In this on-going series, Vertiflite studies the issue of helicopter noise in US national parks and wilderness areas.

Grand Canyon

Helicopter noise over populated areas generates the most concern among residents and local leaders these days. But some say the genesis of noise concern in the US began many years ago when air tour operators began flying daily flights over the Grand Canyon, a natural wonder carved out of rock that is 277 river-miles (446 km) long, nearly 18 miles (29 km) wide, and a mile (1.6 km) deep.

In the 1960s, Elling B. Halvorson, head of a construction company, won a contract to build a water pipeline from the North to the South Rim of the Grand Canyon, using helicopters for the project. Not long after, Halvorson began flying tourists over the Canyon. Today he is chairman of air tour operator Papillon Airways Inc.

At the time, air tours did not sit well with those tourists and environmentalists who preferred their Canyon experience sans aircraft noise. They complained loudly to lawmakers. In January 1975, the US Congress passed the Grand Canyon Enlargement Act to protect the natural beauty of the park, but federal agencies did little to alleviate noise or specify operating parameters over the Canyon.

Then, on June 18, 1986, air tour operator Grand Canyon Airways, operating a fixed-wing de Havilland Twin Otter, collided with a Bell 206 helicopter operated by Helitech Choppers. Twenty-five people on both aircraft were killed in the mid-air collision that occurred by the Scorpion Creek area near Crystal Rapids. At the time, around 40 air tour operators flew over the Canyon, according to one published report.

The tragedy prompted FAA and the US National Park Service (NPS) to set guidelines on air tours, which was followed by passage of the 1987 National Parks Overflights Act (Public Law 100-91). The generally-worded law set standards for overflights of national parks, including the Grand Canyon. The FAA and the NPS were ordered to “substantially restore the national quiet and experience” of Grand Canyon National Park.

But in 2011, the Overflight Act was watered down, according to environmentalists. Sen. John McCain (R-Ariz.) and Sen. Harry Reid (D-Nev.) attached a rider to a transportation bill that, in effect, could allow for additional flights over the Grand Canyon if air tours operated quiet technology aircraft. Flight allocation limits in the first quarter of the year would not be counted if tour companies operated quiet technology aircraft.

Language in the Rider essentially redefined what constitutes a quiet operating environment, environmentalist claim. The Act still mandates flight free zones in certain areas of the Park. Tour companies still have to maintain specified altitudes and no flights are allowed below the...
regulations strengthened and new caps set on annual air tour operations over the Grand Canyon. No significant progress on further alleviating aircraft noise in the Grand Canyon has been achieved since 1986, claimed McCarthy, when he first got involved. McCarthy helped produce a video of air tour operators over the Grand Canyon to illustrate his concerns over helicopter noise. (Readers can go to youtu.be/SJvCM_ohdnI to view the video.)

The biggest problem to curtailing helicopter noise could be the lack of communication between interested parties. While the NPS and FAA meet occasionally to discuss aircraft operations around and over the Park, there are few meetings between industry, regulators, Native Americans and environmental groups. The Grand Canyon Working Group, which included the Sierra Club and other interested parties, has disbanded.

McCarthy, a mechanical engineer, claimed the air tour industry is not willing to sit down and find a way to curtail the noise in the Grand Canyon. “The industry and the FAA like to talk, but they won’t get involved in genuine compromise. All they want is more, more, more,” he said. He paused and added

Environmental Complaints

Environmentalists claim that helicopter noise has gotten worse over the years and there doesn’t appear to be any relief in sight. “Air tours are inappropriate in national parks such as the Grand Canyon; however, we are willing to make measured accommodations to resolve the controversy,” said Jim McCarthy, who represents the Sierra Club on aircraft noise issues affecting the Grand Canyon.

Opinions differ on the level of helicopter noise over the Grand Canyon and whether it has increased or decreased since passage of the Overflights Act. “Over the last several years, it [fixed-wing and helicopter noise] has been fairly stable,” said Robin Martin, chief of planning and compliance for the Grand Canyon, NPS. Martin said quiet technology aircraft is helping to reduce the noise footprint in the Park, but so do the various rules and enhancements to the Overflights Act.

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lightly: “They probably say the same thing about us.”

The Helicopter Association International (HAI), which represents the civil helicopter industry, including air tour operators, takes exception to the view that communication between all sides on reducing noise in the Grand Canyon and at other national parks has stopped.

The National Parks Overflight Advisory Group (NPOAG), a congressionally formed advisory body, continues to meet on various helicopter related issues, including noise. The Group is made up of industry representatives, environmentalists, Native Americans and other interested parties. NPOAG will hold a meeting at HAI’s 2015 Heli-Expo in Orlando in March. At the conclusion of the meeting, there will be a public comment period during which attendees who are not formal members of the advisory group may have their say.

“The general public is welcome anytime,” said HAI President Matt Zuccaro, who sits on the NPOAG. “We want environmentalists and Native Americans and others to know as much about our industry as possible and hear about their concerns because that is how you solve problems.”

[AHS and HAI are partnering on a renewed Fly Neighborly/Noise Abatement initiative that will also be announced at Heli-Expo in March.—Ed.]

Operators’ View

Mr. Halvorson declined through a spokesperson to be interviewed for this article. However, Las Vegas-based air tour operator, Maverick Helicopters, part of the Maverick Aviation Group, which includes Maverick Airlines and Mustang Helicopters, talked with Vertiflite about its operation and noise abatement efforts.

