

| LOA | LETTER OF AGREEMENT | ZAN – vUSAF |
|----------------|--|--------------------|
| Subject | Anchorage ARTCC and the vU.S. Air Force | New |
| | | 5/1/2009 |

1. PURPOSE:

This Letter of Agreement (LOA) establishes operating procedures between Anchorage ARTCC (ZAN) and vUSAF at Eielson AFB and surrounding Special Use Airspace. This LOA will be for providing control services in the Eielson Range to include Allen and Wainwright AAF.

2. SCOPE:

These procedures apply to all VFR/IFR aircraft entering or exiting the Eielson Range, Eielson and Wainwright Class D, all local MOAs, air refueling routes and military training routes (MTRs).

3. ROLES AND RESPONSIBILITIES:

The Offices of Primary Responsibility (OPR) for this LOA are the ZAN Air Traffic Manager (ATM) and the vUSAF Department of Communications.

Eielson Control is responsible for the Birch, Buffalo, Eielson, Fox, Viper and Yukon (MOA) to include the overlying air traffic control assigned airspace (ATCAA) and Restricted Areas R2502, R2505 and R2211. Eielson and Wainwright Tower provides Class D service within a 5 NM radius, surface to 3000' MSL and Allen is an uncontrolled airfield within Class E airspace from surface to 700' MSL. (See Attachment 1 and 2)

4. DISTRIBUTION:

This LOA is intended for use by ZAN and Controllers of the vUSAF staffing positions in anchorage airspace.

5. BACKGROUND:

This LOA has been developed and shall be maintained to establish flight management procedures for vUSAF operations, so that ZAN ARTCC ATC staff and vUSAF pilots can expect consistent ATC support within the ARTCC. The procedures set forth in this LOA shall be disseminated to vUSAF command staff, pilots and the ZAN ARTCC Staff and controller roster.

6. POLICIES:

a. Facilities.

- i. Facilities will be of two types: “joint civil/military” and “military-only”, as described in section 7. ZAN controllers and vUSAF military controllers, who are certified as outlined in section 6(b) shall be authorized to man “joint” facilities. ZAN controllers shall not be authorized to man “military-only” facilities.
- ii. vUSAF military controllers are not authorized to man any ATC positions other than those described in section 7.
- iii. vUSAF controllers shall use certified ZAN ARTCC sector files as available on the ZAN website, or any other sector file, if they have been reviewed and certified by the ZAN ARTCC Air Traffic Manager or their designee. Currently the following non-ZAN files have been reviewed and certified:
 1. None.

b. Certification and Enforcement – vUSAF military controllers

- i. vUSAF controllers shall be considered a unique class of visiting controller. They shall not be required to comply with the ZAN visiting controller policy but will be required to comply with all items listed in this LOA.
- ii. vUSAF military controller must meet published VSOA military certification requirements for the position manned. If no applicable VSOA military certification requirements are published, the following shall be applied:
 1. Must hold an S-3 grade or higher to work an Approach Control Position or lower position.
- iii. The vUSAF Air Control Command Director will provide an e-mail list of the approved controllers and their approved position to the Air Traffic Manager or their designee.
- iv. vUSAF military controllers must strictly adhere to all aspects of this LOA. The ZAN shift supervisor shall be authorized to remove any vUSAF military controller who fails to demonstrate detailed familiarity with the provisions outlined in this LOA.

c. Certification and Enforcement – ZAN controllers

- i. ZAN controllers must meet standard ZAN ARTCC facility certification as outlined in applicable ZAN SOPs.

d. Airspeeds in the Class D, C, and MTRs

- i. It is recognized that certain training operations and training aircraft require high speed. Military training aircraft on MTRs may exceed 250 knots below 10,000’ MSL if required, as well as aircraft operating within Special Use Airspace.

- ii. B-1b, B-52H, KC-10 and KC-135 aircraft may exceed 250 knots below 10,000' MSL to help formation departures to expedite formation join-up.

e. Flight Plans

- i. All aircraft departing any Air Force Base will file a flight plan in accordance with vUSAF policy.
- ii. ATC will verify all “no flight plan” aircraft operations via the aircraft commander prior to granting engine start approval or landing clearance, unless an emergency exists.

