

## MEMORANDUM FOR RECORD

### SUBJECT: PROCEEDINGS – AIR FORCE WESTERN PACIFIC REGION AIRSPACE/RANGE COUNCIL - MANAGEMENT SESSION

.AGENERAL – The Air Force Western Pacific Region Airspace/Range Council convened at 1 pm on 9 January at the Arizona Air National Guard Dining Facility, Phoenix Sky Harbor Airport, AZ.

#### .BMANAGEMENT SESSION PROCEEDINGS FOR JANUARY 9, 2008

**.1Remarks/Objectives/Introductions – Brig Gen Marty Holland (HQ NMANG / Chief of Joint Staff)** opened the meeting by thanking everyone to make the effort to attend this meeting and to make it productive. The Management Session is the place to present issues to be discussed and find solutions.

**.2National Overview – Colonel Mitchell (NAEC Exec Asst; JFHQ-CT/DO)** presented an overview of the regional airspace/range management and executive council process directed by AFI-13-201. The Air National Guard started the regional councils in 1989 and the Air Force joined the councils in 1995. The regions now present issues to the national council meeting in December of each year for resolution. Public Outreach has been a major factor in the success of the process. Airspace is a valuable asset that must be shared and therefore DoD must engage all airspace users as well as special interest groups.

- Fifth Gen Aircraft** present new training requirements moving from A-10 to F-35 operations in the National Airspace System and Weapons Ranges. There will be fewer manned aircraft in the future but they will require much larger volumes of airspace. The final requirements have not been determined.

- Dynamic Airspace** is a goal of the FAA, Airline Industry, General Aviation and DoD agencies working together to develop a method to treat Special Use Airspace (SUA) as a Weather event to be avoided and relocated when possible to allow more efficient air traffic flow.

- Global Area Reference System (GARS)** – is a grid system that identifies an area by 5 minutes of Latitude and Longitude with a seven digit alpha numeric that can be overlaid on existing charts. The area system can be used to define training airspace and allow dynamic creation, relocation and utilization. The **FAA Navigation Reference System (NRS)** is a system of waypoints used in point to point navigation based on latitude and longitude that are depicted on high altitude enroute charts. The format of the naming convention for use in the northern hemisphere is two letters, followed by two numbers, followed by a single letter. This will define waypoints every 10 minutes of latitude along every line of longitude. The FAA and the Airlines are very interested in combining the capabilities of both systems to allow better airspace utilization for all users.

- UAS Considerations** – the beddown in ND and NY is critical and if the challenges are not met, other people and units will be greatly impacted. The FAA is evaluating the capability of the ASR-11 resolution as a "sense and avoid" capability - There have been 100 COAs issued and 14 Special Airworthiness authorizations issued.

- Public Outreach** – Major General Akey has stressed how important public outreach has been to solving airspace issues – having non-military organizations at these meetings in critical – the airspace/ range councils are looking at how to involve the airline industry in these meetings without inviting individual airlines that might not equally represent the interest of all airlines.

- **Gen Holland** added that the FAA estimates that air traffic will triple by the year 2025 with 1/3 of the air traffic consisting of UAS. Special Use Airspace will have to be better managed.

**.3Warfighter Brief – Colonel Carillo (150FW, NM ANG)** briefed that the New Mexico ANG had just returned from Iraq in late December 2007. The unit has 15 F-16s and will add an additional 3 aircraft in April.

•**New Mexico Airspace** – with major changes over the past few years, New Mexico now has three excellent training areas with airspace that will accommodate small to medium joint training exercises.

◦**White Sands Missile Range** is scheduled by the Army with Holloman AFB at the primary user.

◦**Pecos / Melrose ATCAA/MOA** is scheduled by Cannon AFB.

◦**Cato MOAB** scheduled by the 150FW.

◦**Users** – of the airspace in New Mexico:

.aHolloman AFB - F-117A, T-38 and soon the F-22 as well as aircraft from the German Air Force

.bCannon AFB – A variety Special Operations Aircraft including Unmanned Aerial Systems

.cKirtland AFB – 150<sup>th</sup> Fighter Wing F-16s

.dLuke AFB – 56<sup>th</sup> Fighter Wing F-16s

.eDyess AFB – 28<sup>th</sup> Bomb Wing B-1B

.fNumerous Navy and Army units

#### •**Training for Iraq Is Changing**

◦**First Deployment** - the tactics were all high altitude using smart laser guided weapons to precisely strike targets. Most of the training was above 18,000 feet with a high demand on urban complexes to train in. Normal Special Use Airspace avoids the dense urban environment and required special operations to prepare for the deployment. Downtown Santa Fe is very similar to the size and layout of a typical Iraqi village.

◦**Second Deployment** - the tactics and training required prior to the deployment were completely different. The primary target has changed to vehicles used to place Improvised Explosive Devices or vehicles used as bombs. The tactic employed was night strafe at low altitude. This training required moving vehicles in low altitude training airspace, either a range or MOA. Colonel Carillo added that he took his own truck out into the CATO MOA and drove the vehicle around as a target so his pilots could have a simulated threat similar to what his unit would encounter in Iraq.

◦**Next Deployment** may have a completely different set of training requirements that make the New Mexico Training Range Initiative so important even with the change of mission at Cannon AFB. Being able to train with the Army at Ft Bliss and the Special Operations forces in the Pecos/Melrose Complex will be essential to “Training like you Fight.”

•**Weapons Effectiveness** – During the entire deployment, the 150<sup>th</sup> Fighter Wing had 100% weapons effectiveness, not a single dud, pilot error or fratricide. This is directly attributable to the local training available to the unit on a daily basis. Local training was realistic and critical to the success of the unit.

#### .4**Unit Operations Briefings**

##### •**144FW California ANG, Fresno – Lt Col Sikora (144 OSF/CC)**

◦**Mission: Homeland Defense** with an assigned 18 F-16 aircraft with an actual number of 22 to enable 24 hour 7 days per week alert locations at March AFB and Fresno ANGB normally and now Portland, OR due to the grounding of F-15 aircraft.

◦**Airspace:** The Western Air Defense Sector (WADS) controls the airspace for training and provides intercept control during an actual or simulated homeland defense mission.

.aCurrent limitation is the requirement to completely fly the Standard Instrument Departure (SID) that causes delays in getting to the target of interest.

