



**DEPARTMENT OF THE AIR FORCE**  
**PACIFIC AIR FORCES**

MEMORANDUM FOR ALASKA CIVIL/MILITARY AVIATION COUNCIL (ACMAC)

FROM: 11 AF/CV  
10471 20th Street, Suite 139  
Elmendorf AFB AK 99506-2100

SUBJECT: Alaska Civil/Military Aviation Council Minutes

1. The ACMAC convened 22 October 2008, at 0900 in the Reeves Conference Room at Elmendorf AFB AK and was broadcast via VTC to 353rd Combat Training Squadron, Eielson AFB AK. The meeting slides are attached to provide more detailed information about the various briefs. Please refer to these as you read the minutes.

2. Member Attendance: Colonel Marc Luiken, 11AF/CV, chaired the meeting and the attendance roster is attached.

3. Opening remarks by ACMAC Chairman: Col Luiken welcomed everyone to the Fall ACMAC.

4. The following agenda items were discussed:

a. Unmanned Aerial Systems (UAS) Update: CW4 Thomas Frtiz, USARAK ASO

(1) CW4 Fritz provided some characteristics and limitations of the Shadow 200 and Raven UASs, and stated the Raven inventory is expected to double in the next few years. When asked by Mr. Tom George what altitude the Shadows fly when transiting to the restricted areas, CW4 Frtiz replied below 3,000 AGL. CW4 Fritz provided a depiction of all the launch and recovery areas and emphasized the "see and avoid" measures used by the Army while operating on approved certificates of authorization (COA).

(2) The Army is pursuing two new UASs. First, the Sky Warrior (MQ-1C) – a modified Predator variant tailored for Army requirements. The U.S. Army is expecting 500 Sky Warriors, with the first deliveries beginning next summer. The other new UAS is the Fire Scout (RQ-8A). The Fire Scout UAS is a rotary-wing aircraft developed by the Navy for shipboard use. This UAS will supplement the Shadow units due to its light armament and great observation capabilities. CW4 Frtiz explained that the Army has not made any final decisions on allocation or beddown locations of these UASs. However, he would keep the council updated on further developments.

(3) Mr. George asked where UASs fly in Class G airspace. CW4 Fritz replied the DoD and Federal Aviation Administration (FAA) approved UASs lighter than 20 pounds (Raven) to fly in Class G airspace over DoD controlled land. He stated that previously the Raven had been flown in the Husky DZ area and that "see and avoid" measures were utilized. However, the Army plans to utilize Firebird and Donley LZ in the future. Maj Peck reiterated that NOTAMs are required before UAS operations are conducted, and Eielson Range Control also provides advisory information during the flight.

b. GPS Jamming Update: Mr. Pete Bussa, Assistant Operations Officer, 353d Combat Training Squadron Alaska

(1) Mr. Bussa provided deliverables from the March ACMAC meeting. The first deliverable was why the Air Force has a need to conduct GPS jamming. Mr. Bussa explained the United States Air Force Chief of Staff directed the Air Force to train the way we fight and that means training against a full spectrum of threats, including GPS jamming.

(2) Mr. Bussa also provided the second deliverable concerning GPS jamming initial specifics. Typical GPS jamming will last 15 – 20 minutes, but will not to exceed 45 minutes. The initial weather requirement to conduct GPS jamming is a ceiling of 10,000 MSL or better. GPS jamming will initially use directional jamming only and will be NOTAM'd. Red Flag Alaska will take baby steps with GPS jamming. The first possible jamming event will be conducted during RED FLAG (RF-A) 09-03 scheduled for 27 Jul-7 Aug 09. The Northern Sub-ACMAC committee will research a feedback process to collect responses from the GPS jamming.

(3) Mr. Chris Gates asked about the range of a directional jammer. Mr. Bussa replied it depended on the type of jammer, type of receiver, and wattage used by the jammer. Generally speaking, a 20 watt jammer can affect the spectrum out to approximately 20 miles. If the jammer is 100 watts, it can reach out to about 60 miles. Mr. Bussa mentioned omni-directional jamming could possibly begin in FY10 and will likely be focused to the same areas as the directional jammers. Future locations for omni-directional jamming will depends on the GPS models which are used to predict the effectiveness of a GPS jammer in a certain location.