7. AUTHORIZED MILITARY FACILITIES:

The following facilities are designated as joint-use civil/military facilities, with the associated authorized positions. These positions may be manned by properly certified vUSAF military or ZAN controller:

Eielson AFB (PAEI) PAEI_DEL, PAEI_GND, PAEI_TWR
 Wainwright AAF (PAFB) PAFB_GND, PAFB_TWR
 Eielson Control PAEI_N_APP, PAEI_S_APP

The following facilities are designated as military only facilities, with the associated authorized positions. These positions may be manned by properly certified vUSAF military controllers only:

| <u>Facility</u> | <u>Authorized positions</u> |
|-------------------|--|
| vUSAF AWACS | AWACSR_CTR, AWACS_CTR |
| Joint Star | JSTR_R_APP, JSTR_B_APP |
| Drop Zone Control | DZ_X_TWR (X may be replaced by a letter to denote which drop zone) |

d. STANDARD OPERATING PROCEDURES:

a. General

- i. vUSAF military controllers shall comply with ZAN SOPs.

b. Eielson AFB (PAEI)

- i. Authorized text callsigns and text frequencies are:
 1. PAEI_DEL...343.70 (CH-01)
 2. PAEI_GND...121.80 (CH-02)
 3. PAEI_TWR...127.20 (CH-03)
- ii. Active Runway. Runway 31 is the calm wind runway. When prevailing winds exceed 6 knots, the runway most nearly aligned with the winds will be designated the active runway.
- iii. Departure Procedures. Departure procedures will be used by fixed wing aircraft operating from Eielson on an IFR clearance. Pilots unable to comply with altitude restrictions will advise ATC prior to

departure and maintain VFR and terrain separation. Flight leads will not call number one until all flight members are ready for takeoff. The flight should be airborne within three minutes after takeoff clearance is received. Initiate coordination for an unrestricted climb with Eielson Ground. (See Attachment 2 for Eielson Airspace.)

- iv. Departures to the Eielson Range shall be routed via the following:
 - 1. Yukon 2 MOA entry via the FOX Departure, APPEL, AXSEM or CABIN Gate.
 - 2. Yukon 1 MOA entry via the DELTA Departure, PAGGI, MIZZI or BUFLO Gate.
 - 3. Birch or Eielson MOA entry via the HAWGG Departure, HAWGG Transition.
 - 4. Fox MOA entry via HOJOE.
- v. Recoveries. Recoveries will be used from the Eielson Range to expedite the flow of traffic into Eielson AFB. There is one recovery called the FALCO 4. (See attachment 3 for visual view)
 - 1. FALCO Recovery. The FALCO recovery is primarily used for aircraft recovering from the Northern part of the Eielson Range via APPEL. Procedures are to cross APPEL between 17,000' and 14,000' MSL. Proceed to BNGAL and cross at 11,000' MSL. From BNGAL proceed to JAVAH, and then turn left to FALCO and cross between 9,000' and 6,000' MSL. Proceed to HAMIR and cross at 2,100' MSL. Proceed visually to the field.
- vi. VFR Traffic Pattern Procedures. Expect frequency change to Eielson Tower approximately 10 NM from Eielson. Eielson Tower will consider all aircraft a full stop from initial unless advised otherwise on initial contact.
 - 1. Overhead patterns: Initial will be flown to at 300 KIAS and 2000' MSL. (See attachment 4 for visual view)
 - 2. Standard Break. Breaks for Runway 13 will be to the right and for Runway 31 to the left.
 - 3. Normal VFR is rectangular at 1500' MSL. Right traffic for Runway 13 and left traffic for Runway 31.
- vii. IFR arrivals shall be vectored for the ILS or TACAN for Runway 13/31. Coordination between PANC_CTR and PAFA_APP is required.
- viii. Local climb out for touch-and-goes and missed approaches when radar facilities are manned shall be runway heading to 6,000' MSL.
- ix. PAEI_TWR shall contact PAEI_APP with any aircraft that are to depart and enter the Eielson Range. If aircraft are to depart and not enter the Range or PAEI_APP is not up,
 - x. PAEI_TWR will contact PAFA_APP or PANC_CTR.