.bNew Procedures developed with WADS and ATC cooperation allow interceptors to turn immediately after takeoff to an intercept heading – All controllers that will be in the path of the intercept will receive notification simultaneously to allow them time to clear the route of flight. A single ATC controller will provide clearance for the intercept.

.c**R-2508** is the primary overland airspace.

- .d**Warning Areas** provide excellent airspace when the sea conditions allow training.
- .e**Lemoore MOA/ATCAA** is small area but it is much closer.
- .f**Nellis Test & Training Range and the Navy Fallon Complex** are further but offer excellent training opportunities.

●**214 RG, Arizona ANG, Davis-Monthan AFB - Lt Col Rempfer (214 RG)**

- Operational Missions** in support of the War on Terrorism began in July 2007.
- Flight Crew** – currently manned with 24 two-person crews; that could triple over the next few years.
- Current Missions** – Afghanistan and Iraq
  - .aHellfire guided weapons have been employed by the unit.
  - .bThe unit has worked with fighter and attack missions.
- Launch and Recovery Unit** will be operational at Ft Huachuca first and possibly moving to Gila Bend. Operations will involve transitioning aircraft through the PCA for missions in BMGR.

●**162 FW, Arizona ANG, Tucson – Lt Col Harting (162 FW Airspace Manager)**

- Mission:** Provide Allied Nations and US with training in the F-16.
  - .aThe unit is a traditional ANG unit (the largest) training U.S. Foreign Military Sales pilots since 1989.
  - .bThe unit also has instructors located in foreign nations providing continuation training to support a national training evolution.
  - .cTen Unit Instructor Pilots have deployed to Iraq.
  - .dThe Unit also provides support for Homeland Defense.
  - .eThey fly the “newest” F-16s (Block 60) as well as the “oldest” F-16s.
  - .fThe unit provides support to the ANG/AFRC Test Center, which is co-located on their facilities.
- Mission Elements**
  - .aF-16 Fighter Training – ANG/AFRC/USAF/USN: Mission Types include basic flight training, takeoff, landing, and tactical training for air to air and air to surface employment.
  - .bHomeland Defense – Air Sovereignty Alert
  - .cAir and Space Expeditionary Force
  - .dOperation Snowbird – Units deploy to Tucson to train on Barry Goldwater Range.
  - .eJoint Counter Narcotics Task Force – Unit aircrafts support mission
- Airspace and Ranges:** Barry Goldwater Range and Special Use Airspace (SUA) along southern boarder with Mexico
- Concerns:**
  - .aDHS Predator operations in joint use SUA and the ability to use NGVs with true lights out requirements
  - .bThe biggest problem is the increasing UAS operations at Ft Huachuca that will impact the auxiliary field takeoff and landing traffic pattern training.
- Improved communication and coordination with ARTCCs has led to a reduction of missions lost due to impending weather.

●**Cannon AFB – Lt Col Corey (27 SOSS/DO)**

- New Command** – Air Force Special Operations Command has replace Air Combat Command’s three F-16 squadrons with up to eight Special Operations Squadrons over the next few years
- Current Aircraft**
  - .aMC-130W
  - .bPC-12
  - .cUAS (MQ-1)
- Future Aircraft**
  - .aAC-130H
  - .bCV-22
  - .cMC-130J

.dUAS (MQ-9)

.eOthers TBD

°**Airspace** – Four new Military Training Routes will provide mountainous terrain for Special Operations aircrew training; will compliment existing Special Use Airspace

.aMost Special Operations aircraft fly below FL200.

.bMany other users of the airspace

.cWeapons delivery training conducted at Melrose and McGregor Ranges.

.dSpecial Operations requires a low altitude air refueling capability.

.eNew Mexico provides the mountain training environment not available at other Special Operations training locations.

#### **.5Travis AFB, CA –Wind Turbine Issue - Major Donelson (60 AMW)**

•**Mission** is to provide rapid global mobility with airlift and air refueling assets needed to deliver military aircraft, people and equipment wherever and whenever they are needed.

•**Special Needs** for local training include air refueling routes, low-level routes and airfields for tactical training.

•**Aircraft:**

°C-5 – worldwide missions, but no local airspace concerns

°KC-10

.aAirspace issues with AR8BA – AR8C. The Dolphin MOA has an ATCAA that, when activated, affects the AR8BA refueling track. Currently working with the MOA owners and the FAA to re-design/re-locate the track to minimize these conflicts.

°C-17 Globemaster

.aAttempting to revise a current SR route to an IR route. The TTSNS has been completed and the environmental is in progress.

•**Training Airspace:**

°Aerial Refueling Routes: AR 1-East, 1-West, 2-West, 3-H East, 3-H West, 5-High, 5-Low, 6, 7-A, 7-B, 8-A, 8-B, 255-H, 255-L, and 462

°MTRs ; SR/IR 300-301, IR 264, 275, 280, 281, 282

•**Travis AFB Airspace:**

°Travis Air Traffic Control manages over 140,000 civilian and military aircraft.

.aClass D Airspace – 5 NM up to 2,600 MSL

.bClass E Airspace

().1Airspace spanning 60 miles N/S by 40 miles E/W

().2Travis Approach services seven airports

().3Nearly 80% of Travis traffic is civilian

•**Wind Resource Area** – Travis is located in one of the United States' prime wind generation locations.

°Approximately 700 wind turbines next to the base (5NM – 13NM)

°The wind turbines interfere with Travis' ATC radar and result in dropped primary targets on mostly light, civilian aircraft from surface to 4k'

°Pilots have reported altitude loss from thermals created during farm overflights.

°Numerous wind developers are proposing to build more wind turbines.

•**History of the Wind Turbine affect on Travis' ATC radar:**

°Nov/Dec 05: Travis received STARS and installed digitizer on the ASR-8.

°Dec 06: Mill Valley radar feed installed; wind turbines displayed as weather and controllers began logging dropped targets; request made to AMC for experts to analyze.

°Jan/Feb 07: AMC/ESC experts evaluate and determine wind turbines are the cause.

°Mar 07 – present: Travis highly engaged with HHQ, FAA, and wind developers; Travis provides input to the Solano County Planning Commission.

°At this same point in time, multiple wind developers are seeking permits for wind turbine projects.

•**Wind Turbine Mitigation**

°Optimization of ASR-8 and Digitizer occurred in June and Dec 07, results of Dec 07 TBD.