Maverick, which provides Grand Canyon and Las Vegas strip flights daily, said the biggest contribution to lowering helicopter noise is its commitment to quiet technology rotocraft. Ten years ago Maverick invested around $100 million in acquiring a fleet of Airbus Helicopters EC130 Eco-Stars (the Ecureuil) with the Fenestron “fan-fin” tail rotor. In 2003, the company was the launch customer for the EC130 T2. In 2003, the company was the launch customer for the EC130 Eco-Star. Since then, the company has grown into the largest operator of EC130s in the world, and in 2012 became a launch customer for the EC130 T2.

The shrouded tail rotor is noticeably quieter than conventional tail rotors, various operators claim. “We deem the EC130 to be the premier air tour helicopter worldwide, due to its size, comfort level and the quiet technology,” said Bryan Kroten, vice president of marketing. “We have been told that the Fenestron tail rotor reduces outside noise by up to 50%.”

Airbus Helicopters would not back operators’ claim that the EC130 T2 is 50% quieter, but said the noise level for that aircraft is 5.9 dB lower than ICAO’s Chapter 8 noise levels. Maverick operates 44 EC130s currently and will be up to 47 by mid-2015. The Fenestron tail rotor is found on other Airbus rotorcraft, such as the AS365 Dauphin and the EC145 T2.

“Las Vegas has the highest level of helicopter traffic in the US,” said Kroten. “There are up to 80 helicopters operating in this market at all times.” As such, Maverick and other air tour operators must follow strict routes in and out of Las Vegas, which were established by the helicopter operators in conjunction with the Las Vegas Department of Airport Operations and the FAA. Each air tour operator signed a voluntary route standardization agreement. The agreement helps augment safety and allows each company to train its pilots on where to expect the other company’s aircraft.

Maverick has quarterly meetings with the McCarran International Airport to discuss any noise or air traffic related issues, said Kroten. It’s unknown if Maverick meets with those groups and individuals that would like to reduce helicopter noise and flights over the Grand Canyon: Kroten declined to discuss whether Maverick has met with anti-noise groups on reducing helicopter noise.

Yet the Las Vegas metropolitan area was cited numerous times by FAA’s Washington D.C. headquarters on how well the “operators, the community and [McCarran] Airport mitigate noise in areas where it is needed,” said Jim Ogletree, assistant chief pilot and safety officer for Maverick.

To reach the Grand Canyon, Maverick’s helicopters fly East over Tropicana Avenue out of the City. Once outside the Class B airspace, the helicopter turns southeast to the Hoover Dam. From there, it is a direct flight to the western end of the Grand Canyon, where the helicopter picks up the FAA regulated Green Four Route, which takes it through the western end of the Canyon. Air tour operators are required to maintain 5,000 ft (1.5 km) above mean sea level until it connects to a specified reporting point if they plan to descend to the bottom of the canyon. Maverick’s contract with the Hualapi Native American Tripe allows the tour operator to land at the tribe’s village at

Maverick, Papillon and Sundance Helicopters (an Air Methods company) operate Grand Canyon helicopter air tours out of McCarran Airport in Las Vegas. (Maverick photo)

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Some 2,400 nm (4,400 km) southwest from the Grand Canyon in the sprawling Pacific Ocean sits the eight picturesque Hawaiian Islands, home to Blue Hawaiian Helicopters. The company provides air tours over the islands of Oahu, Maui, Kauai, Molokai and the Big Island of Hawaii, with a fleet of 27 helicopters: 21 EC130s and six AS350 B2 A-Stars.

Blue Hawaiian Helicopters Chairman and CEO Dave Chevalier, is refreshingly candid about how his company has changed its mindset regarding helicopter noise. “It wasn’t that we were being obnoxious purposely, we were just ignorant,” said Chevalier, who began flying air tours over Maui in 1985. Numerous complaints plus negative news media coverage during the early days prompted Chevalier and other air tour operators to form HELO – the Helicopter Environmental Liaison Office. A HELO representative would field noise complaints and pass along the concerns to the operators, which would hopefully deal with the problem.

Before the Overflight Act, civil helicopters could fly wherever they wanted, said Kirsch. That legislation has been modified and refined. And yet there remains conflict about helicopter noise and operations over the Grand Canyon.

Implementing noise and operating restrictions in the Grand Canyon represents a “classic example of trial and error,” said Kirsch. “Some of the regulations have worked, while others have not.”

Helicopter noise around the Grand Canyon is an issue Kirsch knows well. His law firm, Kaplan, Kirsch and Rockwell LLP represents Clark County, Nevada, in which McCarran sits. In addition to Maverick, Papillon Grand Canyon Helicopters and Sundance Helicopters also operate Grand Canyon helicopter air tours out of McCarran; a fourth company, Heli USA Airways filed for bankruptcy in 2013.

Air tour operators are permitted by the Hualapai Tribe to land at Grand Canyon West, which is outside of the National Park. (Maverick photo)

Blue Hawaiian, an Air Methods company, was started in 1985 with a single four-seat helicopter piloted by company founder, Dave Chevalier. The company operates EC130 Eco-Stars and the smaller AS350 B2 A-Stars. (Blue Hawaiian photo)
Helicopter noise remains an issue on Kauai so that help line remains, he added.

The Haleakalā National Park on Maui and Volcanoes National Park on the Big Island are the main federal parks over which Blue Hawaiian flies. Blue Hawaiian meets occasionally about helicopter noise and operational issues with the superintendent of Volcanoes National Park and rarely with the head of Haleakalā National Park. The air tour operators interact occasionally with the local FAA branch, but not the State of Hawaii, except to obtain tour permits. The operators deal mainly with the various communities on the Islands.

The issue of helicopter noise over communities and national parks and designated wilderness areas is unlikely to be resolved anytime soon. But there appears to be a genuine effort by both sides to engage in meaningful dialogue, even if those conversations don’t result in a tangible solution to the helicopter noise problem. The key, said Chevalier, is to maintain communication.

About the Author

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