c. Eielson Control

- i. Eielson Control authorized callsign and text frequencies are:
 1. North Side- PAEI_N_APP- 125.30 (CH-04).
 2. South Side- PAEI_S_APP- 133.60 (CH-05)
 3. When the South Radar is not active, the default will be PAEI_APP- 125.30
- ii. Authorized voice callsign is "Eielson Control".
- iii. Primary responsibility is approach sequencing and departure separation services for PAEI while in Viper MOA.
- iv. When manned, PAEI_APP shall be delegated the airspace of the Birch, Buffalo, Eielson, Fox, Viper and Yukon (MOA) to include the overlying air traffic control assigned airspace (ATCAA) and Restricted Areas R2502, R2505 and R2211 from surface to FL500. (See Attachment 3)
- v. Range Entry and Exit. All aircraft must receive ATC clearance from Eielson Control prior to entering or exiting the Eielson Range.
 1. Range Entry. Aircraft are considered MARSAs while on range. Aircraft in the Eielson Range will operate under the provision of MARSAs while on the range. Civil ATC will not provide IFR services to participating mission aircraft operating under the provisions of MARSAs in the Eielson Range. ATC separation is provided until entering aircraft have crossed the boundary of their scheduled Special Use Airspace (SUA) at ATC assigned headings and altitudes. Aircraft may not depart assigned altitude until within the confines of the Eielson Range and "Cleared tactical" by Eielson Control. Upon entering the Range, all aircraft in the flight will squawk their assigned tactical code.
 2. Range Exit. Aircrew will attempt to obtain and report the current ATIS code on initial check-in for range exit with Eielson Control. Although ATC may assign headings and altitudes to assist pilots exiting the range, separation responsibility rests with the pilot until the aircraft has exited the boundary of their scheduled SUA. Flights that wish to depart in non-standard formation will advise Eielson Control of their request. Flights that wish to depart in ATC standard formation will ensure they are joined up prior to exiting assigned airspace. Once joined up in ATC standard formation, wingmen will strangle their transponder.
 3. Intrusions. All intrusions into the range complex will be handled in accordance with vAFI 11-415.
- vi. Air Refueling (AR) Anchors and Procedures.
 1. AR-719: Located within the Yukon ATCAA and Anchorage ARTCC Class A Airspace when ATCAA is not active. Published altitudes are FL240- FL290. Refueling

will be conducted on 270.20. All aircraft operating in AR-719 are MARSAs with aircraft operating in adjacent special use airspace. The controlling agency is PAEI_APP (125.30) or PANC_CTR if PAEI_APP is not active during non-Red Flag activities.

2. AR-720NE/SW: Located in Fox ATCAA and Anchorage ARTCC Class A Airspace when ATCAA is not active. Published altitudes are FL240 - FL290. AR-720NE and AR-720SW shall not be scheduled simultaneously in the same altitude block. Refueling will be conducted on 276.70. All aircraft operating in AR-720 are MARSAs with aircraft operating in adjacent special use airspace. The controlling agency is PAEI_APP (133.60 or 125.30) or PANC_CTR if PAEI_APP is not active during non-Red Flag activities.
- vii. Training Area Operations. Aircrews must remain in their scheduled or assigned airspace. Eielson Control will transmit advisories on Guard when aircraft exceed the perimeter boundaries of the Eielson Range. The operating agency will transmit advisories for aircraft approaching boundaries on the range frequency if possible, and on Guard if required. Eielson Control will assist aircrews in remaining in assigned airspace.
- viii. Altimeter Setting Procedures. Use Eielson AFB altimeter setting at all altitudes in the Eielson Range with the following exceptions:
 1. Aircraft using AR719 or AR720NE/SW will use 29.92 when Red Flag is not active or unless otherwise briefed.