°Procedural Mitigation

.aTravis air traffic controller & pilot awareness training

.bNOTAM published

.cSubmitted caution note on VFR sectional chart

.dTravis visits all local airports and advises on radar limitation

°ASR-11 to be operational approximately Oct 08

•**Wind Turbine Evaluation Process**

°Potential areas that may have an impact to military readiness or safety

.aEnvironmental/Encroachment

.bSecurity

.cRadar signature of the wind plant

.dAnd overflight or obstruction limitation

°Developer is required to submit a notice of proposed construction to FAA for any object over 199 feet for TERPs evaluation of the obstruction.

°For the affects on ATC Radar Systems the DoD defers to the FAA regarding possible impacts wind farms may have on ATC radars.

.6**Discussion – Colonel Chupein** added that Wind Turbine placement is a interagency struggle – there is no process to handle the issues of ATC Radars or the affects on Airborne Radars.

•There is a need for a GIS data base that will allow Wind Energy Developers to find agencies that have a stake in a particular area in the earliest planning stages before the OE/AAA application.

•The Air Force is committing manpower in an outreach to county governments and interest groups looking for best alternatives/compatibility.

•**GARS capabilities and implementation** – DoD is working with the FAA to determine the feasibility of providing a system similar to the XM WX Satellite Weather that would provide pilots access to constantly updated real time utilization of Special Use Airspace. MOA airspace could be coded GREEN for Cold – YELLOW for becoming Active – RED for Active.

°Emergency Management Agencies in the states of Florida and Louisiana have adopted GARS as the area reference system.

°The Forest Service and BLM requested additional information be presented to them for their fire fighting and emergency response operations.

•**NEPA** - the DoD has embraced the process.

°**CEQ Guidance** is a good tool.

°**DoD** is developing a tool that will make the process work correctly from the beginning to save time and money complying with NEPA.

°**Decisions** – All reasonable alternatives must be detailed including the “no-action,” “best environmental” and the “operationally preferred” alternatives.

**.7National Park Service (NPS) – Ms. Vicki McCusker (Military Liaison Natural Sounds Program {NSP})** Located in Ft Collins, CO as a Washington HQ Support Office of the National Park Service. Staff expertise includes acoustic data collection and analysis, planning, National Environmental Policy Act (NEPA) and information management.

- The Natural Sounds Program** works to protect natural sounds and visitor experience from noise intrusions in National Park units.
- Noise intrusions include aircraft, personal watercraft, snowmobiles, NPS maintenance activities, etc.
- The NPS Mission** is to preserve park resources unimpaired for future generations.
- Natural Sounds** are indicators of the ecosystem and essential to the visitor’s experience. Visitors are being surveyed to evaluate their visit. Surveys consistently mention natural sounds as an important aspect of visiting a national park (up to 91%).
- Accomplishment in 2007**
  - Assisted over 40 parks.
  - They provide technical assistance during lawsuits filed against the parks.
  - NEPA requires noise to be modeled – NSP has developed an automated spreadsheet for calculation of noise impacts from aircraft – eliminating weeks of work on each project.
  - Soundscape Visitor experience surveys
- Current Activities in the Pacific West Region**
  - Grand Canyon Overflight EIS: Providing technical assistance on acoustic monitoring, metrics, review of draft EIS
  - Technical support to Yosemite NP for review of DEIS for Mammoth Yosemite Airport
  - Acoustic Monitoring at Golden Gate National Recreations Area, technical support for general management plan
  - Air Tour Management Plans and Soundscape surveys for Haleakala and Hawaii Volcanoes National Parks
  - Provide assistance to parks with military overflight issues – Proposed MTR in Hawaii
- Discussion**
  - The Chiricahua National Monument, located 120 miles southeast of Tucson, has reported recent overflights by CH-46 and AV-22.
  - Death Valley National Park has experienced recurring overflights of a housing area.
  - Colonel Chupein inquired about a threshold on concerns – all overflights are a concern to the parks but there is no NPS standard.
  - General Holland inquired about the reporting system used by the parks – Ms. McCusker stated that the parks do have a training session and have forms to fill out when an overflight occurs. Currently the major problem is with general aviation.
  - A major concern for the parks is to have a point of contact when they have a question – the FAA Military Representatives are the best people to start with.
- Contact info:** Vicki McCusker, NPS Natural Sounds Program, (970) 267-2117 and email address: [Vicki\\_McCusker@nps.gov](mailto:Vicki_McCusker@nps.gov) web site: <http://www.nature.nps.gov/naturalsounds/index.cfm>

**.8Hawaii Volcanoes National Park – Ms. Lentz (NPS – Hawaii Volcanoes National Park)** stated that there are two volcanoes in the park, Kilauea and Mauna Loa. These volcanoes are among the most active in the world. Kilauea is producing surface flows. The current flow field is not in the park. Mauna Loa, the world’s largest volcano, is not erupting; however, it will erupt again. Volcanic activity can present hazards to aircraft (e.g., smoke, ejected tephra, VOG, ocean entry laze). These hazards may not be predictable because of the unpredictability of volcanic events. The concept of a park soundscape is new to many parks including

Hawaii Volcanoes. She also mentioned that the Airspace/Range Council is an excellent forum and that more parks should participate.

- **Designated Wilderness within the park.**
- **Park is a World Heritage site and a Biosphere Reserve for its ecological significance.**
- **Many threatened and endangered bird species within the park**, including a nocturnal species. Threatened and endangered marine species within the park and immediately off shore (out of the park).
- **Air space closures over park occur due to volcanic eruptions and wildland fire.**
- **Air Tour Management Plan** for the Hawaii Volcanoes NP must include the proposed activity on the MTR in the cumulative impacts section. The annual commercial air tour operations are currently capped at 28,441; current operations are less than this number.
  - **National Park Service Aviation** - frequent flights are operated in association with scientific study of volcanoes, resource management, maintenance, wildland fire, and search and rescue.
  - **Kilauea and Mauna Loa are sacred to many Native Hawaiians.** The sacred space includes the sky.
- **Military Training Route**
  - The proposed MTR is over one of Mauna Loa's active volcanic rift zones. While it is not erupting now, the volcano will certainly erupt in the future.
  - The proposed MTR is over threatened and endangered bird habitat, including where the nocturnal species flies.
  - The natural soundscape is part of the visitor experience at Hawaii Volcanoes.
  - Many park neighbors don't like overflights.
  - Other civilian agencies conduct park overflights, including low-level flights, e.g., HELCO (Hawaiian Electric Light Company), DEA, and state agencies.
  - Other branches of the military have flight operations on the Big Island. These operations need to be considered in the cumulative effects section of the EA.
  - Communication is important – working with the FAA and need closer cooperation with the Air Force for safety
  - A concern is how is the Air Force use of the MTR regulated?
  - The National Parks Air Tour Management Act defines the airspace that is to be included in Air Tour Management Plans as ½ mile outside the park boundary.
  - GOAL – the park needs to be able to communicate with the proper people; they want to know who to include in communications. We need to work together to ensure safe flight operations and to protect the resources and values for which the park is managed.
- **Discussion – Colonel Chupein** mentioned that the EIS or EA must consider the cumulative effects – multiple species and other airspace users. It was asked why the MTR was just an EA.

