4 dBA (sound exposure level) near high visitation

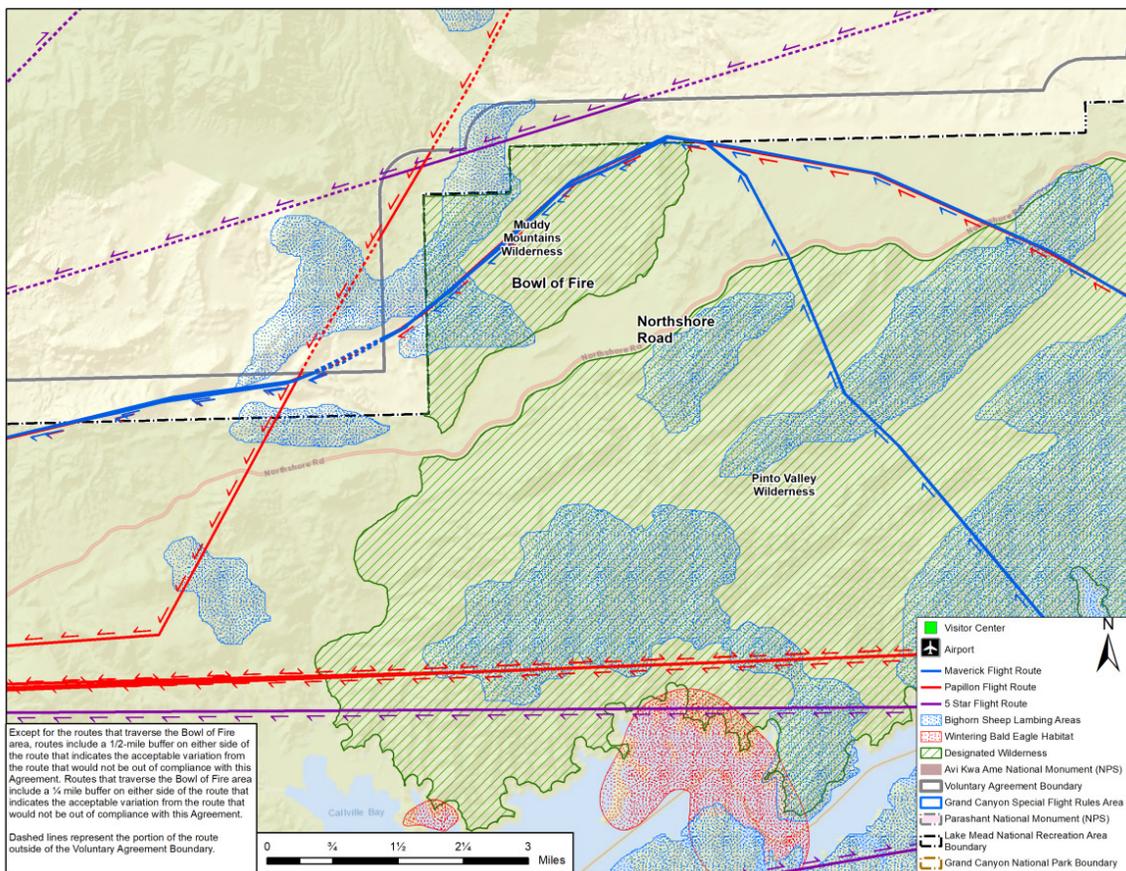
¹⁶ U.S. Fish and Wildlife Service. (2007). National Bald Eagle Management Guidelines.

¹⁷ Stockwell, C.A., and Bateman, G.C. (1991). Conflicts in national parks: A case study of helicopters and bighorn sheep time budgets at the Grand Canyon. *Biological Conservation* 56 pp. 317-328.

DRAFT

317 trails. This mitigation was added to reduce noise and visual impacts to the Muddy
318 Mountains and Pinto Valley Wilderness areas and to reduce disturbance to bighorn sheep.

- 319 • Helicopter air tours will increase their elevation from at minimum 3,000 ft. mean
320 sea level (MSL) to 3,500 ft. MSL to maintain 1,000 ft. AGL or higher over the
321 Muddy Mountains Wilderness.
- 322 • Helicopter tours will minimize the area impacted by noise over the Pinto Valley
323 Wilderness by concentrating their routes into corridors and flying between 3,500
324 ft. and 4,000 ft. MSL to maintain a minimum of 1,000 ft. AGL.
- 325 • Fixed-wing air tours will maintain a minimum of 1,500 ft. AGL over Bowl of
326 Fire.
- 327 • See Figure 4 for a depiction of this area.



328
329 **Figure 4.** Bowl of Fire commercial air tour operating area.

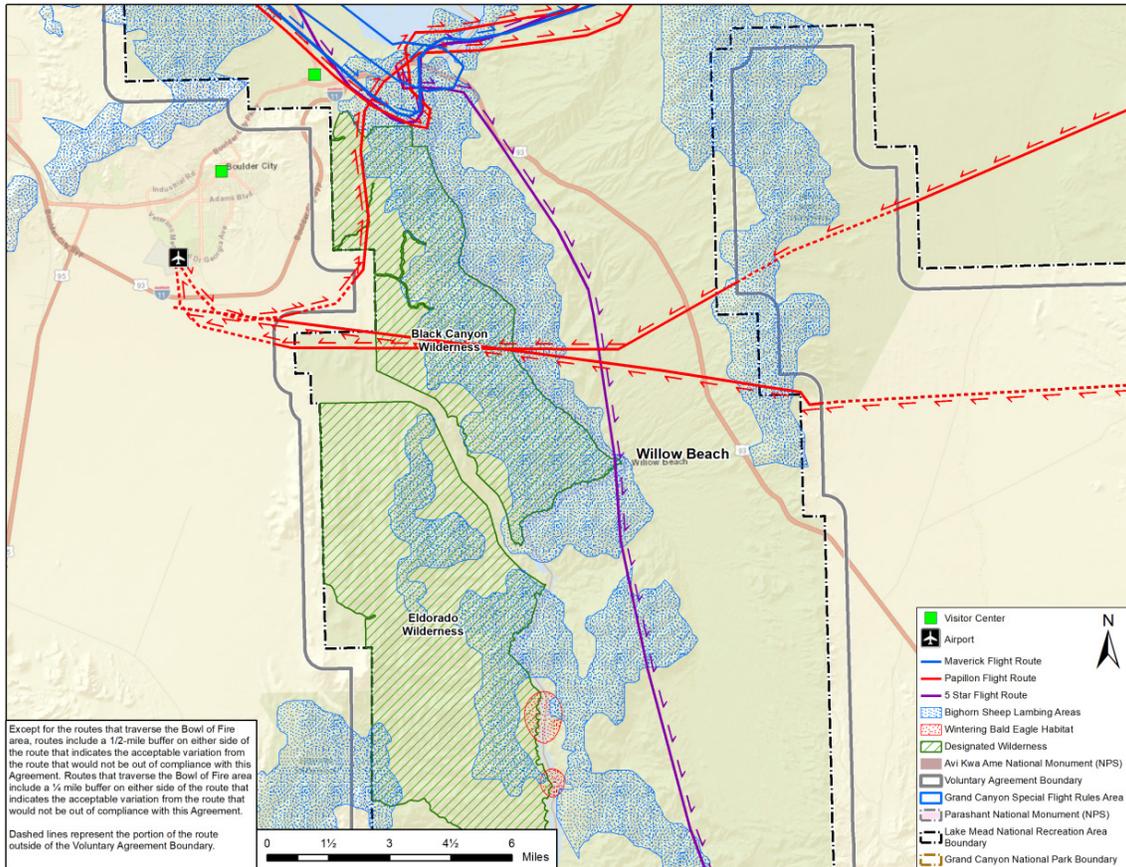
330 4.4 Black Canyon

331 At Black Canyon the tours are being concentrated north of Emerald Cove and south of
332 Arizona Hot Springs to reduce impacts to visitors in these heavily used locations as well
333 as reduce the impacts otherwise scattered throughout the Black Canyon Wilderness.
334 While no short loop tours of Black Canyon are currently active, if these routes become
335 active they will not occur on Sunday and Monday in line with the Lake Mead National

DRAFT

336 Recreation Area Lake Management Plan and activation of these routes will require
337 advance notice described in Appendix D.

- 338 • Air tours shall be conducted at a minimum altitude of 1,000 ft. AGL for
339 helicopters and a minimum altitude of 1,500 ft. AGL for fixed-wing aircraft.
- 340 • Helicopter air tours traversing Black Canyon will fly 2.5 miles north of Willow
341 Beach and a half-mile south of Arizona Hot Springs.
- 342 • See Figure 5 for a depiction of this area.



343
344 **Figure 5.** Black Canyon commercial air tour operating area.

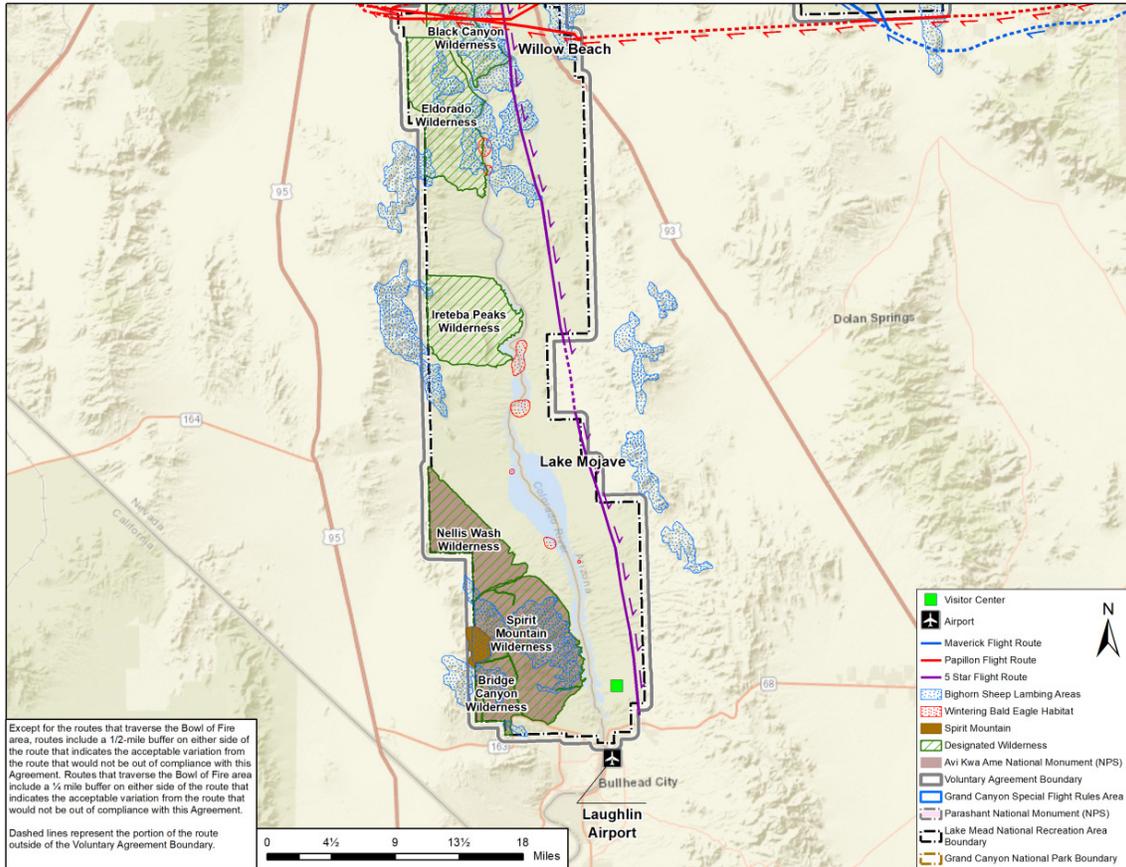
345 4.5 Avi Kwa Ame

346 No air tours will fly over the portion of Avi Kwa Ame National Monument within the
347 voluntary agreement boundary to reduce impacts to the sacredness of the site, which
348 is a traditional cultural property. This also serves to reduce impacts to Spirit
349 Mountain Wilderness, Nellis Wash Wilderness, and Bridge Canyon Wilderness areas.

