



# ***10<sup>th</sup> SFG(A) Chase Plane SOP v5***

The overall classification of this briefing is **UNCLASSIFIED**

11 FEB 11

# ***Shadow TUAV***



***T-41 B  
Chase Plane***



# *Chase Plane*

- Platform must be able to transport Aerial Observer.
- Must remain 1 NM lateral separation & 1000' vertical separation of the Shadow TUAS during flight.
- Must possess a VHF radio to communicate with shadow GCS on 122.75 (Air to Air Frequency).
- Must be able to fly a similar flight profile as the Shadow TUAS (60-90 KTS) and an altitude of 6K to 10K MSL.



# *Aerial Observer*

- The Aerial Observer will be an Army AVN (FW or RW) Pilot or a Shadow TUAS Pilot.
- Must have a current annual flight physical (DA Form 4186).
- Must be trained on rules and responsibilities in 14 CFR 91.111 (Operating Near other Aircraft) and 14 CFR 91.113 (Right-of-Way Rules).
- Aerial Observers must have vision correctible to 20/20 (both eyes).



# *Aerial Observer Training*

- The Shadow Platoon Leadership will identify those Shadow Pilots who are selected for Aerial Observer duties.
- Initial training will first occur in the UH-60 SFTS on BAAF to conduct initial area orientation using the VFR Data Base of Pinon Canyon MOA.
- Aerial Observer will be trained on the IMBTR Radio (FM, VHF & UHF).