#### **.9 Yosemite National Park – Mr. Meyer (Yosemite N. P., Resource Mgt & Science Division)**

- **Visitors** – over 4 million visitors per year, up to 25,000 people per day in the summer
  - 95% of Yosemite is considered wilderness area.
  - Overflight Noise Impacts
    - .a With “box canyon” formations, the sound bounces back/forth and causes significant noise impacts.
    - .b Most of the park outside of the main canyon is above tree line and significant noise is propagated for long distances.
- **Noise** - most of the noise is from commercial airplanes, but low altitude military flights are also an issue that they still would like to see addressed.
  - During the daytime approximately 75% of the time aircraft can be heard in the park.
- **Data Collection** – a recommendation from the 2007 Council meeting was to collect data.

°Fifty park personnel have been trained on how to complete a data sheet to provide sufficient information to describe an overflight incident – aircraft and service identification remains an issue.

° 2007 Summer data from June through September confirmed continuing military overflights – eight reliable observations were collected – 3 Helicopters – 4 Fighters - 1 Unknown.

•**Discussion**

°**Lt Col Sampson** added that Oakland Center has the only radar coverage over Yosemite – one incident was tracked down. Communication should go to the centers through the AF Reps.

°**Ms. Stewart** mentioned that for intruders in a fire area an immediate call to the FAA Center has been very effective in tracking the intruder and briefing them at the end of their flight.

°**Mr. Meyer** added that Edwards has done a good job with their users in avoiding overflight of the park – Edwards has radar coverage and works well with Sequoia and Death Valley NPs. One reported overflight turned out to be a C-130 on a marijuana detection mission for the Park Service.

°**Colonel Chupein** suggested that communication is the best method of eliminating overflights – visit flying units with an outreach program that will bring attention to the problem. Recommended a meeting between the NPS and local unit CCs to highlight the issue.

°**Navy CDR Hawkins** insured the council that this information would be disseminated to NAS Fallon and NAS Lemoore.

°**Ms. McCusker** mentioned that most parks do not have the staff to have a program like Yosemite.

.**10US Forest Service – Ms. Julie Stewart (BLM/USFS - Fire and Aviation)** represents the nation's "second largest air force" with more than 2,000 aircraft engaged in fire fighting and disaster relief.

•**2007 was another “Intense” Fire Season** - 85,7005 fires for 9.32 million acres.

°Heat and drought added to the fire potential.

°More homes are being built in fire prone areas.

°Fire fighting stratagem has change due to back-to-back fierce fire seasons.

°85% of fires were human caused.

•**Idaho** was an especially difficult area with major impacts on vacationers, hunting and fishing, and the local communities that rely on the summer for their entire year's profitability.

•**California's** late season fires were severe with seventeen major fires and eight dynamic TFRs. A very large disaster response ensued which also had to cope with the logistical nightmare of over one million people evacuated.

°**FEMA Joint Field Office** was located in Pasadena – Incident Management Teams handled Tactical Air Operations. FEMA Aviation Coordination Group (ACG) established to coordinate interagency aviation responses.

°**Top Off IV** lessons learned - an established air operations plan was effectively employed – Most of the deployed participants from Top Off IV (the week before) were deployed to Southern California and immediately establish communications.

°**Real Time Aircraft Monitoring** - For increased safety, the US Forest Service has Automated Flight Following of many of their aviation assets through a satellite transponder system. The data is available through an internet-connected computer via Google Earth with three-dimensional depictions of TFRs and Aircraft location. The system was used by WADS to deconflict fire traffic from all other air traffic during the Presidential visit.

•**Fire applications of Unmanned Aviation Systems (UAS).** Several different UAS systems have been tested since 1996 and this past year the NASA IKHANA (meaning intelligent, conscious or aware in Choctaw) Predator aircraft flew fire observation missions up to 20 hours in duration. The sensor has provided great information.

•**Airspace Coordinators** provide an interface between the fire operations and the FAA, military operations and GA activities surrounding the fire area. They coordinate the TFRs for complex fire operations and provide agency pilots with daily updated kneeboard TFR maps and other aids to safety.

•**Fire Hazard Airspace Posters** are available. For DoD operations, per AP/1, whether NOTAMed or not, DoD aircraft are to stay five nm from fire/smoke. Be very cautious of flying down within the vicinity of a fire at any altitude.

- Fire Traffic Areas** dimensions extend up to 2,500 feet above the fire level and out to 12 nm from the fire for the initial contact ring. DoD Flight Crew must check NOTAMS for fire activity, avoid the area in accordance with active TFRs, and when a fire is observed, avoid by at least five NMs according to the DOD API.

- Interagency Airspace Coordination Guide** is a basic airspace management guide and available online at the Interagency Airspace Websites: [www.fs.fed.us/r6/fire/aviation/airspace](http://www.fs.fed.us/r6/fire/aviation/airspace)

- Issues**

- NOTAMS and TFRs (Temporary Flight Restrictions)** – Very interested in the development of the Federal Internet NOTAM system.

- FAA Flight Service Stations** – working on mitigating issues from 2007 fire season.

**.11AOPA – Mr. Pete Lehmann (AOPA Airspace Coordinator)** AOPA serves the needs of members as aircraft owners and pilots...to promote the economy, safety, utility, and popularity of flight in general aviation aircraft.

- Members** - AOPA has over 414,000 members

- Special Use Airspace concerns:**

- 67% of General Aviation pilots deviate around SUA.

- 72% of General Aviation pilots ask Flight Service Stations for SUA status information.