- 350 • Air tours flying parallel with Lake Mohave including those to Laughlin Airport
351 will fly on the east side of Lake Mohave and shall be conducted at a minimum
352 altitude of 1,000 ft. AGL for helicopters and a minimum altitude of 1,500 ft. AGL
353 for fixed-wing aircraft for entirety of the route.

DRAFT

- 354 • Air tours shall avoid Spirit Mountain and Avi Kwa Ame National Monument by
355 flying on the east side of Lake Mohave.
- 356 • See Figure 6 for a depiction of this area.



357
358 **Figure 6.** Avi Kwa Ame commercial air tour operating area.

359 4.6 Commercial Air Tours Authorized

360 The terms “Authorization” or “Lake Mead Authorization” as used in this Agreement
361 refers to the commercial air tours of the Park that NAME OF OPERATOR is authorized
362 to conduct under this Agreement.

363 The number of commercial air tours initially authorized under this Agreement (Initial
364 Authorization) is the number of air tours authorized under IOA for all existing operators
365 with IOA before 2024. While the annual number of air tour Authorizations conducted
366 within the voluntary agreement boundary will not be reduced by this Agreement, the way
367 those air tours are reported will, by necessity, change because this Agreement clarifies
368 which routes are transportation routes to Grand Canyon National Park under the Act.

369 The final number of annual air tours authorized under this Agreement (Final
370 Authorization) will be determined after the agencies analyze three years of resource
371 monitoring data, aircraft tracking data, and annual reports submitted by operators under
372 the reporting format identified by the agencies in Section 6.0 of the Agreement. The

DRAFT

373 three-year reporting period will begin in January 2025 and continue through December
374 2027. After December 2027 the agencies will analyze the information and update Initial
375 Authorizations identified in Appendix B, to Final Authorizations. After the three-year
376 reporting period IOA shall also be updated to ensure the stability of the Agreement.
377 After December 2027 NAME OF OPERATOR will continue to report air tours as
378 outlined in this Agreement until the Agreement is amended.

379 5 Star Grand Canyon Helicopter Tours, LLC (5 Star) applied for operating authority in
380 2012. Pursuant to the provisions in the Act regarding the inclusion of new entrants in a
381 voluntary agreement,¹⁸ 5 Star is included in this Agreement as a new entrant.

382 Within 180 days after the end of the three-year period, the agencies will analyze NPS
383 resource monitoring data, aircraft tracking data and reporting data to determine Final
384 Authorizations, identify any additional adjustments, if any, necessary to meet the
385 objectives of the Agreement, and amend the Agreement to include Final Authorizations
386 for the operators. Operators will continue to report commercial air tours the same as
387 during the three-year period until the Agreement is updated to include Final
388 Authorizations or other guidance is provided by the agencies in compliance with all
389 applicable data collection laws and regulations. The Final Authorization under this
390 Agreement will not exceed the Initial Authorization. Refer to Appendix B for the Initial
391 Authorization of air tours.

392 4.7 Commercial Air Tour Route and Altitudes

393 Commercial air tours authorized in this Agreement by helicopter operators shall be
394 conducted on the active designated air tour routes and altitudes shown in Figures 9
395 through 11. See Appendix C for additional descriptions of the active routes. See
396 Appendix D for maps of inactive routes, terms and conditions for inactive routes, and the
397 process for activating an inactive route. Designated routes are not required for fixed-
398 wing commercial air tours conducted above 1,500 ft. AGL with the exception of flights in
399 the vicinity of the Hoover Dam shown in Figure 7.

400 Altitude expressed in units above ground level (AGL) is a measurement of the distance
401 between the ground surface and the aircraft, whereas altitude expressed in mean sea level
402 (MSL) refers to the altitude of an aircraft above sea level, regardless of the terrain below
403 it. The altitudes in Figures 9 through 11 below are expressed in MSL. Fixed-wing
404 aircraft will fly a minimum of 500 ft. higher than helicopters. These MSL altitudes
405 ensure commercial air tours conducted by helicopters will fly no lower than 1,000 ft.
406 AGL, and commercial air tours conducted by fixed-wing aircraft will fly no lower than
407 1,500 ft. AGL throughout the voluntary agreement boundary with two exceptions:

- 408 • The first exception encompasses the outbound route towards Grand Canyon
409 National Park and the S-turn associated with the Hoover Dam, as displayed in

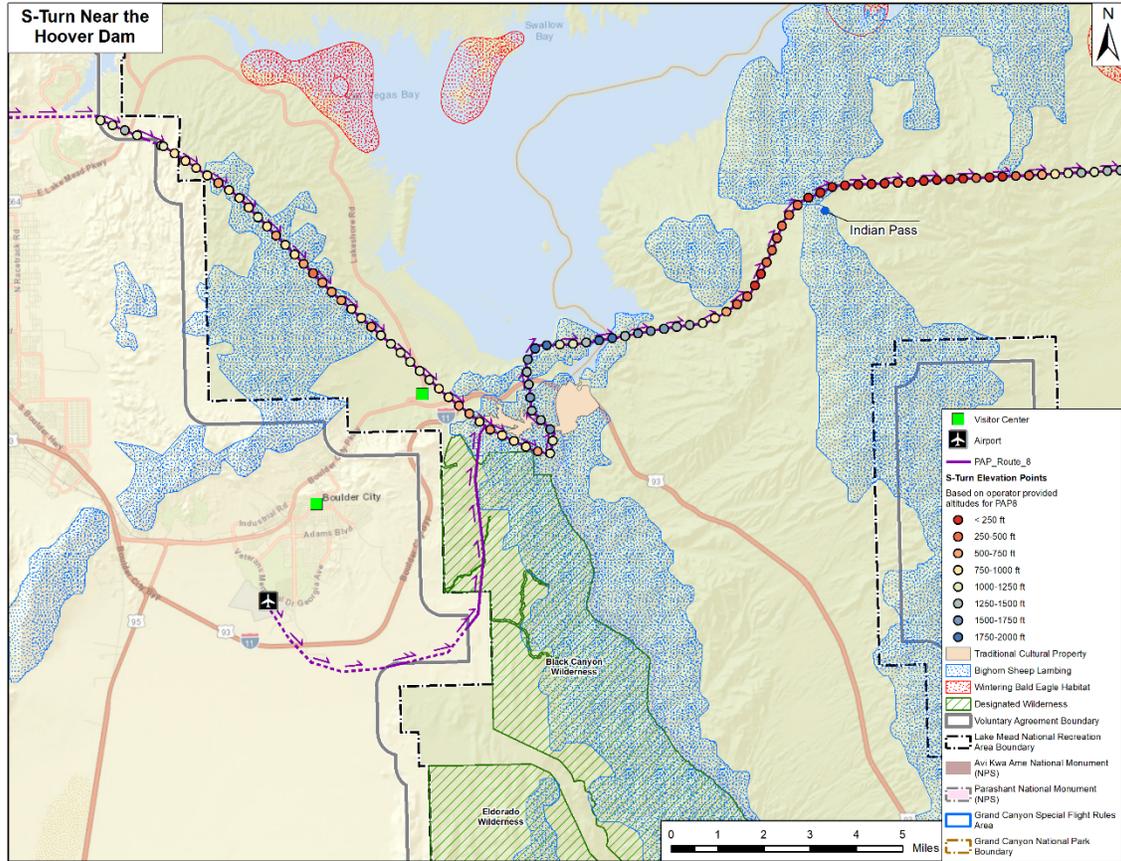
¹⁸ See 49 U.S.C. § 40128(b)(7)(A).

DRAFT

410 Figure 7. Under the S-Turn, 1,000 ft. cannot be achieved because of the
411 congestion of aircraft in this area that is under the Class B airspace. All helicopter
412 operators that are signatories to this Agreement fly the same route shown in
413 Figure 8, while fixed-wing operators fly approximately 500 ft. above them. In
414 this area, fixed-wing operators may also not achieve the 1,500 ft. AGL required
415 over the rest of the voluntary agreement boundary.

416 • Figure 8 depicts the second exception where 1,000 ft. AGL cannot be achieved by
417 Maverick Helicopters, Inc. (Maverick) as they leave their fuel farm; this
418 exception is made for safety. As Maverick leave their fuel farm and enter the
419 voluntary agreement boundary, they climb under eastbound traffic returning from
420 Grand Canyon National Park and traffic from the Temple Bar Airport, because of
421 this traffic an exception is made for achieving 1,000 ft. AGL before entering the
422 voluntary agreement boundary.

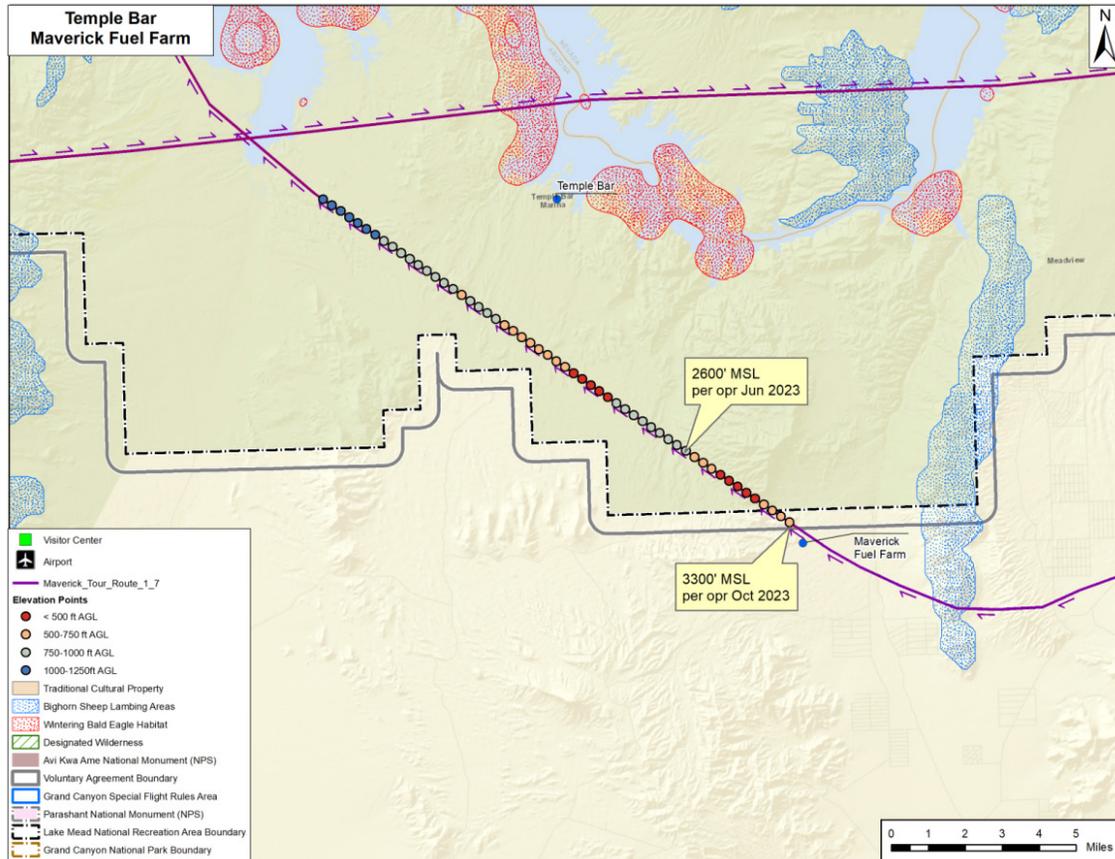
423 Except for the routes that fly over the Bowl of Fire area (Figure 4), routes include a ½-
424 mile buffer on either side of the route that indicates the acceptable variation from the
425 route that would not be out of compliance with this Agreement. Routes that fly over the
426 Bowl of Fire area include a ¼-mile buffer on either side of the route that indicates the
427 acceptable variation from the route that would not be out of compliance with this
428 Agreement. Operators may not deviate from the designated route and altitudes except as
429 necessary for safe operation of an aircraft as determined under Federal Aviation
430 Regulations requiring the pilot-in-command to take action to ensure the safe operation of
431 the aircraft. The pilot-in-command should return to the designated route and altitude as
432 soon as safely possible after the hazard has passed.



