

Military Overflight Management and Education Program— Immersion and Communication

Gregg D. Fauth, Wilderness Coordinator, Sequoia and Kings Canyon National Parks,
47050 Generals Highway, Three Rivers, CA 93271; gregg_fauth@nps.gov

Park background

Sequoia and Kings Canyon National Parks (SKCNPs) are in the southern Sierra Nevada of California and contain some 865,000 acres of land ranging from foothill to alpine environments. Twelve of the fifteen 14,000-foot-high (4267m) peaks in California are contained within these High Sierra parks, including the highest peak in the lower 49 states, Mt. Whitney at 14,495 ft. (4418m) elevation. The parks are very popular for backpacking and recreational stock use, hosting some 30,000 annual wilderness visitors spending some 100,000 nights camping in the parks' wilderness.

Sequoia and General Grant national parks (NPs) were established in 1890. These parks were: “set apart as a public park, or pleasure ground, for the benefit and enjoyment of the people” and to “provide for the preservation from injury of all timber, mineral deposits, natural curiosities or wonders within said park, and their retention in their natural state.” General Grant NP later evolved and expanded to become Kings Canyon NP in 1940 when its purpose was stated as: “That in order to insure the permanent preservation of the wilderness character of the Kings Canyon National Park, the Secretary of the Interior may limit the character and number of privileges that he may grant within the Kings Canyon National Park.”

The passage of the Wilderness Act in 1964 included a directive to the Secretary of Interior to survey park land for wilderness designation. SKCNPs did the survey and eventually recommended that some 800,000 acres be designated. Congress did not accept all of these lands, but on September 28, 1984, the California Wilderness Act was passed, designating 723,000 acres to be managed per the mandate of the Wilderness Act.

The Wilderness Act defines what wilderness is and should be:

- A place *in contrast to places where man and his works dominate the landscape.*
- Where the earth and its community of life are untrammelled by man.
- Where man is a visitor who does not remain.
- Land retaining its primeval character and influence.
- Generally appears to have been affected primarily by the forces of nature.
- Where *the imprint of mans work is substantially unnoticeable.*
- Has *outstanding opportunities for solitude* and primitive recreation.

SKCNPs lie between the Central Valley and the Owens Valley/Mojave Desert in California, each containing vast open spaces. The southern Owens Valley and the adjoining Antelope Valley were and are home to notable aviation pioneering; much of it happening at what is now the Air Force Flight Test Center (AFFTC) at Edwards Air Force Base (where the sound barrier was broken by Chuck Yeager). Over time as commercial air travel has grown, “free” military airspace has subsequently shrunk. To protect their aviation training needs,

the joint military services formed the R-2508 Military Aviation Training complex (R-2508) in 1995. The R-2508 consists of some 19,600 square miles and includes airspace over SKCNPs, Death Valley National Park (DVNP), Mojave National Preserve, China Lake Naval Air Weapons Center (NAWC-CL), AFFTC, and Ft. Irwin National Training Center (US Army). Its management is conducted by a Complex Control Board (CCB), consisting of aviation staff from the three installations, and overseen by a Joint Policy and Planning Board (JPPB), consisting of the commanders of the three military installations.

The value of the R-2508 is as a large diverse designated military airspace. It ranges in altitude from 282 feet (86m) below mean sea level (MSL) at Badwater in Death Valley NP, to 14,495 (4418m) above MSL at Mt. Whitney in SKCNPs. The airspace is used by all military services for training and test missions. The single largest user is Lemoore Naval Air Station, located west of SKCNPs in the Central Valley. Lemoore planes fly directly over SKCNPs to access the R-2508, averaging 70–80 flights per day over the parks.