- There is no FAA requirement to transmit all SUA data from Centers to the FSS.

- Diversion around SUA cost General Aviation pilots considerable time and money.

- There are misconceptions about SUA – AOPA and the Education Through Air Safety Foundation Online Course at [http://www.aopa.org/asf/online\\_course/mission\\_possible](http://www.aopa.org/asf/online_course/mission_possible) is a 30-minute course to provide general aviation pilots with an understanding of Special Use Airspace.

- Special Use Airspace Proposals**

- AOPA is not trying to prevent military training but wants involvement/consideration in the process.

- AOPA believes that early dialogue is the key to addressing issues and finding solutions that work for everyone. AOPA desires that safety and the impact on civil aviation be considered during the development of military special use airspace.

- Public Notification and Involvement** - newspapers alone are not sufficient; many people receive information via other means.

- Public Notices** should be available via an on-line method to ensure concerned local governments, airport officials and aviation organizations receive early notification and allow sufficient time to prepare better comments on specific issues.

- AOPA's ePILOT** web based electronic newsletter is the most effective means of information dissemination to the general aviation public.

- UAS Issues**

- AOPA Member Survey**

- .aOnly 23% of those surveyed favored airspace segregation via flight restrictions – 77% preferred to share the airspace with UAVs.

- .bNearly 95% of those surveyed believed that UAVs' inability to see and avoid manned aircraft was either the highest or second highest level of concern.

- .cNearly 75% of those surveyed believed that UAVs inability to immediately respond to ATC instructions was second or first highest level of concern.

- .dUAVs having not been tested in the same airspace as manned airspace was only a moderate concern.

- .eUAVs being certified to the same level of safety as manned aircraft was considered only a minor concern to general aviation pilots.

°**AOPA's Position**

- .aUA and their flight operation should be certified to the same level of safety as piloted aircraft. See and Avoid = Sense and Avoid
- .bUA operations in the National Airspace System should not have a negative impact on civil aviation operations.
- .cUA operations should not require additional segregated airspace. No flight restrictions.

**.12Session Wrap up** – The session concluded with a mentioning of the topics for breakout session for Thursday.

**.CMANAGEMENT SESSION FOR JANUARY 9, 2008 ADJOURNED AT 1715**

**.DMANAGEMENT SESSION PROCEEDINGS FOR JANUARY 10, 2008**

**.1Remarks/Objectives/Introductions – Brig Gen Marty Holland (HQ NMANG / Chief of Joint Staff)** opened the meeting and thanked Colonel Jergensen and the staff from the HQ Arizona ANG for their support of the council meeting. Asked FAA representative present to address regional issues.

- LA ARTCC representative, Mr. Frappied, expressed support for the USMC expansion at 29 Palms assuming separation responsibilities in LA Center airspace.
- ABQ ARTCC representative, Mr. Semanek, expressed gratitude for work done with Luke to arrange for non-participant traffic to transition training space during super-bowl surge periods.
- ERAM, a host computer upgrade for ARTCCs, will reach FOC by FY09. ERAM installation causes an 18 month configuration freeze that will pause any airspace changes.
- ABQ ARTCC is awaiting scheduling LOA updates to transition to MADE.

**.2FAA Update – Lt Col Sampson (AFREP (AWP 910), FAA WP Region) Western Service Area MILRep Office** in Seattle will be fully manned this summer with Air Force, Navy and Army Representatives.

**.3NOTAMS: SFC Johnson (DoD NOTAM Office)** presented an update on the consolidation of the US NOTAM systems.

•**The new system will provide:**

- °ICAO standardization
- °Local NOTAM accessibility
- °Reliable, accurate, timely, digital delivery of NOTAM data
- °Graphical depiction of affected airspace

•**The system will be a single source for all NOTAMs.**

•**Roadmap**

- °Industry Day was completed in May 2007 with the commitment made by the US Government to modify the NOTAM System.
- °Initial Policy Change in Oct 2007 will align the D NOTAM criteria with ICAO NOTAM criteria (reclassify civil L NOTAMs).
- °System and Additional Policy Changes in August 2009 will create a single Federal NOTAM System FNS with Full ICAO implementation.
- °System Enhancements in 2010 will enable aeronautical information eXchange Model (AXIM) NOTAM Capabilities.
- °Initial Policy Changes
- °Distant (D) NOTAMs will adopt the ICAO definition for aerodrome movement area that includes taxiways, ramps, aprons, and lighting.
- °Unverified reports of Hazards will be included in the NOTAM system as (U) and disseminated as D NOTAMs.

°Other information not conforming to ICAO standards and that may impact aircraft operations will be labeled (O) in the D NOTAMs.

•**Initial Implementation Activities**

°NOTAM Realignment Working Group (NRWG) is comprised of military, civil, and commercial flight operations meeting with FAA and Flight Service personnel.

°A Safety Risk Management Panel reviews proposed changes to policy by NRWG.

•**Summary of changes implementation**

°Reclassify civil Local NOTAMs to be D NOTAMs.

°Create keywords for all D NOTAMs for improved sorting and parsing.

°Create central repository all NOTAMs.

°Standardize NOTAM policy.

°Town Hall meetings in the near future are question and answer sessions. Notice effective October 2007.

°NOTAM Handbook update published July 31, 2008 – Kick off next phase of NOTAM realignment to standardize with ICAO – Federal system consolidated in 2008.

•**Discussion**

°**NOTAM Entry – Ms. Stewart** asked how agencies would make a NOTAM request or entry.

.aThe Forest Service/BLM currently have many dispatchers trained to make NOTAM entries.

.bHow will people train for the new system?

.c**Response:** if an agency has a NOTAM account now they will have the same capability in the new system. DINS will become FINS (Federal) and the current entry system will remain the same for those that have been using the DINS system. Validation of NOTAM inputs is a concern.

°**TFR Entry – Ms. Stewart** asked would there be a single entry system replacing the three systems used today?

°**General Holland** requested that **SFC Johnson** ensure that Ms. Stewart has the information she needs to insure normal operations in the future.

°**APOA** supports the change and desires the system evolve to a digital NOTAM system that is easily accessible to all pilots.

.4**MADE/SAMS: FAAO 7930.2 – Mr. Perkins (HQ FAA / AJR-33 (MADE))**

•**TFRs** – the goal is to have a single site for all TFR depictions so there is no ambiguity.