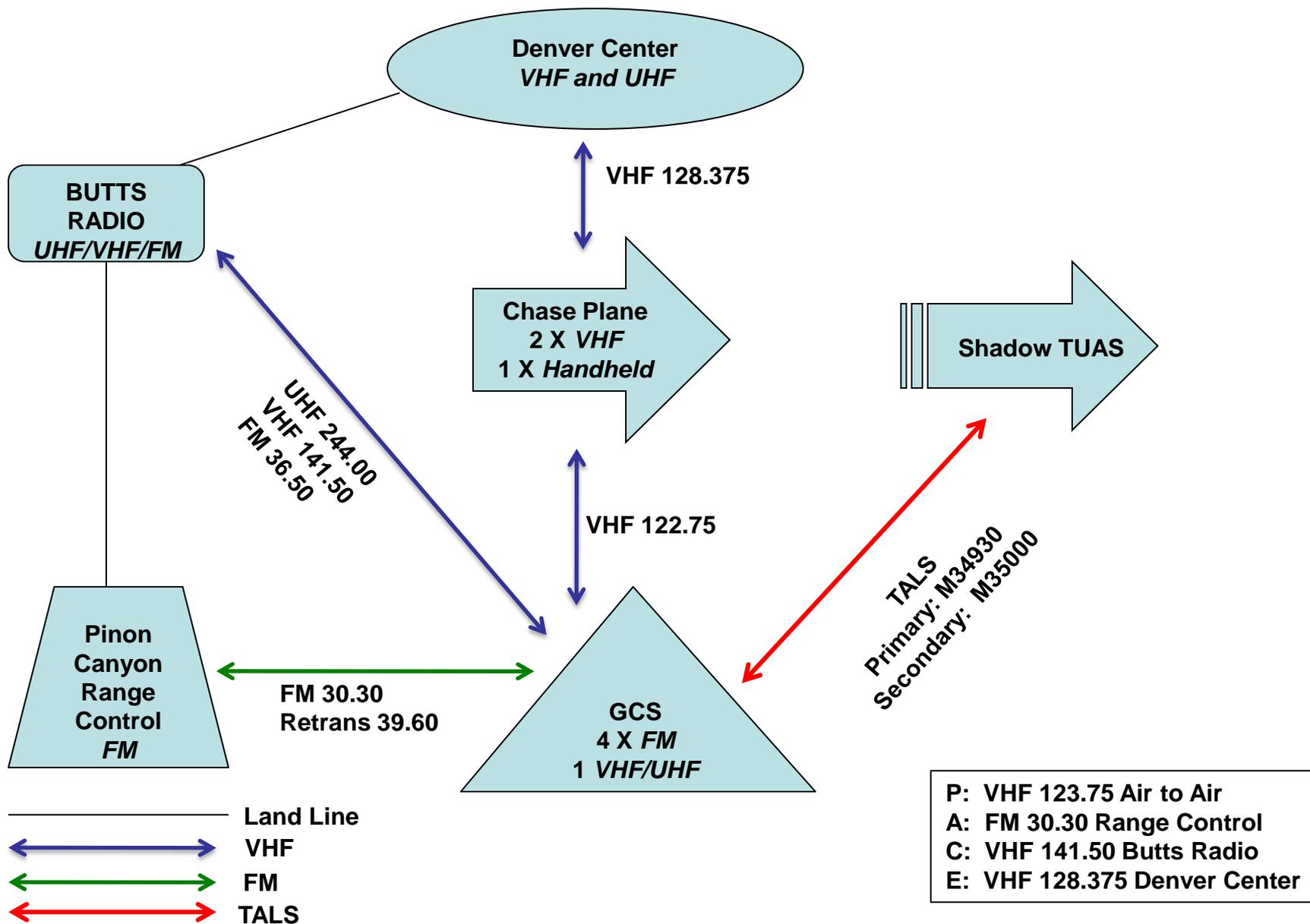


# Rehearsals

- Use 2 X T-41B/C (or C-172) planes for rehearsals.
  - 1<sup>st</sup> airplane will simulate the Shadow.
  - 2<sup>nd</sup> airplane will act as the chase plane.
    - Exercise the communications plan (VHF, FM & UHF).
    - Practice flying TTPs to allow best aerial observation of Shadow.
- Conduct Aerial Rehearsals of PCMS MOA Boundary using the Garmin GPS in plane. Also back up navigation with Maps.



# Commo Plan v4





# ***IMBTR Radio Preset Freqs***

<b>Preset Channel</b>	<b>Organization</b>	<b>Frequency</b>
1	Shadow GCS Air to Air	122.75
2	PCMS Range Control	30.30
3	PCMS RC Retrans	39.60
4	Butts Radio FM	36.50
5	Butts Radio VHF	141.50
6	Butts Radio UHF	244.00
7	Denver Center VHF	128.375
8	Denver Center UHF	379.95
9	FCCO Range Control	39.60
10	FCCO Butts Radio	38.38



# Emergency Procedures

- Loss-of-Link.
  - GCS Procedures:
    - If the GCS cannot communicate with the Shadow, the Shadow will be pre-programmed to fly back to the Loss-of-Link (LoL) location (see map on next slide).
    - The LoL location is 3 KM East of the Air Strip at 2000 AGL. Once link is re-established, the GSC will command the Shadow to RTB.
  - Chase plane Procedures:
    - Will communicate with the GCS to confirm LoL.
    - Confirm the Shadow is flying (as programmed) to LoL Rally Location.
    - Contact Denver Center if Shadow flies outside the PCMS MOA.
- Failed comms between GCS and Chase Plane.
  - Contact Range Control, Butts Radio or Denver Center to relay information to the GCS.
- If the CGS and Chase Plane cannot communicate, all operations will stop and Shadow will RTB.



# *Safety*

- Chase Plane will have a Garmin GPS 430, which will depict the PCMS MOA for situational awareness.
- Chase Plane Crews will attend the Shadow Platoon's Daily Mission Briefings prior to each flight.
- Chase Plane Crew will ensure the Shadow TUAV has less fuel than the Chase Plane.



# *Weather*

- Shadow Platoon will get their Wx Briefings from 23rd Operational Weather Squadron.
- Chase Plane will obtain Wx Briefings from Peterson AFB.
- If the Wx is below 3000' AGL, Missions will be not be flow.