The history of “problems”

The potential for problems stems from mixing a sophisticated flying machine and a pilot who is trained and encouraged to test his skills and his jets’ capabilities over a federally designated wilderness. The outcome of this has been what is known as “low-flyers” over the parks. Low-flyers are those jets/planes that operate in close proximity to the ground, and can be very disturbing to wilderness users, and even a safety hazard, due to the extreme noise and sound concussions they generate. This problem has been in existence at SKCNPs since the 1950’s, essentially since jet aircraft have been operating. Through the years, park management and the visiting public have complained to local military base commanders about the intrusive and unwanted noise. Upon designation of the SKCNPs Wilderness in 1984, the military voluntarily instituted an aviation floor of 3,000 ft. (914m) Above Ground Level (AGL). Though the military accepted this restriction on paper, there was little action to inform pilots or enforce the limit. As a result, the new, at the time self-imposed restriction led to no change in the number of low-flyer incidents.

In the early 1990’s Lemoore Naval Air Station in the Central Valley, with SKCNPs between it and the R-2508, went through a National Environmental Policy Act (NEPA) compliance process in seeking to expand how many fighter jets were based at the installation. The NPS, via SKCNPs, commented on the plan and requested analysis of the effects of the proposed action on SKCNPs. The Department of Defense (DOD) made a determination that SKCNPs did not have standing due to the fact that the airspace is not controlled by the NPS and thus refused to consider impacts to the parks. SKCNPs protested this denial and obtained a hearing with the Council on Environmental Quality in 1999. This hearing led to the recognition of the parks as affected entities and DOD then altered its documents and actions to reflect effects on the parks.

The program

At the same time the issue of SKCNPs’ “standing” was playing out, the parks were involved in advancing dialogue with national and local military leadership. Park managers, in the form of the Superintendent, Chief and District Rangers, and Wilderness Coordinator were work-

ing to build understanding of the NPS' mission with the military. It began with face to face meetings, and eventually evolved into a wilderness pack trip, starting in 1996.

This annual multi-day pack trip in SKCNPs takes local and national military leaders and NPS managers out for a wilderness immersion in order to facilitate better understanding of each others' missions. The informal nature of the setting and venue allows for free and open dialogue to discuss general and specific issues, such as wilderness soundscape protection, need for military aviation readiness and related topics. The parks have continued to develop and present the issue of common mission. That is, the military and the NPS are similarly charged with protecting values and resources. The scale and methods are different, but the basic purpose is the same. If the military, via rogue pilots, does not follow its own rules and deviations occur, the military is actually undermining its own purpose and effectiveness, and working counter to its identity of discipline and responsibility to carry out the will of the citizens of the United States. This approach allows the discussion to go beyond the problems of SKCNPs, and informs military leaders that this problem exists in other wilderness and park areas of the country and that they have the ability, at their current and future posts, to act to improve wilderness character.

NPS managers have since been invited to provide input into R-2508 planning and operations. The Complex Control Board meetings deal with day-to-day operations and are often attended by SKCNPs staff to provide input and receive information. The Joint Policy and Planning Board (installation commanders) meets twice yearly and has been hosted by both SKCNPs (twice) and DVNP within the past four years, and has provided a key contact opportunity for military and park leadership. Other interactions have included base and park orientations for managers, attending change of command and retirement ceremonies, sitting on committees that deal with relevant issues, and frequent emails and phone calls.. These regular and varied contacts have led to excellent rapport, empathy, and credibility between the military and the NPS (beyond SKCNPs).

The military and NPS have cooperatively developed a sophisticated method of determining when pilots are in deviation, i.e. less than 3000 ft. (914m) from the ground. Park field staff provide information on observed low-flyers to park fire dispatch. This information is relayed to the R-2508 air traffic control which checks radar tapes and then verifies whether it was a deviation, a non-deviation, or an unknown. The determination is then relayed back to the park. If a low-flyer is verified as a deviation, then a letter from the commander of NAWC-CL or AFFTC, depending on which service is involved, is issued to the pilots' commanding officer and the pilot is disciplined.

Another example of cooperation, into which SKCNPs had input, is the U.S. Air Force and NPS Western Pacific Regional Sourcebook (2002). This publication documents each entities' mission and details aviation and overflight information for each installation and park unit in Arizona, California, Nevada, and the Pacific Islands. It also provides guidance for military and park managers on how to work cooperatively on developing relationships and solving problems. The Sourcebook is considered an exemplary work in providing background on the missions of the Air Force and NPS.