•**NOTAMS** – the MADE/SAMS team is working with the NOTAM Realignment Working Group to change FAA Order 7930.2L to require the issuance of a NOTAM for all SUA, MTR and AR schedules outside of published times. This will be automated based on the schedules entered in MADE/SAMS. We will be involving AOPA in this process.

•**AOPA** - the MADE/SAMS team is working with AOPA to create a useful SUA (MOA) system to have real time status information.

•**SAMS v3.0** - ABQ Center has just completed a conversion to the latest version of SAMS v3.0. All centers will convert by the end of February 2008. Benefits of the new version: automated and standardize data flow, eliminate redundant data input, enable dynamic access, and increase data integrity.

•**FAA 7400.2F - TIMES OF USE** - When the using agency has a requirement for intermittent, less frequent use of the airspace (outside the specific published time period), a provision to activate the airspace by NOTAM may be stated in the SUA legal description.

•**FAA 7930.2L**

•**6-1-4. SPECIAL USE AIRSPACE (SUA) AND RELATED AIRSPACES** - A NOTAM shall be issued to activate the following Special Use Airspace and related airspaces at other than published times under appropriate ARTCC(s):

° **Prohibited Area, Restricted Area, Warning Area, Alert Area, and Military Operating Areas (MOAs) EXAMPLES:**

.a!SUAE ZJX AIRSPACE R2903A ACT 4000 –FL180 WEF 0811210400 -0811210500

.b!SUAC ZMP AIRSPACE CRYPT NORTH MOA ACT 5000 -16000 WEF 0807150500 – 0807150600

° **Military Training Routes (MTRs)** including Instrument Routes (IRs), Visual Routes (VRs) and Slow Routes (SRs). EXAMPLE:

!SUAC ZFW AIRSPACE SR236 ACT 300 – 1000 AGL A TO F WEF 0804151455 – 0804151555

° **Aerial refueling tracks and anchors** EXAMPLE:!SUAC ZDV AIRSPACE AR201(W) ACT FL190-FL200 WEF 0811212100 -0811212200

• **Schedule Inputs to SAMS (FAA) using MADE (Military)** – the military units now have an electronic method of submitting schedules – SAMS and MADE are now a single system.

° **Airspace schedules submitted using MADE** – currently units can only schedule their own airspace – in the future, MADE will allow units to schedule other airspace with the approval of the airspace owner.

° **Schedules transmitted via NIPRnet SAMS**

.aSAMS forwards SUA and ATCAA information to the FAA MOS.

.bSAMS forwards MTR information for dissemination via NOTAM system, Flight Service, ARTCC and the FAA web site.

° **FAA Military Operations Specialist (MOS) reviews the schedules and approves them, pending local coordination.** The MOS forwards SUA and ATCAA information for dissemination via NOTAM system, Flight Service, ARTCC and the FAA web site.

° **SUA and ATCAA** data are disseminated as required by FAA orders and Directives.

• **Future Enhancements**

° Automated NOTAM Submission – when use is outside normal hours, the required NOTAM will be created and submitted.

° Annual Utilization Report will be available by the end of FY08 – units will be able to print, review, edit and submit report.

° Conflict alerts with TFRs

° MADE to MADE to SAMS

° CARF / ALTRV

° CAC Card sign on

° Automated data feeds

° SAMS to ERAM to SAMS will be seamless and both systems will have real time airspace utilization.

° Graphical user interface

• **UAS Operations – Ms. Trindle (FAA Air Traffic Representative)** began by stating that there are 46 active Certificates of Authorization and 55 issued in 2007 in the Western Service Area.

° **UAV Types** – 25 different types of UAVs were flown in the WSA in CY2007 – Predator, Global Hawk, and Raven, Shadow and others

° **Common Problems**

.aInsufficient lead time to process COA

.bLost Link Procedures incomplete

.cEmergency Procedures incomplete

.dDescription of operations are vague

.eNon-pilots (operators) attempting to coordinate missions/COAs – FAA needs knowledgeable people to make the requests.

- .f Learning curve for personnel unfamiliar with policy
- .g No automated COA procedure. Each application is unique

°Trends

- .aFAA UAS Program Office has seen a 100% increase in COA requests from law enforcement and universities this past year.
- .bMoving from “routine” to highly sophisticated UAS flight request requiring extensive coordination with affected ATC facilities
- .cSignificant increase in requests from all users for operations outside of restricted airspace and for “sterile” airspace – UAS missions by law enforcement are becoming much more complicated.

°UAS Challenges for FAA

- .aEnsuring safety of the NAS for all users and public on the ground
- .bBalancing the needs of all users of the NAS
- .cSupporting DoD in mission needs for War On Terrorism
- .dSupporting DHS in increased tasking of defense/surveillance of our borders
- .eSupporting the national emergency response & expanding access requests
- .fOther Government Agencies without aviation departments, requesting access to the NAS
- .gMaking information available so that COA process is more standardized and repeatable

°New Web Site Address - <http://www.faa.gov/uas> was mandated by Congress.

°New Requirements - Groups are working on defining the requirements for sense and avoid as well as file and fly criteria – this is an outgrowth of the Access 5 program and included European aviation agencies.

.aJoint Agreement (DoD and DOT) for operations of UAVs weighing 20 pounds or less in Class G Airspace without COA

.bDoD UAS Data – The FAA wants all data associated with flight operations of UAS.

°Class D Airspace – Users must be reminded that there is a struggle between manned and unmanned system in Class D airspace. Ft. Huachuca has increasing UAS operations that restrict manned operations.

.5ACTION ITEM REVIEW – Mr. Rose (QinetiQ North America)

•ACTION ITEM: Request that the National Airspace/Range Council recommend to DoD Policy Board on Federal Aviation (PBFA) that the FAA and other airspace users adopt GARS as a system to designate airspace and that Special Use Airspace be defined with GARS so that SUA can become re-locatable in the future to allow shifts to accommodate maximum traffic flow on a more real-time basis.

°OPR: NAREC; AF/A3O-AR                      OCR: PBFA

°Status: CLOSED - GARS briefed at CY 2007 Exec ARCs.

°Update: - Status: In Progress – continue to promote GARS through CY 2008 NAREC. FAA adoption of GARS dependant on future technology, funding, policy changes

•ACTION ITEM: Implement GARS to identify/define airspace and ranges.