433
434 **Figure 7.** The S-Turn around the Hoover Dam, includes part of Indian Pass where 1,000
435 ft. AGL is not achieved by helicopter operators and 1,500 ft. AGL is not achieved by
436 fixed-wing operators per the terms of this Agreement.

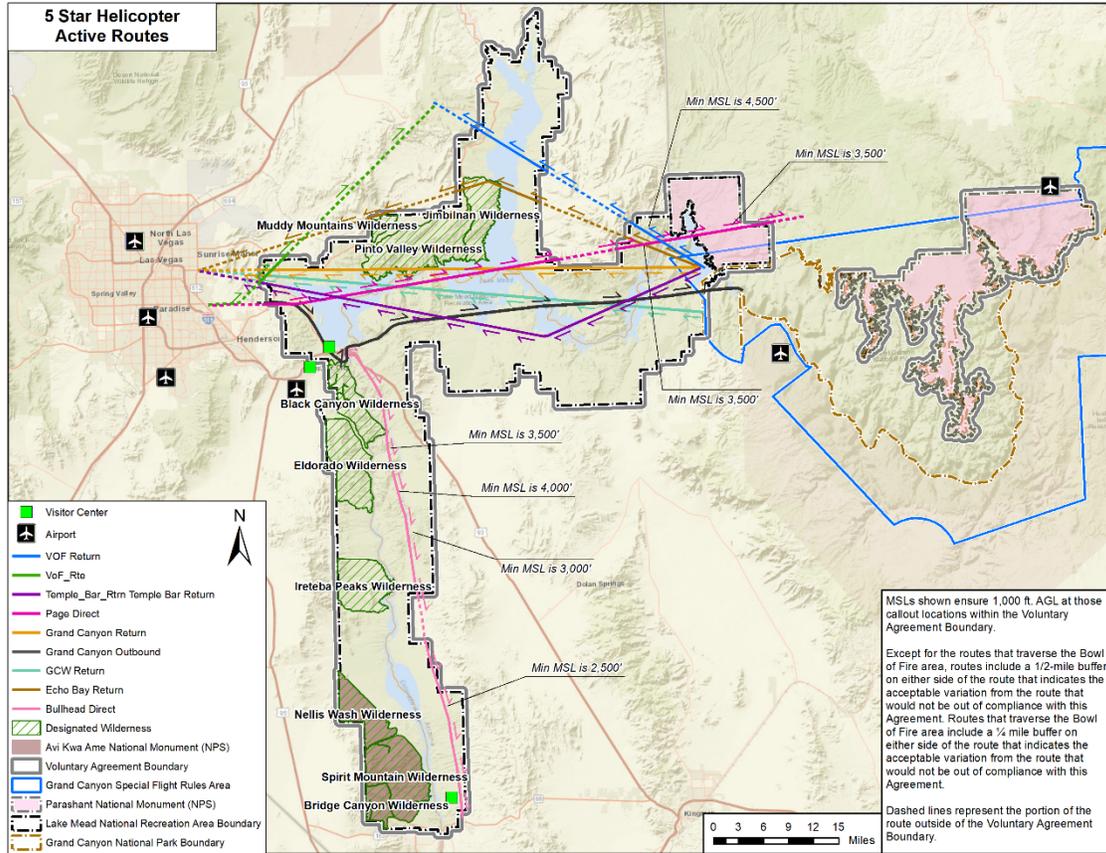
437
438
439
440
441
442
443
444

DRAFT



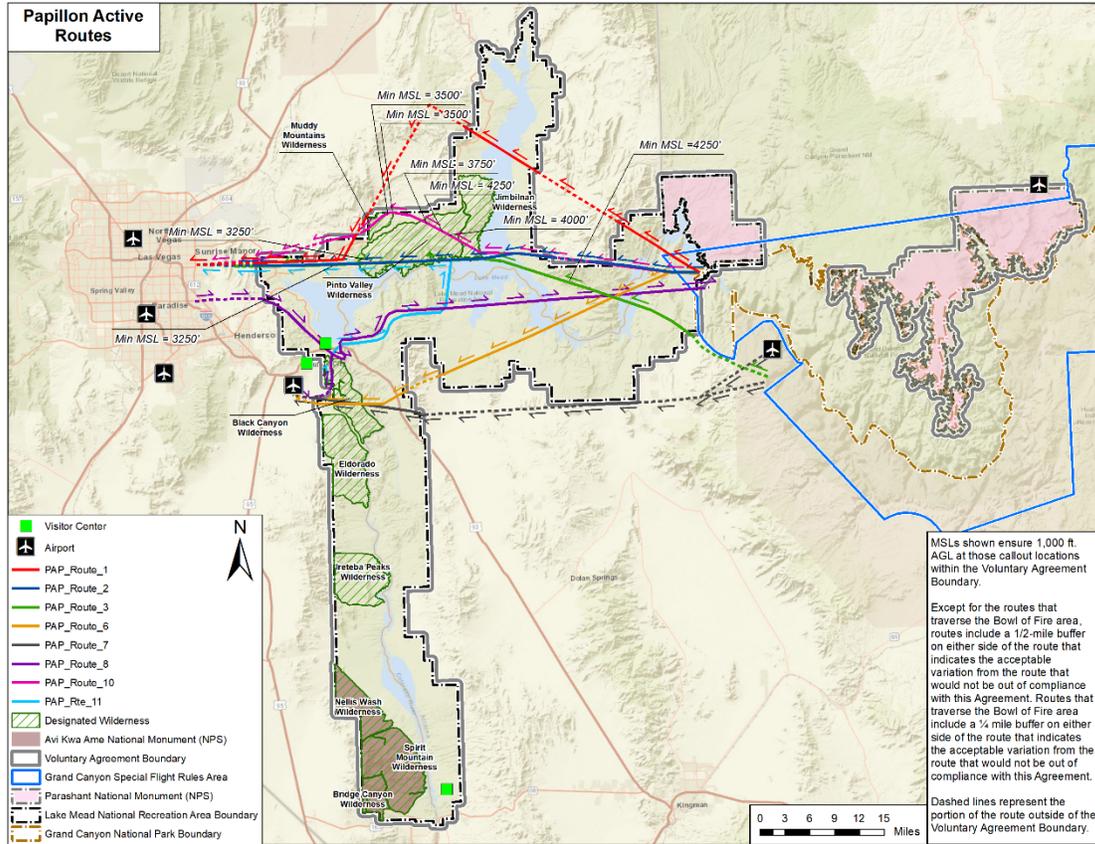
445

446 **Figure 8.** Maverick as they leave their fuel farm where 1,000 ft. AGL is not achieved per
447 the terms of this Agreement.



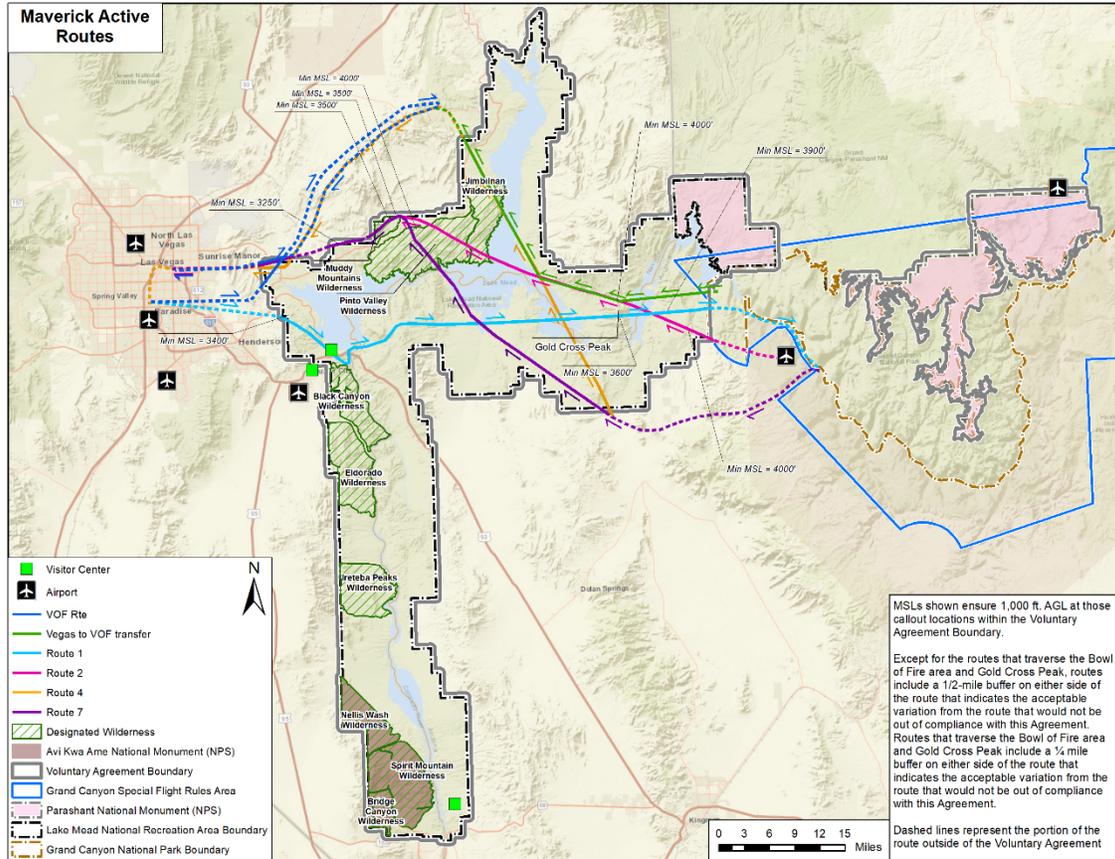
448
449
450

Figure 9. Commercial air tour routes conducted by 5 Star in the voluntary agreement boundary. See Appendix A for an enlarged map.