d. Wainwright AAF (PAFB)

- i. Authorized text call signs and text frequencies are:
 1. PAFB_GND....121.70 (Ch-13)
 2. PAFB_TWR...125.00 (Ch-14)
- ii. Active Runway. Runway 24 is the calm wind runway. When prevailing winds exceed 10 knots, the runway most nearly aligned with the winds will be designated the active runway.
- iii. Departure Procedures. Runway 06, climb straight ahead direct to CHENA then proceed as filed. Runway 24, turn left and proceed to CHENA. Cross CHENA at or above 3,200' MSL before proceeding on course.
- iv. FAI_APP provides approach control service to PAFB_TWR.
- v. IFR arrivals shall be vectored for the HI-VOR/DME TACAN for Runway 24. Coordination between PANC_CTR and PAFB_APP is required.
- vi. VFR Traffic Pattern. All traffic patterns will be south of the field. Runway 06 is right traffic. Pattern altitude is 1,200' MSL, 1,500' MSL for overhead

- vii. Helicopter Traffic will park on the South side of the field. Transports and other fixed wing aircraft will park on the North side of the field.

e. AWACS Operations

- i. Eielson Area AWACS authorized callsigns and text frequencies are:
 - 1. AWACS_CTR – 134.10
 - 2. AWACSR_CTR – 118.05
- ii. Primary responsibility is controlling air to air engagements within the Eielson Area MOAs and ATCAAs.
- iii. Secondary responsibility is to provide separation services between military training aircraft and civilian aircraft to ensure safety of flight within the Range Complex.
- iv. When MOAs are active all IFR aircraft if possible shall be routed around or over the active airspace. If aircraft are unable to be routed over or around Center shall hand off the IFR aircraft to PAEI_APP to help transition the aircraft through the Active airspace. PAEI_APP will coordinate with AWACS.
- v. AWACS_CTR will cover operations done by 'Blue Air' or 'friendly' Aircraft only. AWACSR_CTR will cover operations done by 'Red Air' or 'aggressor' Aircraft.

f. Joint Star Operations

- i. Eielson Area JSTAR authorized call signs and text frequencies are:
 - 1. JSTR_B_APP – 134.15
 - 2. JSTR_R_APP – 118.10
- ii. Primary responsibility is controlling air to ground engagements and ensuring the protection of all strike aircraft within the Eielson Range complex.
- iii. Secondary responsibility is to organize the flow of cargo aircraft inbound to a Drop or Landing Zone (DZ/LZ) and in the absence of a DZ/LZ controller will ensure the orderly flow of aircraft in and out of the DZ/LZ.
- iv. JSTR_CTR will cover operations done by 'Blue Air' or 'friendly' Aircraft only. JSTR_R_CTR will cover operations done by 'Red Air' or 'aggressor' Aircraft.

g. Drop and Landing Zone Control

- i. Eielson Area LZ authorized call signs and text frequencies are:
 - 1. DZ_X_TWR – Frequency assigned in the event Communications Plan
- ii. Primary responsibility is controlling drop/landing zone operations.
- iii. Secondary responsibility is to collect information on the quality of a landing as to assess damage to cargo.
- iv. DZ_TWR will own airspace within the Eielson Area MOAs within 10nm of all targets and DZs/LZs

- v. DZ_TWR will cover operations inbound to their DZ
- vi.

h. Eielson Stereo Flight Plans

- i. The following routes may be issued to military and civil aircraft during Red Flag. Participating VSOA member aircraft (vUSN, vUSAF, vUSCG, vUSA, vUSMC, AvDF, vRAF and vRNLAf) may file the appropriate "stereo route" ID in the flight plan.