(4) The Air Force will submit Electronic Attack (EA) paperwork through appropriate military, FAA, and other government channels no later than 80 days prior to GPS operations and submit NOTAMS 72 hours prior to jamming. Eielson Range Control will also provide advisories. Maj Peck stated "stop jamming" procedures would be utilized to ensure increased safety as briefed during the March 08 ACMAC meeting. Mr. George asked what FAA department is working on the effects of GPS jamming. Mr. Rick Vickory said he would research this. Col Luiken stated GPS jamming is an important issue for all parties and will continue to be an agenda item at future ACMAC meetings.

c. C-17 Update: Lt Col Andy Hird, Director of Operations, 517 Airlift Squadron

(1) Lt Col Hird provided an overview of C-17 operations. He stated Alaska's environment provides excellent training due to its mountainous terrain and cold weather conditions. These conditions better prepare our Airmen for deployments to areas such as Afghanistan and assist them executing their various missions. Realizing the excellent training opportunity in Alaska, C-17 pilots in Charleston, SC are also looking for opportunities to train here before deploying.

(2) C-17s have a huge joint mission. A large part of their mission is supporting Army parachute jump proficiency. Lt Col Hird explained they normally support 12,000 – 14,000 jumps per year. However, with the Ft. Richardson soldiers preparing to deploy again soon, they are scheduled to support 3200 additional jumps in 2 weeks in December 08 and January 09.

(3) Mr. Gates expressed concern with C-17 wake turbulence. Lt Col Hird stated they fly the majority of their missions on low level routes at about 300 feet AGL and utilize the Common Traffic Advisory Frequency (CTAF). Therefore, the C-17s would be below the majority of general aviation aircraft. Even so, when they are in the vicinity of congested areas, C-17 pilots increase their advisory calls on CTAF. All C-17 aircraft are equipped with TCAS which offers an increased measure of safety. The real problem is in the Big Lake, Wasilla, Birchwood and Goosebay areas where several small

airfields are closely located and have separate CTAFs. C-17s have a limited number of radios they can use/monitor. Col Luiken asked if there was a way to combine at least two of the CTAF frequencies to improve safety. Maj Peck stated that he would pursue this with the FAA.

(4) Maj Peck stated the AF had distributed C-17 information pamphlets in the Lake Hood, Merrill Field, Birchwood, Wasilla, and Palmer areas and during the Anchorage Aviation Tradeshow and Northern Aviation Expo. He also provided the pamphlets at this meeting for members to take with them. The information sheet is located on the Alaska Airspace webpage, and it is attached to these minutes. Additionally, the AF has worked with the South Sub-Committee to develop a common reference point map in the Anchorage/ Mat-Su Valley area. This map will help military pilots better identify common civil aviation locations/reference points (informal reporting points) when making or receiving CTAF position reports. Maj Peck said these two helpful guides closed a March ACMAC tasker his office was assigned.

d. Airspace Update: Maj Robert Peck, Airspace & Range Operations Team Chief, 611 AOC Combat Operations Division

(1) Maj Peck provided a quick synopsis of the Delta T-MOA approval process for calendar year 2009 exercise period and the Gulf of Alaska environment impact study. The final environmental assessment for the Delta T-MOA is expected to be completed in January 09 and the Air Force is hoping the Chartered Delta MOA will receive FAA Headquarters approval sometime in Fall 09. Maj Peck stated there is no difference between the T-MOA and the Chartered, except that the chartered will be published on sectional charts. Charting this MOA will only improve GA awareness/safety in the future.

(2) Maj Peck mentioned there were two Sub-ACMAC meetings since last ACMAC. The northern meeting was held in August and the southern in September. The topics discussed at the northern meeting were GPS jamming, Delta MOA NOTAMs, UAS operations, and Ft. Greely Temporary Flight Restriction (TFR). Col Booth requested Maj Peck expand on the Ft. Greely TFR. Maj Peck replied there were no issues/concerns by any of the parties present at the meeting. He also added that an automated radar system is being considered which can provide notification to aircraft that fly close to the TFR. The southern Sub-ACMAC focused on the C-17 handouts and common reference points for CTAF operations in the Anchorage Bowl/Mat-Su Valley that Maj Peck mentioned earlier. Maj Peck concluded by informing the council on the status of the 5 Year Airspace Plan. A feasibility study is a part of this plan, to research restricted areas for the Joint Pacific Alaska Range Complex (JPARC) which accommodate Army, Air Force, and Navy mission requirements. This will be followed by an umbrella Environmental Impact Study on the JPARC which is being pursued in 2010 timeframe.

e. RED FLAG-Alaska FY09 Update: Lt Col Robert Kelly, Range Director, 353d Combat Training Squadron . Lt Col Kelly provided an overview of upcoming exercises. He stated RF-A 09-1 was relatively small compared to previous exercises. Though they were limited by weather on several days, the overall exercise was still successful. No airspace issues or spill-outs were reported. Below is the schedule for future exercises. Please refer to the attached slides for specific details, however bear in mind the dates on the slides reflect the Thursday and Friday before the exercise. These days are intended as familiarization days for the crews only and are not the start of the official exercise.