451
452
453

Figure 10. Commercial air tour routes conducted by Papillon Airways, Inc. (Papillon) in the voluntary agreement boundary. See Appendix A for an enlarged map.



454

455 **Figure 11.** Commercial air tour routes conducted by Maverick in the voluntary
 456 agreement boundary. See Appendix A for an enlarged map.

457 4.8 Aircraft Type

458 The aircraft types authorized to be used for commercial air tours are identified in
 459 Appendix B. Any new or replacement aircraft must not exceed the noise level produced
 460 by the aircraft being replaced. In addition to any other applicable notification
 461 requirements, operators will notify the agencies in writing of any prospective new or
 462 replacement aircraft and obtain joint agency concurrence before initiating air tours with
 463 the new or replacement aircraft.

464 4.9 Restrictions for Particular Events

465 The NPS can establish additional temporary route modifications or temporary no-fly
 466 periods that apply to commercial air tours for special events, such as tribal ceremonies or
 467 planned Park management. A temporary no-fly period would result in no air tours being
 468 flown in the voluntary agreement boundary. Absent exigent circumstances or emergency
 469 operations, the NPS will provide a minimum of two months' notice to the operators
 470 (operator contact in Attachment B) in writing in advance of the no-fly period. NPS may
 471 require temporary route modifications and will provide no less than two-weeks written
 472 notice for planned events or ceremonies and no less than 48 hours in the event of an
 473 unforeseen or unplanned circumstances.

DRAFT

474 4.10 In-Flight Communication

475 For situational awareness when conducting flights within the voluntary agreement
476 boundary, the operators will utilize the frequency and position reporting outlined in the
477 Las Vegas Helicopter Tour Operators Route Standardization Agreement (RSA).¹⁹

478 4.11 Hovering/Circling

479 Hovering and/or circling of aircraft is prohibited except when needed for safety of the
480 flight or when necessary to obtain clearance into Las Vegas Class B airspace.

481 4.12 Emergency and Precautionary Landings

482 While uncommon, the Parties acknowledge that there may be a need for emergency or
483 precautionary landings inside the Park.

484 In the event of an emergency landing:

- 485 • Once the aircraft has safely landed and any medical or other emergency issues
486 have been addressed, the operator shall immediately notify the NPS through Park
487 Dispatch at (702) 293-8998 of the nature and location of the ongoing emergency
488 and what actions are being taken.
- 489 • When necessary to land additional aircraft to address a continuing emergency
490 situation, pre-approval will not be required.
- 491 • When necessary to land additional aircraft once the emergency situation no longer
492 exists (e.g., to remove passengers that are not injured or in any harm) notice and
493 prior approval from Park managers is required and can be granted by contacting
494 Park Dispatch and/or Park contacts in Attachment B.
- 495 • Plans for removing any downed aircraft that cannot be flown out will require
496 approval by Park management (contact information in Attachment B) prior to
497 removal for the safety of Park visitors and protection of Park resources.²⁰

498 Precautionary Landings

- 499 • Advance notice of a precautionary landing will be made to the agencies by
500 contacting Park Dispatch where practical.
- 501 • When advance notice is not practical, the landing will be reported to FAA and
502 NPS via Park Dispatch as soon as practical and safe.

¹⁹ The Route Standardization Agreement (RSA) is written and maintained by the operators of this Agreement to address safety concerns related to Las Vegas Class B airspace and the Grand Canyon SFRA. It will continue to be updated to incorporate routes described in this Agreement and may include information not relevant to this Agreement to ensure safe operations. The RSA is not an agreement with the agencies nor does it meet the statutory requirements for a voluntary agreement under the Act. Therefore, if any terms, conditions, or requirements of the RSA conflict with the Agreement, the Agreement will be predominate. The operators will notify the signatories of any changes.

²⁰ See 36 CFR 2.17.

DRAFT

- 503 • For all events, irregularity reports will be provided to the FAA and the applicable
504 Park Superintendent or their designee within 10 days of the incident.

505 In the event of emergency landings within lands managed as Wilderness, a minimum
506 requirements analysis of any proposed recovery operations plan is required per NPS
507 policy prior to NPS approval of any removal or recovery operations within the Park, after
508 any emergencies are addressed.

509 **5.0 PROVISIONS TO ENSURE STABILITY AND EFFECTIVENESS OF THIS** 510 **AGREEMENT**

511 The Act specifically provides that voluntary agreements may include provisions to ensure
512 the stability of, and compliance with, the Agreement.²¹ The measures included in this
513 Agreement are described below.

514 Compliance with this Agreement will be ensured through ongoing communications
515 among the Parties, reporting of air tour operations by NAME OF OPERATOR as
516 required under the Act and described in Section 6.0, and enforcement measures as
517 appropriate. The Parties agree to work together to address any possible compliance
518 issues.

519 NAME OF OPERATOR will comply with the terms and conditions of this Agreement.
520 The NPS and the FAA are both responsible for oversight and enforcement of the
521 Agreement within their respective agency jurisdictions. Any party, stakeholder, or
522 member of the public can identify instances of alleged non-compliance with this
523 Agreement, including through the use of Automatic Dependent Surveillance–Broadcast
524 (ADS-B) or other flight tracking data. Allegations of non-compliance with this
525 Agreement will be reported to the appropriate FAA Flight Standards District Office
526 (FSDO). The FSDO will investigate and respond to all written reports consistent with
527 applicable FAA guidance.

528 Investigative determination of non-compliance with this Agreement may result in loss of
529 Authorization to conduct commercial air tours authorized by this Agreement and
530 termination of this Agreement. Any violation of operations specifications (OpSpecs)
531 shall be treated in accordance with FAA Order 2150.3, *FAA Compliance and*
532 *Enforcement Program*.

533 5.1 Automatic Dependent Surveillance–Broadcast

534 All operators are ADS-B equipped.²² At all times within the voluntary agreement
535 boundary, operators will have ADS-B Out turned on. New and replacement aircraft must

²¹ See 49 U.S.C. § 40128(b)(7)(B)(ii).

²² ADS–B is a performance–based surveillance technology that is more precise than radar and consists of two different services: ADS–B Out and ADS–B In. ADS-B Out broadcasts information about an aircraft's GPS location, altitude, ground speed and other data to ground stations and other aircraft, once per second.

DRAFT

536 maintain these requirements. Barometric altimeter settings will be adjusted in
537 compliance with the RSA and the Grand Canyon SFRA Manual.

538 5.2 Meetings

539 At the request of either of the agencies, the Park staff, the local FAA FSDO, and all
540 operators will meet once per year to discuss the implementation of this Agreement and
541 any amendments or other changes to the Agreement. This annual meeting could be
542 conducted in conjunction with any required annual training and will provide a virtual
543 attendance option. The Parties may meet more frequently, or as necessary, to discuss
544 compliance and ways to improve the protection of Park's resources. Topics to be
545 discussed may include: a review of emergency and precautionary landings in the Park, a
546 review of post-Agreement adaptive management resource/visitor experience monitoring,
547 changes in resource conditions or visitor patterns in the Park, proposed amendments,
548 changes to agency and operator contact information (Attachment B), and other measures
549 that might influence the stability or effectiveness of the Agreement. Other stakeholders
550 with subject matter expertise may be invited.

551 When training is made available by NPS, operators/pilots will complete training within
552 one year of it being made available. The training will include Park information that
553 operators can use to further their own understanding of Park priorities and management
554 objectives as well as enhance the interpretive narrative for air tour clients and increase
555 understanding of the Park by air tour clients. Meetings will also include a review of any
556 updates in the documentation for the Las Vegas Class B Airspace Helicopter Operators
557 Letter of Agreement, the Las Vegas RSA, the Grand Canyon SFRA Manual, other
558 relevant content, and the information in Attachments A and B.

559 5.3 Adaptive Management

560 Adaptive management allows for minor adjustments to routes, altitudes, or other
561 operating parameters without a formal amendment if the impacts of such changes are
562 within the scope of impacts considered by the Parties.

563 Such modifications may be made if: 1) the NPS determines that they are necessary to
564 avoid adverse impacts to Park resources, values, or visitor experiences; 2) the FAA
565 determines the need for such changes due to safety concerns; or 3) the Parties determine
566 that appropriate, minor changes are necessary to address new information or changed
567 circumstances, including consideration of a new entrant or competitive bidding.

568 Examples of adaptive management may also include: A) measures to ensure the
569 Agreement continues to address the management issues necessary to protect the resources
570 and visitor use of the Park without compromising aviation safety or the air traffic control

ADS-B Out airspace and equipment requirements are contained in 14 CFR § 91.225 and the equipment performance requirements are contained in §91.227.

DRAFT

571 system; and B) measures necessary to activate a currently inactive route that are outlined
572 in Appendix D.

573 The NPS may conduct monitoring of Park conditions to ensure the continued
574 effectiveness of the Agreement in addressing Park management objectives consistent
575 with the requirements of the Act as well as NPS-management authorities.

576 5.4 Staff Training

577 Operators will ensure that the Agreement will be included as part of their regular initial
578 and recurring pilot training process. Similarly, the agencies will ensure that any new
579 agency staff with responsibilities related to carrying out the terms and conditions of this
580 Agreement will be made aware of its existence and the specific agency obligations
581 included.

582 5.5 Interim Operating Authority

583 The Act required the FAA to grant Interim Operating Authority (IOA) to existing
584 operators authorizing them to conduct commercial air tours within the voluntary
585 agreement boundary as a temporary measure. The Act provides that if this Agreement is
586 terminated, NAME OF OPERATOR shall conform to the requirements for IOA until an
587 ATMP for the Park is put in effect, as is further described in Section 12.0. The Parties
588 agree that IOA as of 2023 will be reduced by two thirds as reflected in Appendix B,
589 Opspecs will be amended to reflect this per Section 11.0 under Initial Authorization. For
590 new entrants that do not hold IOA they will be granted one air tour annually under IOA.

591 5.6 Notifications

592 NPS, FAA, and all operators agree to provide each other timely notification (not to
593 exceed 30 days) of any changes or proposed changes to any relevant laws, regulations,
594 rules, guidance, agreements, practice, or conditions that have the potential to effect
595 implementation or effectiveness of this Agreement. Examples include but are not limited
596 to: changes to the RSA, any relevant letters of agreement, the Grand Canyon SFRA rules,
597 changes to NPS Management Policies or Director's Orders, or other obligations that
598 would affect noise management, changes to Park management priorities as reflected in
599 NPS planning and management documents or compendium, changes to operator training
600 manual sections relevant to air tours, or changes in key staff or contacts, etc.

601 **6.0 REPORTING**

602 Given the dynamic nature of natural resources and systems the NPS is responsible for
603 managing, coupled with the dynamic nature of the human influences upon them, NPS is
604 required under its enabling legislation and Management Policies to monitor resource
605 conditions to better understand trends and conditions over time and manage accordingly.

606 Further, the Act states that voluntary agreements must address the management issues
607 necessary to protect the resources and visitor use of the Park without compromising
608 aviation safety or the air traffic control system.