°OPR: AF/A3O-AR                      OCR: Units, Ranges

°Status: IN PROGRESS - A3O-AR will draft a message from AF/A3O to MAJCOM/A3s to identify airspace/range complexes for beta testing of the GARS construct

°Update: 1/15/08 A3O-AR drafted message from A3O-A to MAJCOM A3s on GARS implementation with a briefing package. Plan is for MAJCOM airspace managers to select SUA with embedded C2, to be internally subdivided for initial trial of GARS in a SUA environment. Message forwarded to Mr. Pease and returned for minor change, now in routing again. A3O-AR has provided this link for GARS downloads at the last national and subsequent regional council meetings: <http://earth-info.nga.mil/GandG/coordsys/grids/gars.html>

•ACTION ITEM: AFNORTH engage NORTHCOM to propose GARS as a standard area reference system. (Ref: CJCSI 3900.01C Position (Point and Area) Reference Procedures)

°OPR: 601CPS/CPDS                      OCR: AF/A3O-AR

- Status:** IN PROGRESS Coordinating with NORTHCOM to determine status for their compliance with CJCSI
- Update:** Mr. Wickman to discuss with Brig Gen Dean who had a meeting with NORTHCOM on this issue
- ACTION ITEM:** Identify continuation training airspace requirements for the Predator UAV.
  - OPR:** HQ ACC/A3Y                      **OCR:** HQ USAF/A3O-AR
  - Status:** IN PROGRESS Airspace requirements included in the T/TSNS for Grand Forks, although no defined requirement has been established by HQ ACC/A3Y
  - Update:** On hold awaiting information from the Project Air Force Rand Study – Which will provide a database of airspace demands associated with aircrew continuation training classified by MDS (including UAS) in terms of Volume, Proximity, Time, and Attributes (VPTA) values
- ACTION ITEM:** Address the issue of FAA-acceptable environmental CATEXs.
  - OPR:** HQ USAF/A3O-A
  - Status:** IN PROCESS - A draft charter for a PBFA Sub-Group was developed by A3O-AR was presented to the PBFA Airspace Subgroup, for DoD position.
  - Update:** Draft charter provided to PBFA Special Use Airspace Subgroup Chair 1 Oct 2007 during meeting at Crystal City. No action to date
- ACTION ITEM:** Develop standard for simultaneous DoD and DHS operations within SUA.
  - OPR:** HQ USAF/A3O-AC    **OCR:** DHS; Other Services
  - Status:** IN PROGRESS Agreement on D2ARSA has been completed OSD gave this document back to AF/A3O-AC for coordination with the Services.
  - Update:** The agreement between DOD and DHS on separation of aircraft within airspace for UAS ops went over to OSD/HD for them to staff and sign a while ago.
- ACTION ITEM:** AFSOC to develop EIS guidelines for smaller UAS
  - OPR:** HQ USAF/A7CI                      **OCR:** AFSOC
  - Status:** IN PROGRESS AFSOC is coordinating with AF/A7CI to determine if a programmatic EIS is required. Per A7CI, a programmatic could cover most EIS requirements but site-specific analysis would still be required.
  - Update:** AFSOC – Jeff Golliver to provide information from Lt Col Crowe’s telephone inquiry of 1/15/08
- ACTION ITEM:** Determine/clarify definition of deconfliction on MTRs for inclusion in AFI 13-201.
  - OPR:** HQ USAF/A3O-AR
  - Status:** IN PROGRESS, DoD Issue A3O-AR forwarded a draft definition with the PBFA Airspace Subgroup for inclusion in the appropriate FLIP documents.
  - Update:** Potentially use “deconflict” in the same aspect as it’s used in Joint Pub 3-52 page III-3, Fig III-2 “Airspace Control Procedures Objectives” but modified to read “Deconflict: Prevent mutual interference, facilitate identification, safely accommodate and expedite the flow of all air traffic in the vicinity, enhance effectiveness in accomplishing the mission commander’s objectives, prevent NMAC/HATR incidents.”
    - .aInitial language below for FLIP changes to PBFA Airspace Subgroup Chair 1 Oct 07 No action.
    - .bAP/1B - Chapter 1 - IFR Military Training Routes (IR) - Change to read:  
 III. Scheduling and Coordination.  
 B. Pilots will consult FLIP Area Planning and AP/1B Military Training Route Charts to view route conflicts. This chart is the single source document (IR, VR, SR routes) depicting potential conflicts between routes. Pilots may consult VFR Sectionals for additional planning information (SR not displayed). Routes displayed on the MTR Chart, Sectionals are “route centerline” only, and route widths are not to scale. Enroute low IFR charts do not show four digit MTRs or SRs;

therefore, do not use enroute IFR charts to plan deconfliction of IR MTRs. Pilots shall be aware of other MTR users (that pose a hazard to the IR MTR) and associated route times to ensure deconfliction. Pilots shall make every effort to contact the Originating/Scheduling Activity for routes that conflict with their planned route to ensure that multiple flights are not scheduled to occupy the same segment or crossing point at the same time. If unable to properly plan/deconflict the IR MTR, **DO NOT FLY THE ROUTE**.

**Note:** Units with Scheduling/ Coordinating responsibilities for an MTR may impose additional time restrictions in minutes on subsequent flights when scheduling those routes with segments/crossing points that have become troublesome chokepoints; however, these restrictions shall be published under Special Operating Procedure for that route. Time restrictions may be waived in the case of pilots who request the use of “MARSAs” on those routes where a MARSAs LOA exists. Aircraft operating VFR must see and avoid other aircraft on VR or IR routes unless additional restrictions have been stated for that MTR by the scheduling agency.

.cChapter 2 - VFR Military Training Routes (IR) - Change to read:  
III Scheduling and Coordination

B. Pilots will consult FLIP Area Planning and AP/1B Military Training Route Charts to view route conflicts. This chart is the single source document (IR, VR, SR routes) depicting potential conflicts between routes. Pilots may consult VFR Sectionals for additional planning information (SR not displayed). Routes displayed on the MTR Chart, Sectionals are “route centerline” only, and route widths are not to scale. Enroute low IFR charts do not show four digit MTRs or SRs; therefore, do not use enroute IFR charts to plan deconfliction of IR MTRs. Pilots shall be aware of other MTR users (that pose a hazard to the VR MTR) and associated route times to ensure deconfliction. Pilots shall make every effort to contact the Originating/Scheduling Activity for routes that conflict with their planned route to ensure that multiple flights are not scheduled to occupy the same segment or crossing point at the same time. If unable to properly plan/deconflict the VR MTR, **DO NOT FLY THE ROUTE**.