RED FLAG-Alaska 09-2	20 April – 1 May
NORTHERN EDGE	15 – 26 June
RED FLAG-Alaska 09-3	27 Jul – 7 August
RED FLAG-Alaska 10-01	1– 16 October

f. F-22 Update: Lt Col Hubie Hegtvedt, Commander, 302 Fighter Squadron. Lt Col Hegtvedt explained the integration of Active Duty and Air Force Reserve (USAFR) forces in the F-22 community in Alaska. Additionally, he provided information on F-22 characteristics and operations. The F-22s fly mostly in the Stony and Fox MOAs (approximately 75% of the time). Along with the outstanding capabilities of the F-22 come some challenges. One of the challenges is the amount of airspace F-22s require to train. The capabilities of the F-22 require a very large training airspace configuration. The capabilities of this amazing aircraft are still being realized as they train from day to day.

g. Airfield Status Update: Briefings were presented by several members: Mr. Iagulli, Ted Stevens International Airport; Lt Hughes, Elmendorf AFB; Ms. Osborn, Fairbanks International Airport; Mr. Mull, Allen Army Airfield; Mr. Ferguson, LADD Army Airfield; and Capt Byman, Eielson AFB. Detailed airfield construction information is provided on the attached slides. All ACMAC members agreed this briefing was very beneficial and needed to continue for future ACMAC meetings. Col Booth requested organizations not only consider airfield construction projects that may hinder operations, but also any other issues that may affect adjoining facility operations.

5. Taskers from March's ACMAC: Maj Peck mentioned the taskers assigned at the March ACMAC have all been closed. Briefing updates were provided on GPS jamming update, C-17s, and UASs. Maj Peck stated that notifying Guardian and Warbelows about Delta MOA Life Guard mitigation procedures has also been closed.

#### 6. Open Forum:

a. No other suggestions were presented for the next ACMAC. Lt Col Hird stated he wished other bases stateside would conduct a form of ACMAC to exchange information between military and civilian communities.

b. Mr. George requested more dissemination on the modified Military Training Routes (MTRs). Maj Peck said as the MTRs go through the coordination process and get final approval, a more robust public outreach program will be initiated. Capt Miller, 3 WG Public Affairs, also mentioned if there are any topics ACMAC members would like publicized, to please contact her office (552-8153).

c. Mr. Carl Siebe wanted to emphasize to military pilots that Merrill Airfield traffic could be a conflict even when Elmendorf airspace extensions have been approved. Therefore, increased vigilance is warranted during these operations on both the military and civilian side.

d. ACMAC members thanked Elmendorf AFB for the Airshow this past summer. It was a great success. Additionally, Ms. Valerie Jokela on behalf of Mr. Bob Lewis, FAA Alaska Deputy Regional Manager, thanked Elmendorf AFB for the F-22 flyby for FAA's 50<sup>th</sup> Anniversary.

e. Lt Col Babos informed the members of ACMAC of the Federal Advisory Council meeting that was established to discuss the aircraft noise generated over Denali National Park. Lt Col Babos and Mr. George are two of the twelve members on this council which is expected to be activated for another 2-3 years. Mr. George added that the outcome of this council may determine whether other national parks will be affected.

#### 7. Closing Comments:

a. Colonel Luiken thanked all in attendance for their participation and interest in ACMAC. He also mentioned the open and honest dialog in this forum is important for in improving general aviation safety.

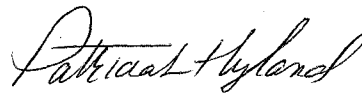
b. Colonel Luiken wanted to ensure the following action items were identified:

(1) GPS Jamming: Research a feedback process to collect responses after the initial GPS jamming exercise in RF-A 09-03. OPR: Northern Sub-ACMAC Committee. Also provide feedback on the impacts of the GPS jamming models. OPR: 353 CTS

(2) C-17 Wake Turbulence: 3 WG Safety provide FAA Safety information on C-17 wake turbulence. OPR: 3 WG/SE

(3) Work on changing the CTAF frequency at Goosebay and Elmendorf AFB to 122.8 to enhance safety in the vicinity of R-2203. OPR: 611 AOC/CODK

8. The meeting adjourned at 1120. The next ACMAC meeting will be scheduled sometime late March/early April 2008 at Eielson AFB, with a VTC to Elmendorf AFB. Notifications will be sent as soon as a definitive date is set. Questions, corrections, comments, and/or concerns should be addressed to the ACMAC Executive Secretary, Capt Tricia Hyland, 611 AOC/CODK at Commercial (907) 552-3636 or DSN 317-552-3636.



PATRICIA L. HYLAND, Capt, USAF  
Executive Secretary

Approved/~~Disapproved~~

NOV 21 2008



MARC A. LUIKEN, Colonel, USAF  
ACMAC Chairman

Attachment:  
ACMAC Attendee List

cc:  
11 AF/CC