DRAFT

609 Starting in January 2025 operators will report air tour activity including both commercial
610 air tours under the Act and Grand Canyon transportation routes as specified below. This
611 reporting format will allow reported data to more accurately distinguish commercial air
612 tour operations and Grand Canyon transportation routes from other types of aviation
613 activity over the Park in order to correlate NPS resource condition assessments with air
614 tour activity.

- 615 • NAME OF OPERATOR will submit to the NPS and the FAA semi-annual reports
616 regarding the number of commercial air tours conducted within the voluntary
617 agreement boundary that are authorized by this Agreement and the number of
618 flights on transportation and/or tour routes.
- 619 • Reports are due to both the NPS and the FAA no later than 30 days after the close
620 of each reporting period.
- 621 • Reporting periods are January 1 through June 30 and July 1 through December
622 31.
- 623 • NAME OF OPERATOR shall adhere to the requirements of any reporting
624 template provided by the agencies.

625 The Parties acknowledge that although transportation flights are exempt from the Act as
626 well as from reporting annual Authorizations, in order to adequately monitor resource
627 conditions and ensure the effectiveness of this Agreement in addressing the management
628 issues necessary for protecting Park resources and visitor use, reporting both Grand
629 Canyon transportation routes and commercial air tours within the voluntary agreement
630 boundary will be necessary to provide a clearer understanding of resource conditions at
631 the Park and the environmental impact from the commercial air tour operations on Park
632 resources. Lake Mead Authorizations as described below are listed in Appendix B.

633 Operators shall report tours using the descriptions below. Attachment A provides
634 instructions on how to fill out the current Commercial Air Tour Operator Reports
635 information collection using the descriptions below:

- 636 A. **Clark County-Grand Canyon Direct.** An air tour that flies within the voluntary
637 agreement boundary in a direct path, that may or may not give a tour of Hoover
638 Dam either on the way to the Grand Canyon SFRA or the way back, and enters
639 the Grand Canyon SFRA on one of the designated routes, will be reported as Lake
640 Mead National Recreation Area exempt (and must also be reported to Grand
641 Canyon National Park) using current air tour reporting requirements for each
642 park. This includes (but is not limited to) air tours that join the Green 4 and Blue
643 2, defined in the current Grand Canyon SFRA Manual. These flights will not use
644 a Lake Mead Authorization.
- 645 B. **Clark County-Grand Canyon with Diversion.** An air tour that flies within the
646 voluntary agreement boundary in a non-direct path in order to provide an air tour
647 of a feature of interest outside of the voluntary agreement boundary (such as
648 Valley of Fire), that may or may not give a tour of Hoover Dam either on the way
649 to the Grand Canyon SFRA or the way back, and enters the Grand Canyon SFRA
650 on one of the designated routes, will be reported as voluntary agreement exempt

DRAFT

- 651 and must be reported to Grand Canyon National Park using current air tour
652 reporting requirements for each park. This includes (but is not limited to) air
653 tours that join the Green 4 and Blue 2 defined in the current Grand Canyon SFRA
654 Manual. These flights will not use a Lake Mead Authorization.
- 655 C. **Lake Mead and other Features of Interest outside the SFRA.** An air tour that
656 flies within the voluntary agreement boundary to fly to any other scenic feature
657 and does not enter the Grand Canyon SFRA will be reported to Lake Mead
658 National Recreation Area even if the air tour within the voluntary agreement
659 boundary is only a portion of the air tour and will use a Lake Mead Authorization.
660 Similarly, a deviation from a route used solely for transportation, as described in
661 the Act, to view a feature of interest in the voluntary agreement boundary, is a
662 commercial air tour under the Agreement and will use a Lake Mead
663 Authorization.
- 664 D. **Lake Mead and Grand Canyon.** An air tour that flies within the voluntary
665 agreement boundary in a non-direct path in order to provide an air tour of a
666 feature of interest inside of the voluntary agreement boundary that is not the
667 Hoover Dam, and enters the Grand Canyon SFRA on one of the designated
668 routes, must be reported to Lake Mead National Recreation Area and must be
669 reported to Grand Canyon National Park because it gives an air tour of both parks.
670 This will use a Lake Mead Authorization.
- 671 E. **Lake Mead.** An air tour that flies within the voluntary agreement boundary and
672 never enters the Grand Canyon SFRA on a designated route and stays within the
673 voluntary agreement boundary. These flights must be reported to Lake Mead
674 National Recreation Area and will use a Lake Mead Authorization.

675 7.0 TRIBAL CONSULTATION

676 In addition to other authorities, the Act also requires the NPS and the FAA to consult
677 with any Indian tribe whose tribal lands are, or may be, flown over by a commercial air
678 tour operator under a voluntary agreement.²³ Out of respect to all Tribes with ancestral
679 ties to the Park, consultation was initiated with all 18 affiliated Tribal Nations. A letter
680 dated October 30, 2023, initiated Government to Government consultation for the
681 Agreement with each Tribe. In December 2023, Tribal Nations were invited to two
682 virtual Tribal engagement meetings in early February, with an offer to hold private virtual
683 meetings upon request. NPS and FAA staff presented the Agreement during each virtual
684 engagement meeting. Representatives from the Hualapai Indian Tribe and the Kaibab
685 Band of Paiute Indians participated in the meeting held February 6, 2024, and
686 representatives from the Navajo Tribe participated in the meeting held February 7, 2024.
687 A private virtual meeting was held on February 9, 2024, as requested by the Paiute Indian
688 Tribe of Utah. Tribal consultation is continuous throughout the life of this Agreement. If

²³ 49 U.S.C. § 40128(b)(7)(C).

DRAFT

689 new information or resources are discovered that may be impacted by this Agreement, the
690 Park will consult with Tribes.

691 Tribal input considered in the development of this Agreement include concerns about:

- 692 • Impacts to all wildlife impacted by air tours in the Agreement.
- 693 • The potential for vibrational impacts to sensitive cultural resources.
- 694 • Identification of new resources or culturally significant sites currently unknown
695 that may require future mitigation.
- 696 • The notice required for no-fly periods if an unexpected event occurs that could
697 result in a request for air tours to avoid certain areas where ceremonies may be
698 held.

699 **8.0 PUBLIC REVIEW**

700 The Act requires the NPS and the FAA to provide an opportunity for public review of a
701 proposed voluntary agreement.

702 The final agreement will include an additional paragraph(s) describing the public review
703 opportunity.

704 **9.0 AMENDMENT**

705 The NPS, the FAA, or NAME OF OPERATOR may request an amendment to this
706 Agreement. Written notice to amend the Agreement must be sent to the other two parties
707 to the Agreement. Within 30 days after receipt of request, the agencies will provide
708 acknowledgement of receipt of the request. Revisions to the Agreement can only be
709 approved if all three Parties sign the amendment to the Agreement, following the
710 opportunity for public review and tribal consultation, as necessary. Amendments must
711 meet the objectives of the Agreement.

712 Due to necessary compliance with Las Vegas Class B airspace requirements,²⁴ any
713 changes to Class B airspace might result in changes to or amendment of this Agreement.

714 **10.0 TRANSFER OF VOLUNTARY AGREEMENT**

715 Authorizations under this Agreement are non-transferable. An Authorization of annual
716 operations may be assumed by a successor purchaser that acquires an entity holding
717 Authorizations under this Agreement in its entirety. In such case, the prospective
718 purchaser shall notify the FAA and the NPS of its intention to purchase the operator at
719 the earliest possible opportunity to avoid any potential interruption in the authority to
720 conduct commercial air tours under this Agreement. This notification must include a
721 certification that the prospective purchaser has read and will comply with the terms and

²⁴ Letter of Agreement for Helicopter Operations in Las Vegas Class B Airspace, as maintained by the Las Vegas Air Traffic Operations.

DRAFT

722 conditions in the Agreement. The FAA will consult with the NPS before issuing new or
723 amended OpSpecs or taking other formal steps to memorialize the change in ownership.

724 **11.0 CONFORMANCE OF OPERATIONS SPECIFICATIONS**

725 FAA will issue OpSpecs to reflect the terms and conditions of this Agreement. OpSpecs
726 will be issued as follows:

- 727 • Initial Authorization: FAA will issue amended OpSpecs that include the Initial
728 Authorizations and amended IOA per Table 1 in Appendix B within 180 days
729 from the effective date of this Agreement.
- 730 • Final Authorization: FAA will issue amended OpSpecs with the Final
731 Authorizations and IOA as described in an updated Table 1 in Appendix B within
732 180 days from the effective date of the updated Agreement based on the three-
733 year reporting period and resource monitoring from 2025-2027.

734 Amended OpSpecs will remain in effect until the Agreement is amended or terminated.

735 **12.0 TERMINATION**

736 12.1 Initiation of Termination

737 This Agreement may be terminated by any of the Parties at any time. The Act provides
738 for agency termination as follows:

739 (1) by the NPS if the Director determines that the Agreement is not adequately
740 protecting the Park's resources and/or visitor experiences;

741 (2) by the FAA, if the Administrator determines that the Agreement is adversely
742 affecting aviation safety and/or the national aviation system or after an
743 investigative determination of non-compliance with the Agreement.

744 The Parties agree to continue dialogue to ensure the stability of the Agreement to the
745 greatest extent practicable identified within their respective jurisdiction and subject to
746 relevant legal and regulatory requirements.

747 Notification of intent to terminate will be made in writing to the other signatories of this
748 Agreement. Such notification shall stipulate the reasons for termination.

749 Prior to termination by either NPS or FAA, the agencies will make good faith efforts to
750 work with the other Parties to mitigate any documented impacts.

751 12.2 Conditions upon Termination

752 Upon termination, NAME OF OPERATOR shall continue to conduct operations
753 consistent with this Agreement for 30 days following such termination, after which time
754 they shall conform to the requirements for IOA as described in NAME OF
755 OPERATOR'S OpSpecs until an ATMP for the Park is in effect.

DRAFT

756 In the event an operator terminates this Agreement and voluntarily surrenders their IOA
757 for the Park, agreements with other operators remain in effect. If the operator does not
758 voluntarily surrender their IOA they shall continue to conduct operations consistent with
759 this Agreement for 30 days following such termination, after which time they shall
760 conform to the requirements for IOA as described in NAME OF OPERATOR’S
761 OpSpecs. Agreements with other operators remain in effect until an ATMP for the Park
762 is established.

763 12.3 Effective Date of Termination

764 The effective date of termination of this Agreement shall be 30 days following a
765 termination notice by any of the Parties to the Agreement.

766 **13.0 AGREEMENT AND EFFECTIVE DATE**

767 The Parties to this Agreement agree to abide by the terms set forth in this Agreement.
768 This Agreement is effective on the date of signature by all Parties.