**Note:** Units with Scheduling/ Coordinating responsibilities for an MTR may impose additional time restrictions in minutes on subsequent flights when scheduling those routes with segments/crossing points that have become troublesome chokepoints; however, these restrictions shall be published under Special Operating Procedure for that route. Aircraft operating VFR must see and avoid other aircraft on VR or IR routes unless additional restrictions have been stated for that MTR by the scheduling agency.

●**ACTION ITEM:** Poll the ANG units to determine the current/future viability of doing high altitude approaches and what would be the impact of removing the requirement to do high altitude approaches from training and check-ride profiles?

°**OPR:** HQ USAF/A3O-AR

°**Status:** CLOSED. ACC’s coordination with AFFSA non-concurred with this initiative as the F-16 community insists it requires high altitude approaches and could not store enough low approaches in the jet for training missions.

°**Update:** Cancel this due to ACC pushback: 1) not enough room in single seat cockpits to carry a full set of Low Approach Plates that might have the High Approach incorporated. 2) ACC desire to allow single seat fighters to perform a High Altitude penetration and approach from high ATCAAs should the need arise, emergency or training.

●**ACTION ITEM:** Develop a streamlined process to clean up High Altitude Approach and NAVAID decommissioning issues.

°**OPR:** HQ USAF/A3O-AC

°**Status:** IN PROGRESS OPR changed. A3O-AC identified the FAA process and will meet through PBFA channels to get the FAA to adhere to those procedures



°**Update:** Stationary Altitude Reservations (ALTRV's) coordinated with the host ARTCC were discussed at the NAREC as a short term alternative to longer term special use airspace actions to support unit spin-up.

**.6Wrap-up – Brig Gen Holland**

- FAA Flight Service** - It was recommended that Flight Service representatives from contractor Lockheed-Martin be invited to the management council meetings because they are critical to general aviation.
- Berry M Goldwater Range (BMGR)** – there is not a cohesive plan for UAV operations on BMGR.
  - °There is very heavy use of the BMGR East by various UAS
  - °The Army is expanding UAS operations at their training site at Pinal Air Park and they are looking beyond their airspace into BMGR – the range is being asked for a commitment and the Air Force has not stated their plans or requirements for BMGR.
- Colonel Chupein** added that the concept of institutional range management has envisioned an overall agency to determine the Air Force requirements and then be able to allocate available time to other agencies.
- General Holland** made a request for all attendees to suggest topics that need to be addressed at these meetings; people and organizations that should be invited to the management meetings. General Holland stated that he would be working on finding the proper representatives for the airline industry to attend the management meetings in the future. These meetings are a place where relationships can be established to enable safe, efficient use of the National Airspace System. Issues presented at this level will be discussed in the executive session in August and then brought to the National meeting in December if they need to be resolved at that level.

**.7Next Meeting – Brig Gen Holland, Colonel Chupein.** Tthe next meeting will be a combined executive council meeting with the Northwest Mountain Region in Seattle 13-14 August 2008.

**.EDoD SESSION ADJOURNED AT 1145**

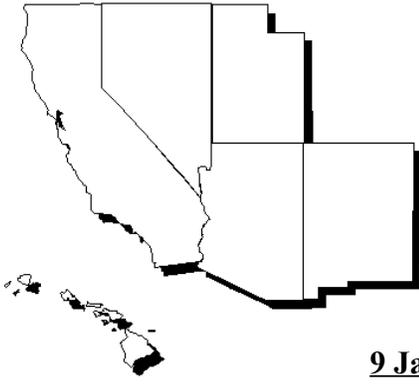
**APPROVED**

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Attachments

1. Agenda
2. List of Attendees

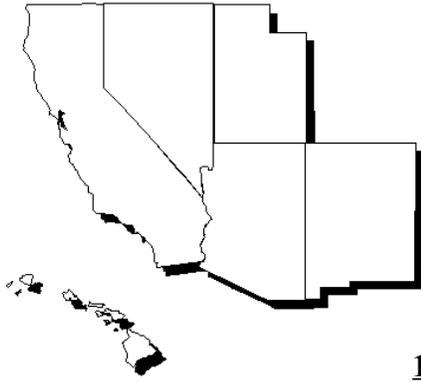


# AGENDA

## Air Force Western Pacific Region Airspace/Range Council Phoenix, AZ 9-10 January 2008

### 9 January                      Management Session

1:00	Welcoming Remarks	Brig Gen Holland
1:15	National Overview	Colonel Mitchell Colonel Chupein
1:45	Warfighter Brief	Colonel Carillo
2:00	Unit Operations Briefings - Aircraft - Airspace - Problems and Issues Being Worked or Recently Solved  (Opportunity for other agencies to identify issues)	Colonel Jergensen
2:45	Travis AFB – Wind Turbine Issue	Captain Donelson
3:00	Break	
3:15	USMC Issues	Mr. Hansen
3:30	Yosemite Overflights	Mr. Meyer
3:45	Natural Sounds Program	Ms. McCusker
4:00	Hawaii Volcanoes National Park	Ms. Lentz
4:15	BLM/Forest Service	Ms. Stewart
4:30	AOPA	Mr. Lehmann
4:45	Breakout Sessions for Tomorrow? -	Colonel Jergensen
5:00	Session Wrap Up	Brig Gen Holland



## AGENDA

### Air Force Western Pacific Region Airspace/Range Council Phoenix, AZ 9-10 January 2008

#### 10 January Management Session

8:00	Opening Remarks	Brig Gen Holland
8:05	Military Reps to the FAA — Perspectives/Issues	Lt Col Sampson NAVRep DARR
8:30	NOTAMS	SFC Johnson
8:45	MADE/SAMS; FAAO 7930.2	Mr. Perkins
9:00	FAA Perspectives - DTO Perspective on Military Ops	Mr. Garza
9:45	BREAK	
10:15	UAS Operations	Ms. Trindle
10:30	State Aviation Officials	TBD
10:45	Breakout Sessions -	Colonel Jergensen
11:30	Breakout Summaries	
11:45	Action Item Recap	Mr. Rose
11:50	Wrap-up & Adjourn	Brig Gen Holland Colonel Chupein

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