Results

The results of these combined and continuous communication and education efforts have been notable. The number of reported low-flyers has shown continuous reduction over the past 15 years, dropping to near zero for a couple of years. This is in spite of more aggressive and sophisticated methods of relaying and following up on low-flyer reports, and more and better educated reporting staff.

The military leadership of the R-2508 also responded to NPS input in 2000 by issuing a memorandum to all pilots to voluntarily observe a floor of 18,000 ft. (5486m) MSL while overflying SKCNPs. This memorandum was generated and signed by the Joint Policy and Planning Board and remains in effect.

Deviating pilots are more frequently held accountable for their actions. One Nevada installation was banned from using the R-2508 for one year after consistently violating low-flyer rules. Another unit was given notice that they would be banned if they had one more deviation. The NPS does not request specific information on individual disciplinary actions as this is an internal responsibility of the military. We do know that if pilots are found in deviation, there is a disciplinary repercussion, sometimes severe.

We believe that there have been and are continuing positive effects of our contacts that extend beyond SKCNPs and central California. When we assess the individuals with whom we have interacted over the years, we find that several of them have moved on and up through the military ranks into very influential positions. We believe that the message we have instilled within them is one that they will use while making decisions about military aviation. Some examples of high ranking and influential military personnel that have participated in our pack trip include; Commander, Naval Air Systems Command, Patuxent River, Maryland; Commander, Air Force Security Assistance Center, Air Force Materiel Command, Wright-Patterson Air Force Base, Ohio; Director of Engineering and Technical Management, Headquarters Air Force Materiel Command, Wright-Patterson Air Force Base, Ohio; and Commander, Air Force Flight Test Center, Edwards Air Force Base, California.

The future

Challenges to keep the program functioning well involve insuring that there is adequate funding to run the programs, primarily meeting the costs of the pack trip and travel.

There is also the issue of the R-2508 airspace and its general non-use by commercial air traffic. Currently, if there are time-blocks that are not being used by scheduled military traffic, the airspace is opened up to commercial traffic. And though these flights do not generate significant noise, due to their high altitude, they do generate notable long-lasting vapor trails. These vapor trails are yet one more “imprint of man” on the wilderness environment, and hence undesirable. We have been working with R-2508 leadership to hold their ground in not releasing the airspace to commercial flights, though this is meeting with some resistance. The resistance is primarily grounded in reduced fuel, i.e. costs, for commercial operators. The Federal Aviation Administration is also a significant player in these decisions, and they almost exclusively side with the commercial airlines.

There is also a need to continually refine the radar coverage to better determine when deviations occur. The remote and radical terrain makes radar ineffective in certain areas. It is

desirable to have better coverage so that findings on low-flyer reports can be more thorough and definitive.

Continuing to educate pilots, who are very transient, about restrictions and reasons behind the restrictions will also remain a challenge. It is our goal that pilots will not see restrictions as things to get around or break without getting caught, but as one more way that they are working to preserve the values of the country. It is our goal to let them know that a moment of fun for them may result in moments of unpleasantness for scores of people on the ground, the very people whose values the pilots are working to protect.

This program has required, and is continuing to require, significant focused effort to build rapport as personnel and situations change. As documented through tangible results, it has proven to be quite effective. Much like any relationship, it needs work to keep it functioning well and viable. We look forward to the challenges and to continue to work toward the improvement of SKCNPs' wilderness character. We believe that positive pressure, continuously applied through immersion and education, will lead to better quality wilderness which in turn leads to better experiences for the visiting public.

References

- Moore, R. 2009. Personal communications with superintendent of Katmai National Park.
- U.S. Air Force and National Park Service. 2002. *Western Pacific Regional Sourcebook*. On-line at www.nature.nps.gov/naturalsounds/PDF_docs/USAFNPSWesternPacificRegionalSourcebook.htm.
- U.S. Air Force, U.S. Navy, and U.S. Army. 2009. *R-2508 Complex User's Handbook*. On-line at www.edwards.af.mil/shared/media/document/AFD-070103-052.pdf.