769

770

Name	Date
Title	
Company	

Mike Gauthier	Date
Superintendent	
Lake Mead National Recreation	
Area	
National Park Service	

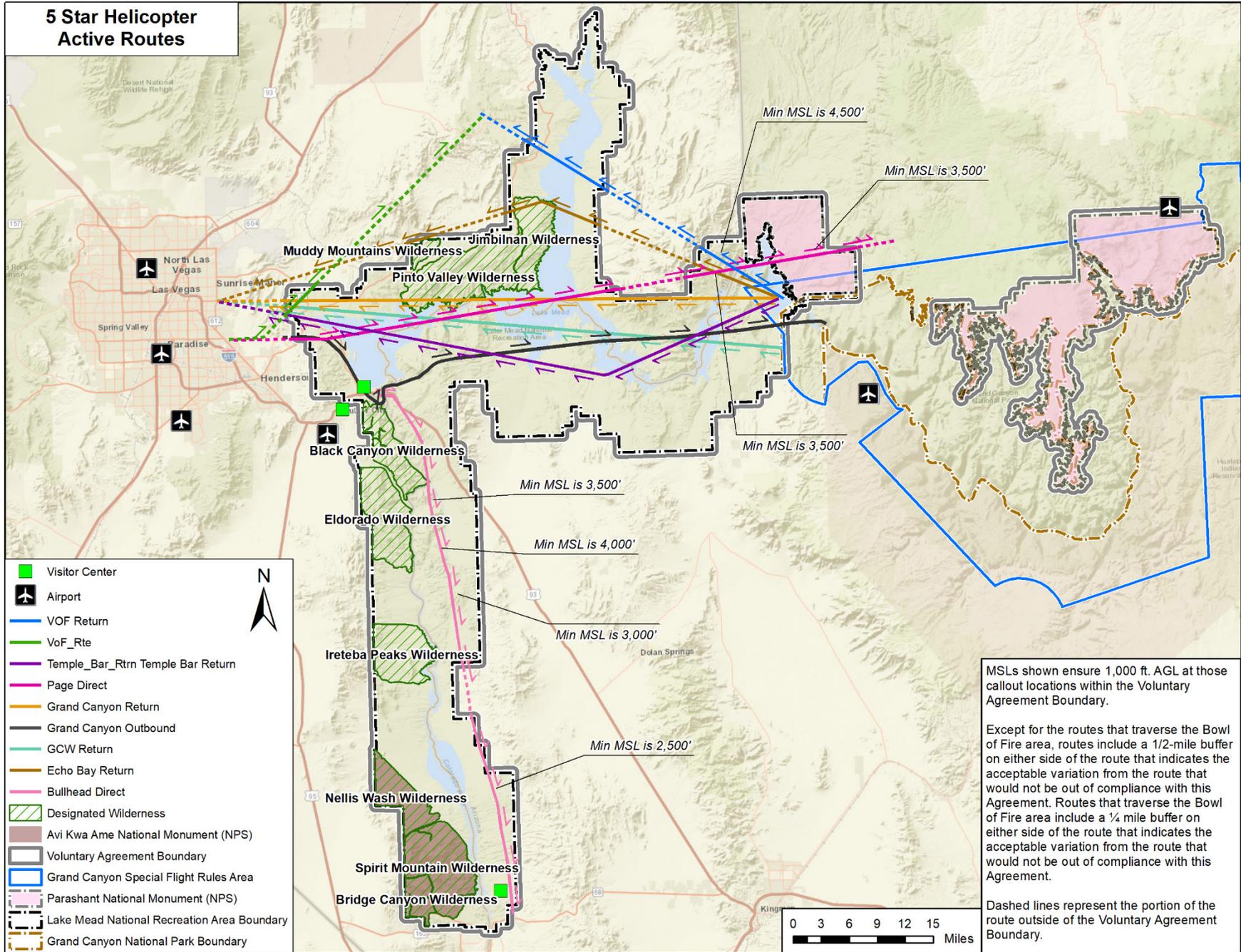
Raymond M. Sauvajot	Date
Associate Director	
Natural Resource Stewardship and	
Science Directorate	
National Park Service	

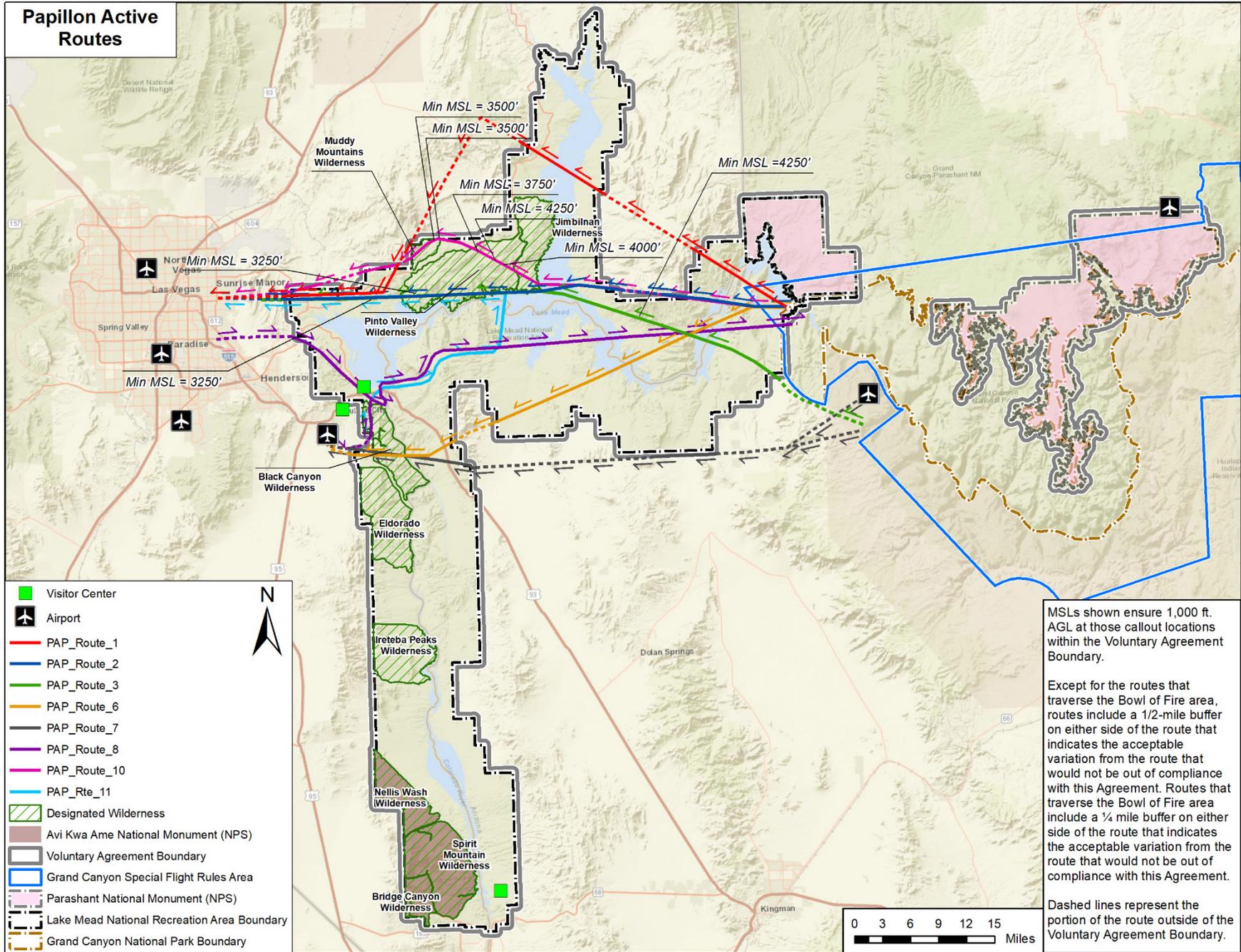
Julie Marks	Date
Executive Director (A)	
Office of Environment & Energy	
Federal Aviation Administration	

771

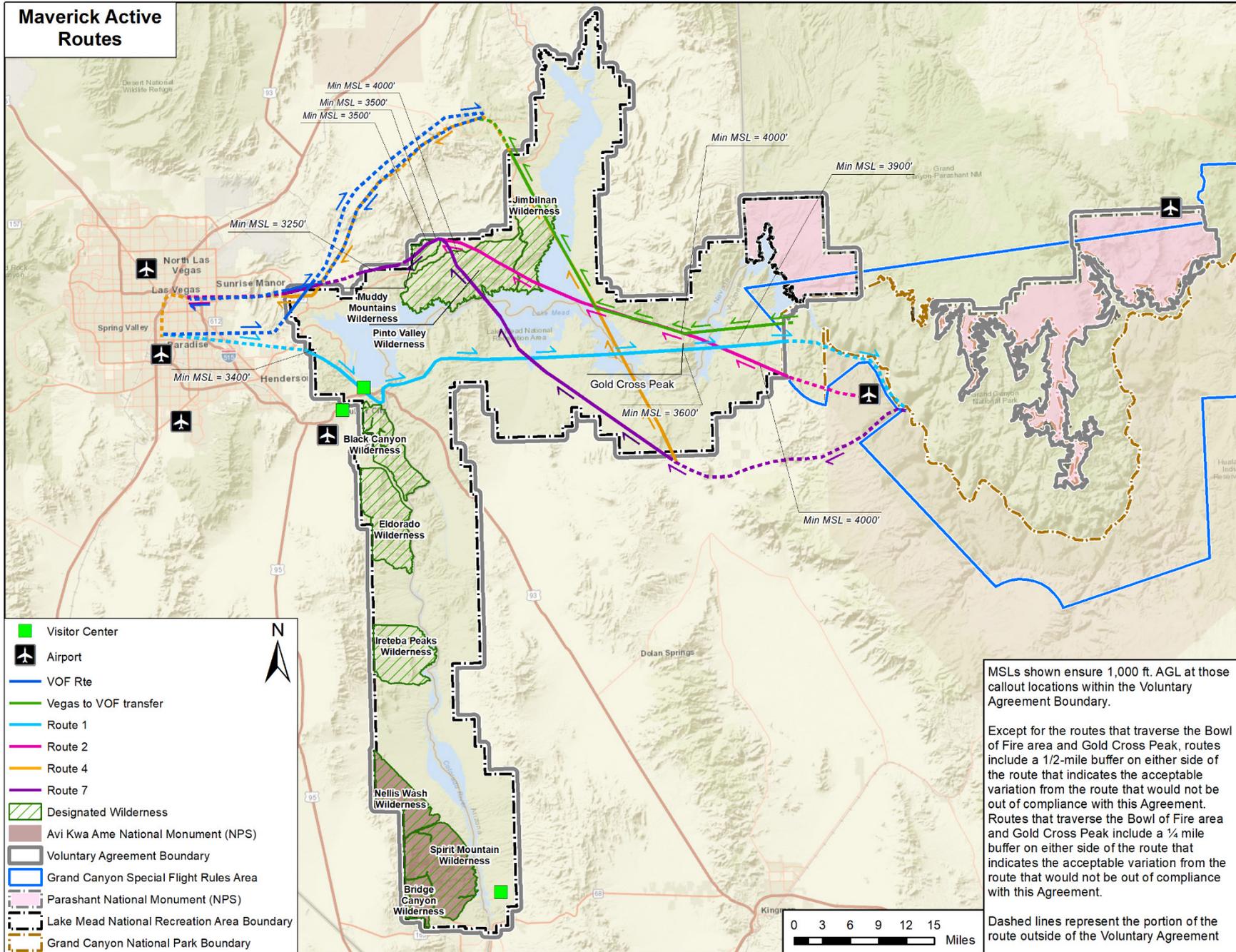
772 **APPENDIX A: Enlarged Maps**

773





DRAFT



DRAFT

777 **APPENDIX B: Initial Annual Authorizations and Aircraft Types**

778 Table 1: This table shows the Lake Mead Initial Annual Authorizations, Aircraft Type,
 779 Route Descriptions, Minimum Altitudes, and the Amended IOA. This table will be
 780 updated again after the 2025-2027 reporting period process with Final Authorizations.