AWACS

| ID | Route |
|-------|--|
| CT001 | EDF BGQ HOJOE 6420N14054W/DELAY 4+00 CRUZR MATTA EDF |
| CT002 | EDF BGQ FAI HOJOE 6313N14452W/DELAY 4+00 CRUZR MATTA EDF |

TANKER

| ID | Route |
|-------|--|
| CT010 | EIL HAWGG BIG BUFLO EIL038020/DELAY 1+30 AR719 BIG BOGIE EIL |
| CT011 | EIL HAWGG BIG BUFLO BIG185044/DELAY 1+30 AR720NE BIG BOGIE EIL |
| CT012 | EIL HAWGG BIG188096/DELAY 1+30 AR720SW BOGIE EIL |
| CT013 | EDF BGQ HOJOE BIG188096/DELAY 1+30 AR720NE HOJOE MATTA EDF |

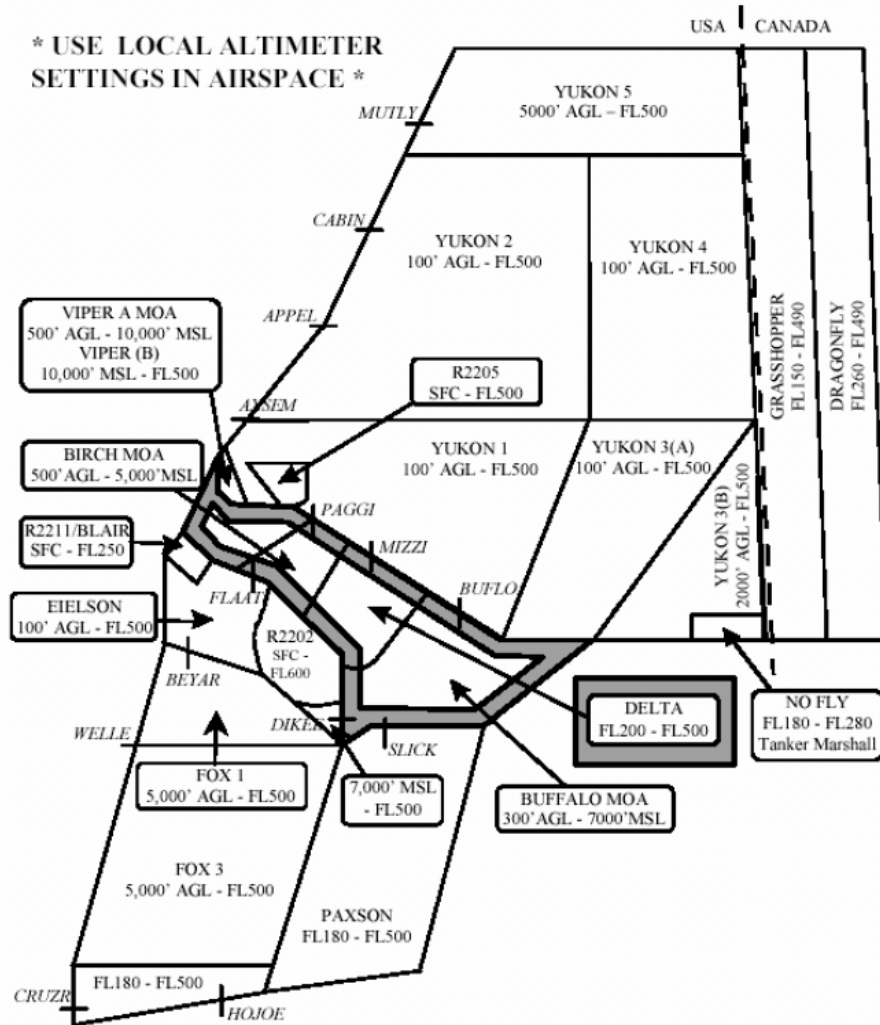
FIGHTERS

| ID | Route |
|-------|---|
| CT020 | EIL FOX3 CABIN/DELAY 1+00 YUKON MOA/R2205 APPEL FALCO4 EIL |
| CT021 | EIL DELTA2 MIZZI/DELAY 1+00 YUKON MOA/R2205 APPEL FALCO4 EIL |
| CT022 | EIL ENN ENN165040 WELLE/DELAY 1+00 FOX MOA R2211 R2202 R2205 YUKON MOA APPEL FALCO4 EIL |
| CT023 | EIL DROPR FLAAT/DELAY 1+00 R2202 YUKON MOA APPEL FALCO4 EIL |
| CT024 | EIL EIL332017 AXSEM/DELAY 1+00 YUKON MOA R2205 R2211 EIL20 BOGIE EIL |
| CT025 | EIL EIL332017 AXSEM/DELAY 1+00 R2205 YUKON MOA APPEL FALCO4 EIL |
| CT026 | EIL FLAAT/DELAY 1+00 R2202 R2211 EIL20 BOGIE EIL |
| CT027 | EDF BGQ HOJOE/DELAY 1+30 FOX MOA/R2205 HOJOE MATTA EDF |
| CT028 | W612 JUNKY JOH HOJOE/DELAY 1+30 FOX MOA/R2205 HOJOE JOH JUNKY W612 (Note: For Carrier Aircraft Only) |

- i. **Red Flag.** The vUSAF hosts the Joint Exercise Red Flag annually from June thru August. Participating VSOA Organizations will be operating aircraft and helicopters from Elmendorf AFB, Eielson AFB, Allen AAF and Wainwright AAF. These organizations will conduct a wide range of tactical flying exercises in the Special Use Airspace in and around Eielson AFB. Civilian and military operators should be appropriately advised that due to the significant increase of military activity, delays can be expected on arrival and departure at the military airfields along with Anchorage IAP and Fairbanks IAP. Pilots should familiarize themselves with the Special Use Airspace within the area.