Operator	Lake Mead Initial Annual Authorization	Aircraft Type	Routes	Min. Alt. (ft. AGL)	Amended Interim Operating Authority
Papillon	11,322	Heli: AS350B3e AS350B2 EC130B4 EC130T2 Bell 206-L-3	Figure 10 Map	1,000	3,736
Maverick Helicopters	9,603	Heli: EC130B4 EC130T2	Figure 11 Map	1,000	3,168
5 Star	288 ^a	Heli: AS350B2	Figure 9 Map	1,000	1
American Aviation	3	FW: CE-172-N Cessna C172 CE-206 CE-207-207 Cessna 207A CE-207-T207A	These routes are limited by Section 4. Fixed-wing aircraft routes are not defined.	1,500	1
Grand Canyon Airlines	14,964	FW: Cessna 208B DHC-6-300	These routes are limited by Section 4. Fixed-wing aircraft routes are not defined.	1,500	4,838
Southwest Safaris	15	FW: CE182 CE207	These routes are limited by Section 4. Fixed-wing aircraft routes are not defined.	1,500	5
Air Grand Canyon	24	FW: Cessna 182M	These routes are limited by Section 4. Fixed-wing aircraft routes are not defined.	1,500	8

781 ^{a)} As a new entrant, 5 Star did not hold authorizations prior to this Agreement. This Agreement grants 5
 782 Star 288 initial air tour authorizations annually for the Park and Interim Operating Authority for one air
 783 tour annually. These authorizations are equal to 33% of the Interim Operating Authority of Sundance
 784 Helicopters who no longer conduct commercial air tours and therefore do not hold authorizations for the
 785 Park.

786

DRAFT

787 APPENDIX C: Descriptions of Active Routes

788 Commercial air tours conducted by 5 Star shall be conducted on the designated air tour
789 routes and altitudes in Figure 9. Additional route details are described below:

- 790 • VOF Return: Grand Canyon, Valley of Fire to LAS Westbound
- 791 • VoF Rte: LAS to VOF
- 792 • Temple Bar Rtrn Temple Bar Return: Grand Canyon to Temple Bar to LAS
- 793 • Page Direct: LAS to Page
- 794 • Grand Canyon Return: Grand Canyon to LAS Westbound
- 795 • Grand Canyon Outbound: Hoover Dam, Grand Canyon Eastbound
- 796 • GCW Return: Grand Canyon Helipad to LAS Westbound
- 797 • Echo Bay Return: Grand Canyon to Echo Bay to LAS
- 798 • Bullhead Direct: Hoover Dam to Laughlin

799 Commercial air tours conducted by Papillon shall be conducted on the designated air tour
800 routes and altitudes in Figure 10. Additional route details are described below:

- 801 • PAP Route 1: Grand Canyon, Valley of Fire to LAS Westbound
- 802 • PAP Route 2: Grand Canyon to LAS Westbound
- 803 • PAP Route 3: GCW to LAS Westbound
- 804 • PAP Route 6: Grand Canyon to BVU Westbound
- 805 • PAP Route 7: GCW to BVU Westbound
- 806 • PAP Route 8: Hoover Dam, Grand Canyon Eastbound
- 807 • PAP Route 10: Grand Canyon, Bowl of Fire to LAS Westbound
- 808 • PAP Route 11: Lake Mead Hoover Dam Loop

809 Commercial air tours conducted by Maverick shall be conducted on the designated air
810 tour routes and altitudes in Figure 11. Additional route details are described below:

- 811 • MAV VOF Route: LAS to Valley of Fire and Back
- 812 • MAV Vegas to VOF transfer: GCW to Valley of Fire
- 813 • MAV Route 1: LAS to GCW eastbound
- 814 • MAV Route 2: GCW to Bowl of Fire to LAS westbound
- 815 • MAV Route 7: GCW to Maverick fuel farm to Bowl of Fire to LAS westbound
- 816 • MAV Route 4: GCW to Maverick fuel farm to Valley of Fire to LAS westbound

817

818

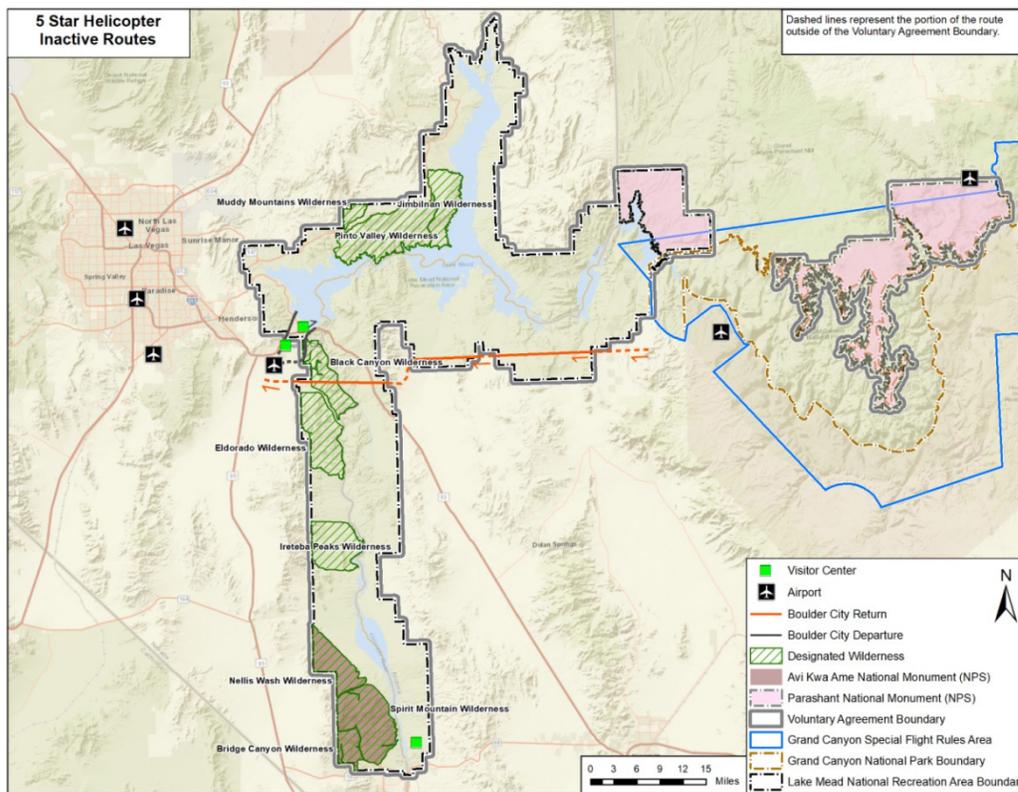
DRAFT

819 APPENDIX D: Inactive Route Maps, Terms and Conditions, and Process for
820 Activation of Inactive Routes

821 Before activating an inactive route, the operators will provide agencies with a 30-day
822 notice. Any activated route will maintain 1,000 ft. AGL to reduce noise and visual
823 intrusions from low flying air tours.²⁵ The one exception for 1,000 ft. AGL is if the
824 routes follow the same path over the Hoover Dam shown in Figure 7 in this Agreement.
825 An amendment will be required for any new routes.

826 5 Star has identified the following inactive routes which are listed below and displayed in
827 Figure 12.

- 828 • Boulder City Return



829
830 **Figure 12.** Inactive routes for 5 Star.

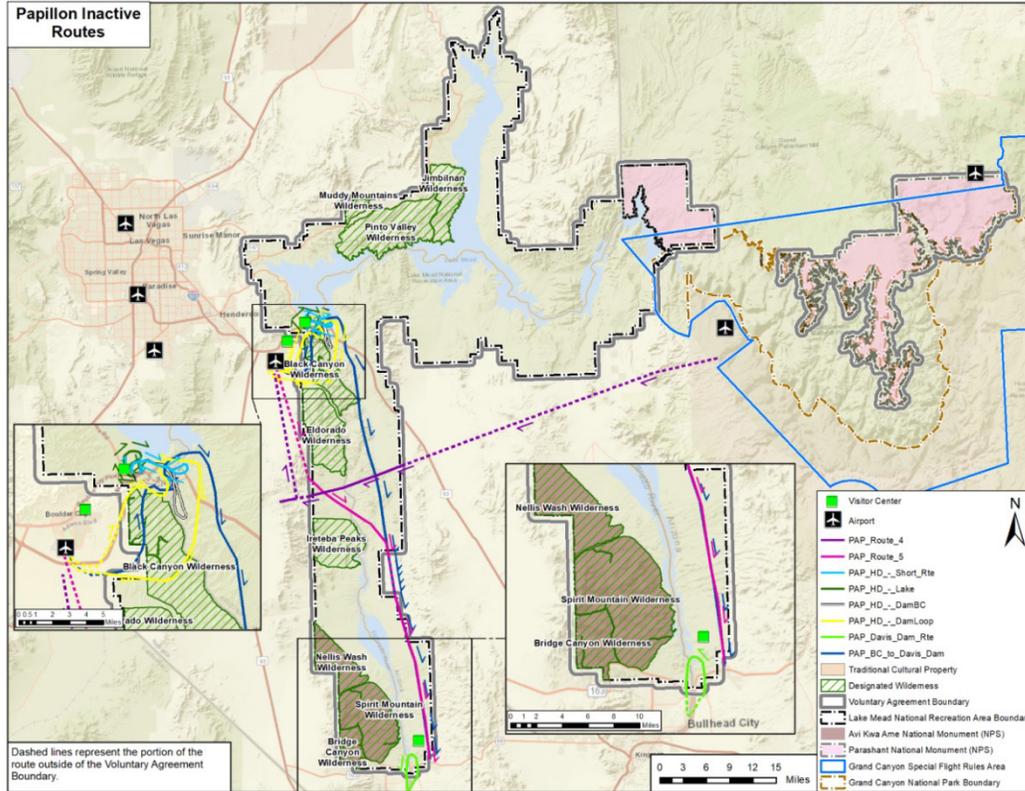
831 Papillon has identified the following inactive routes which are listed below and displayed
832 in Figure 13.

- 833 • PAP Route 4
 834 • PAP Route 5
 835 • PAP HD_Short_Rte
 836 • PAP_HD_Lake

²⁵ National Park Service Management Policies § 4.9.

DRAFT

- 837 • PAP_HD_DamBC
- 838 • PAP_HD_DamLoop
- 839 • PAP_Davis_Dam_Rte
- 840 • PAP_BC_to_Davis_Dam

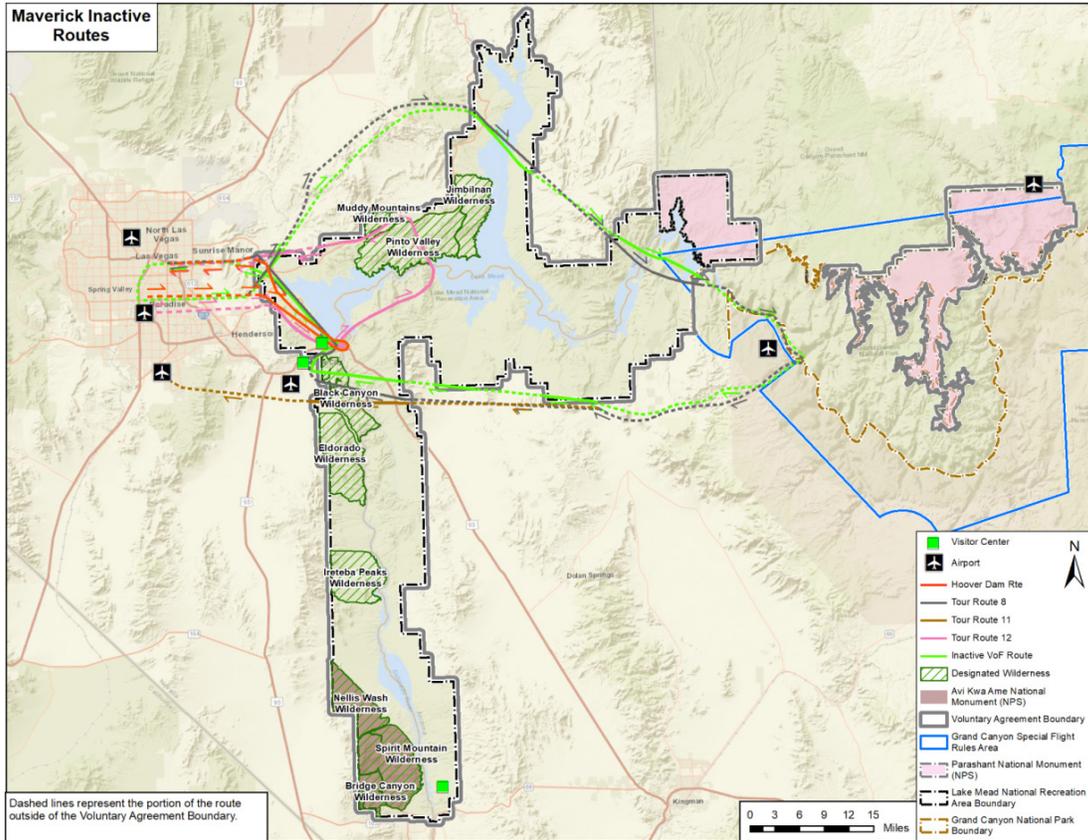


841

842 **Figure 13.** Inactive routes for Papillon.

843 Maverick has identified the following inactive routes which are listed below and
844 displayed in Figure 14.

- 845 • MAV Hoover Dam Rte
- 846 • MAV Tour Route 8
- 847 • MAV Tour Route 11
- 848 • MAV Tour Route 12



849
850 **Figure 14.** Inactive routes for Maverick.

851

852 Hoover Dam Lodge Routes of Black Canyon

- 853
- 854 • Currently there are no air tours departing the helipad located at Hoover Dam
855 Lodge (36.010628, -114.781929). If air tours resume they will include terms
856 consistent with the primitive zone established in the Lake Mead National
857 Recreation Area Lake Management Plan.
 - 858 ○ No tours of Black Canyon on Sunday and Monday.
 - 859 ○ Tuesday through Saturday, operating hours for Black Canyon air tours are
860 from 10:00 AM to 6:00 PM Pacific Time; no air tours will occur in the
861 Black Canyon outside of these operating hours.

DRAFT

862 **ATTACHMENT A: Reporting Process and Instructions**

863 The reporting template below will be used for reporting flights in accordance with the
 864 Act. The directions in this attachment may change without an amendment to the
 865 Agreement. This section is instructional in nature and clarifies the reporting requirement
 866 pursuant to the Office of Management and Budget (OMB) approved Commercial Air
 867 Tour Operator Reports information collection (OMB 2120-0750).

868 Under the **Route Code** column in the template below, all active routes in this Agreement
 869 will be listed and under **Route Name** they will be described as they are in Appendix C.
 870 The information in the red box in each figure displays how those routes are categorized
 871 as described in Section 6 of this Agreement. Operators are not required to fill in the
 872 information in the red box but can choose to do so.

Location Information			Route Information	
National Park Service Unit Name(s):	Alpha-Code(s):	Departure Airports/Helipads:	Route Code:	Route Name:
Lake Mead National Recreation Area	LAKE	LAS	Pap 1	Grand Canyon, Valley of Fire to LAS Westbound
Lake Mead National Recreation Area	LAKE	GCN	Pap 2	Grand Canyon to LAS Westbound
Lake Mead National Recreation Area	LAKE	BVU	Pap 3	Hualapai (no Grand Canyon) to LAS Westbound
Lake Mead National Recreation Area	LAKE	1G4	Pap 6	Grand Canyon to BVU Westbound
Park Name (pick from list)			Pap 7	Hualapai (no Grand Canyon) to BVU Westbound
Park Name (pick from list)			Pap 8	Hoover Dam, Grand Canyon Eastbound
Park Name (pick from list)			Pap 10	Grand Canyon, Bowl of Fire to LAS Westbound
Park Name (pick from list)			Pap 11	Lake Mead Hoover Dam Loop
Park Name (pick from list)				
Park Name (pick from list)				
Air Tour Data Submission				
Date of Tour	Hour of Tour	Aircraft Make/Model	Park-Route Code	
1/1/2025	8	EC130B4	LAKE- Pap 11	Example Type E
1/2/2025	8	EC130B4	LAKE- Pap 8, Pap 1	Example Type B
1/3/2025	7	EC130B4	LAKE- Pap 8, Pap 10	Example Type D
1/4/2025	9	EC130B4	LAKE- Pap 8, Pap 2	Example Type A

873

874 **Figure 15.** Example reporting template for Papillon with all of their active routes listed in
 875 Appendix C.

Location Information			Route Information	
National Park Service Unit Name(s):	Alpha-Code(s):	Departure Airports/Helipads:	Route Code:	Route Name:
Lake Mead National Recreation Area	LAKE	LAS	VOF RTE	LAS to Valley of Fire and Back
Lake Mead National Recreation Area	LAKE	GCN	Vegas to VOF Transfer	GCW to Valley of Fire
Lake Mead National Recreation Area	LAKE	BVU	Route 1	LAS to Hoover Dam to GCW eastbound
Lake Mead National Recreation Area	LAKE	1G4	Route 2	GCW to Bowl of Fire to LAS westbound
Park Name (pick from list)			Route 7	GCW to Maverick fuel farm to Bowl of Fire to LAS westbound
Park Name (pick from list)			Route 4	GCW to Maverick fuel farm to Valley of Fire to LAS westbound
Park Name (pick from list)				
Park Name (pick from list)				
Park Name (pick from list)				
Park Name (pick from list)				
Air Tour Data Submission				
Date of Tour	Hour of Tour	Aircraft Make/Model	Park-Route Code	
1/1/2025	8	EC130B4	LAKE-Route 1, Route 7	Example Type D
1/2/2025	8	EC130B5	LAKE- Route 1, Route 4	Example Type B

876

877 **Figure 16.** Example reporting template for Maverick with all of their active routes listed
 878 in Appendix C.

DRAFT

Location Information			Route Information	
National Park Service Unit Name(s):	Alpha-Code(s):	Departure Airports/Helipads:	Route Code:	Route Name:
Lake Mead National Recreation Area	LAKE	LAS	VOF Return	Grand Canyon, Valley of Fire to LAS Westbound
Lake Mead National Recreation Area	LAKE	GCN	VOF Rte	LAS to VOF
Lake Mead National Recreation Area	LAKE	BVU	Temple Bar Rtrn	Grand Canyon to Temple Bar to LAS
Lake Mead National Recreation Area	LAKE	1G4	Page Direct	LAS to Page
Park Name (pick from list)			Grand Canyon Rtrn	Grand Canyon to LAS Westbound
Park Name (pick from list)			Grand Canyon OB	LAS to Hoover Dam, Grand Canyon Eastbound
Park Name (pick from list)			GCW Return	Grand Canyon Helipad to LAS Westbound
Park Name (pick from list)			Echo Bay Return	Grand Canyon to Echo Bay to LAS
Park Name (pick from list)			Bullhead Direct	Hoover Dam to Laughlin
Park Name (pick from list)				
Air Tour Data Submission				
Date of Tour	Hour of Tour	Aircraft Make/Model	Park-Route Code	
1/1/2018	8	EC130B4	LAKE- Page Direct	Example Type E
1/1/2018	8	EC130B5	LAKE-Grand Canyon OB, VOF Return	Example Type B
1/1/2018	7	EC130B6	LAKE- Grand Canyon OB, Echo Bay Return	Example Type D
1/1/2018	9	EC130B7	LAKE- Grand Canyon OB, Grand Canyon Return	Example Type A

879

880 **Figure 17.** Example reporting template for 5 Star with all of their active routes listed in
 881 Appendix C.

Location Information			Route Information	
National Park Service Unit Name(s):	Alpha-Code(s):	Departure Airports/Helipads:	Route Code:	Route Name:
Lake Mead National Recreation Area	LAKE	LAS	Type A	Clark County-Grand Canyon Direct
Lake Mead National Recreation Area	LAKE	GCN	Type B	Clark County-Grand Canyon with diversion
Lake Mead National Recreation Area	LAKE	BVU	Type C	Lake Mead and other Features of Interest outside SFRA
Lake Mead National Recreation Area	LAKE	1G4	Type D	Lake Mead and Grand Canyon
Park Name (pick from list)			Type E	Lake Mead
Park Name (pick from list)				
Park Name (pick from list)				
Park Name (pick from list)				
Park Name (pick from list)				
Park Name (pick from list)				
Air Tour Data Submission				
Date of Tour	Hour of Tour	Aircraft Make/Model	Park-Route Code	
1/1/2018	8	Cessna 182M	LAKE- A	
1/1/2018	8	Cessna 182M	LAKE- B	
1/1/2018	7	Cessna 182M	LAKE- C	
1/1/2018	9	Cessna 182M	LAKE- D	
1/2/2018	10	Cessna 182M	LAKE- E	

882

883 **Figure 18.** Example reporting template for fixed-wing operators; they will report routes
 884 based on the type of routes listed in Section 6 of the Agreement.

885

886

887

DRAFT

888 **ATTACHMENT B: Agency and Operator Points of Contact**

889 This contact information is withheld for public review and may change. Any changes to
890 this attachment do not require an amendment to the Agreement.

891 Updated: mm/dd/yyyy

<u>Name</u>	<u>Title</u>	<u>Contact Information</u>	<u>Other</u>
Lake Mead National Recreation Area Dispatch			
	Lake Mead National Recreation Area Superintendent		
	Lake Mead National Recreation Area Chief Ranger		
	Parashant National Monument Superintendent		
	Parashant National Monument Chief Ranger		
	NPS Overflights Outdoor Recreation Planner		
	FAA Senior Policy Advisor for the Office of Energy and Environment		
	5 Star Grand Canyon Helicopter Tours, LLC		
	Air Grand Canyon, Inc.		
	Grand Canyon Airlines, Inc.		

DRAFT

	IKG Air, Inc. (American Aviation)		
	Maverick Helicopters, Inc.		
	Papillon Airways, Inc.		
	Southwest Safaris		

892