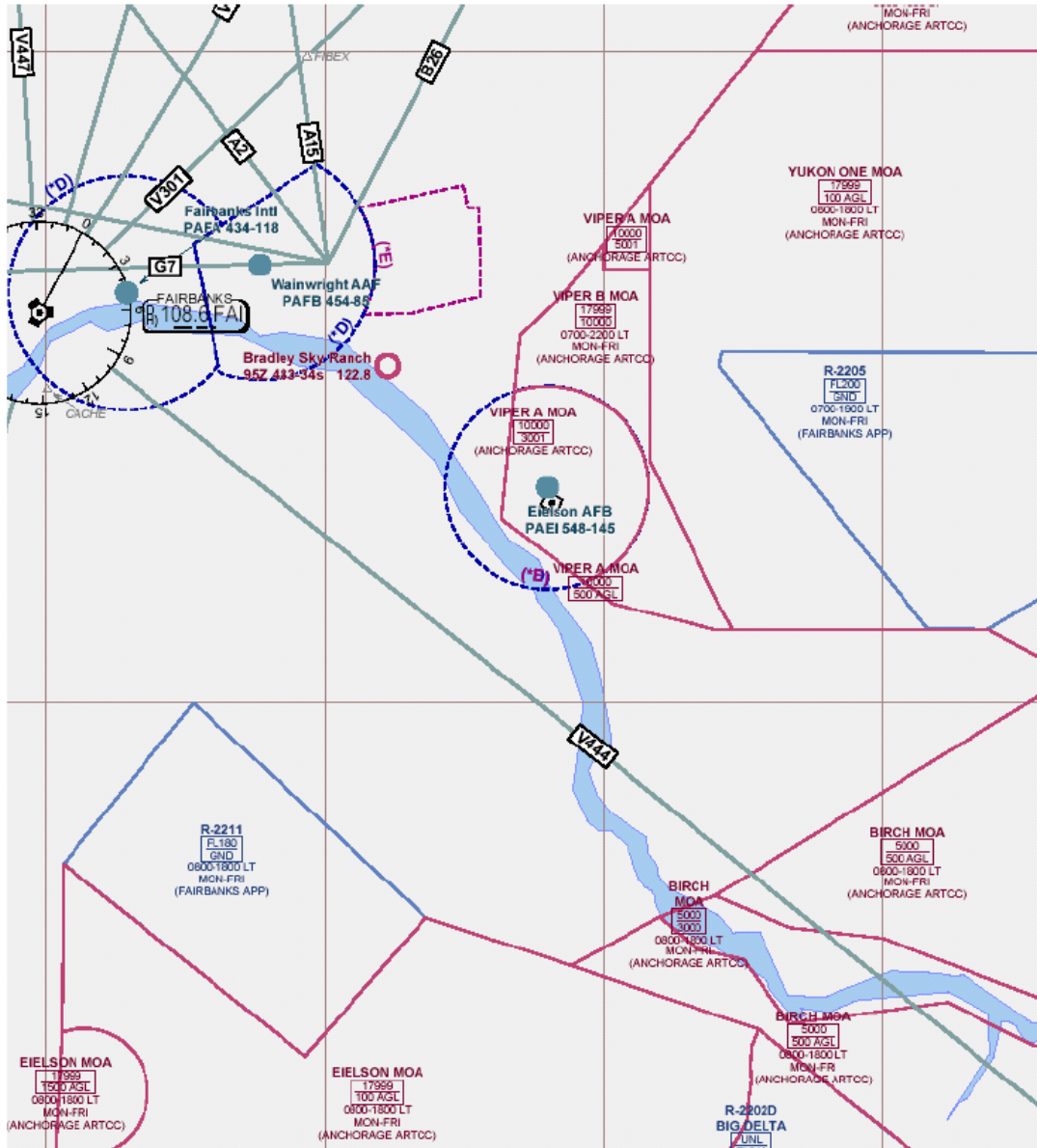
Attachment 1

Eielson Range Airspace



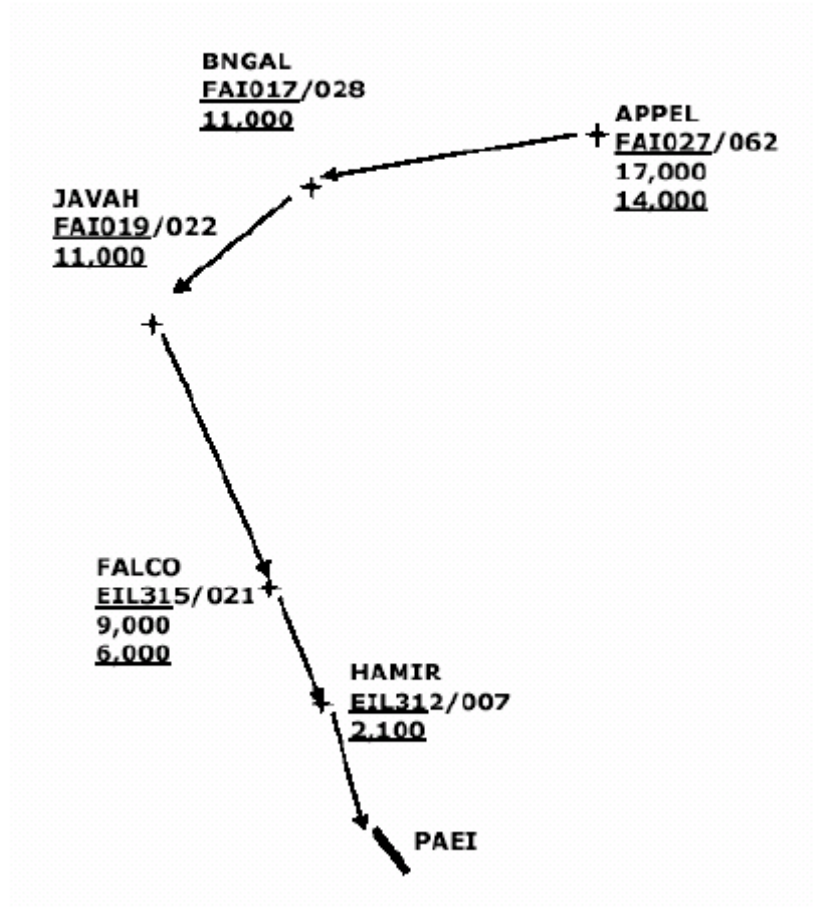
Attachment 2

Eielson AFB and Wainwright AAF Airspace



Attachment 3

FALCO 4 Recovery



Attachment 4

Eielson VFR Patterns

