

UAS MISSION PLANNING

TAWIKI OPS

Sept 06

SCOPE

- SITUATION
- MISSION
- EXECUTION
- ADMIN AND LOG
- COMMAND AND CONTROL
- WEATHER

SITUATION

- Stennis Space Center was robbed last 01 Sep 2022
- New classified technology/supplies were allegedly taken by perpetrators
- Items stolen will allegedly be sold to an unknown buyer at Tawiki Park on September 6 2022 1130-1430.
- Per surveillance footage, perpetrators were 2 military aged people.

COMMANDER'S INTENT

- Conduct an ISR Operation at Tawiki park in order to track the valuable item robbed from Stennis Space Center lab.
- Track the robber and the buyer after the transaction at Tawiki Park.
- Fill S,A,L,U,T,E info

MISSION LOCATION (TAWIKI PARK)



MISSION

MISSION:

- 1 UAS Detachment.
- Conduct the ISR mission at Tawiki Park.
- September 6 2022 since 1130-1430.
- Get information to HQ
- To locate the target take video and photo during surveillance.

OBJECTIVE:

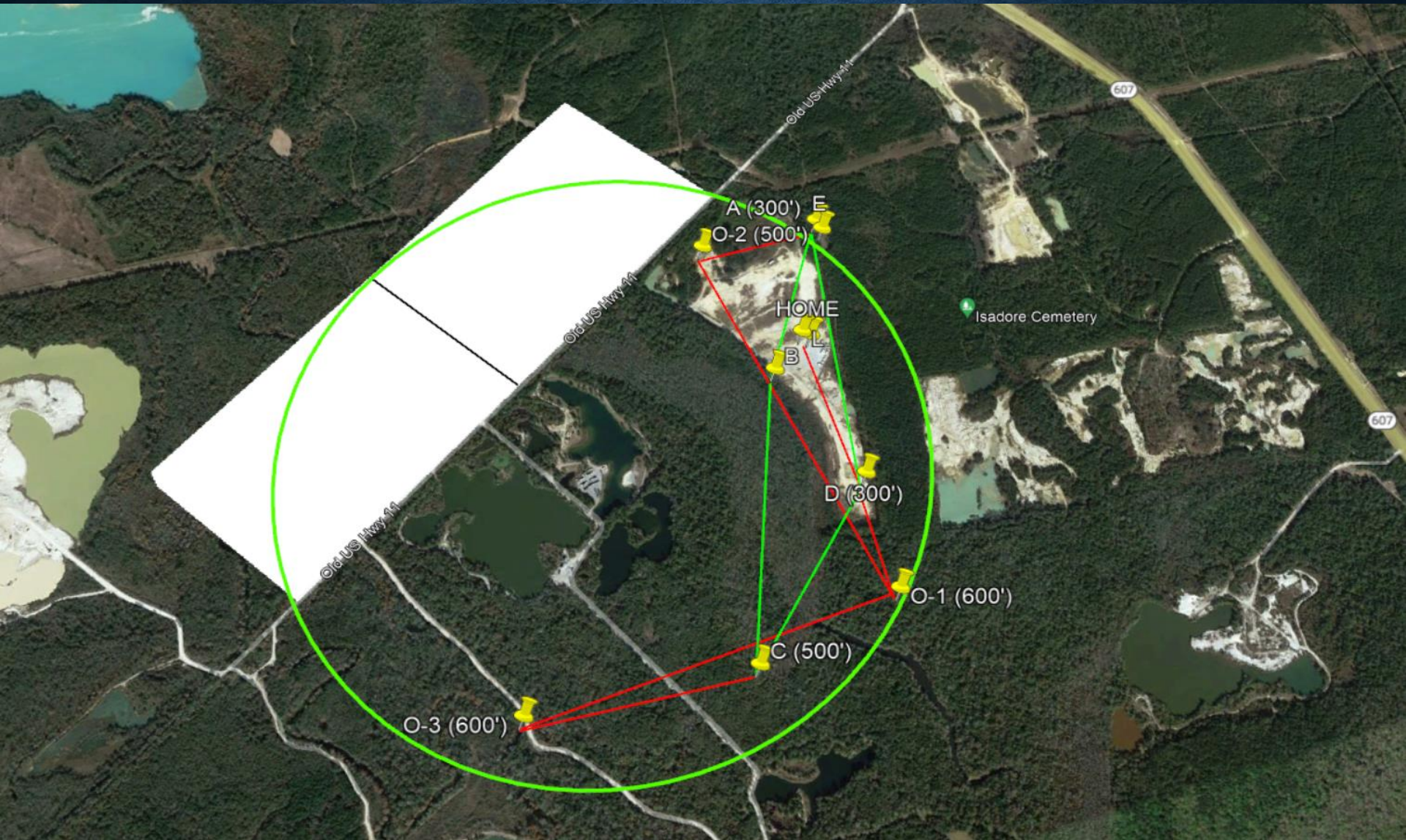
- Locate target
- Photo / video any suspect activities
- Attempt to gather high resolution photos of all people till they leave or DDT 1430.

MISSION EXECUTION

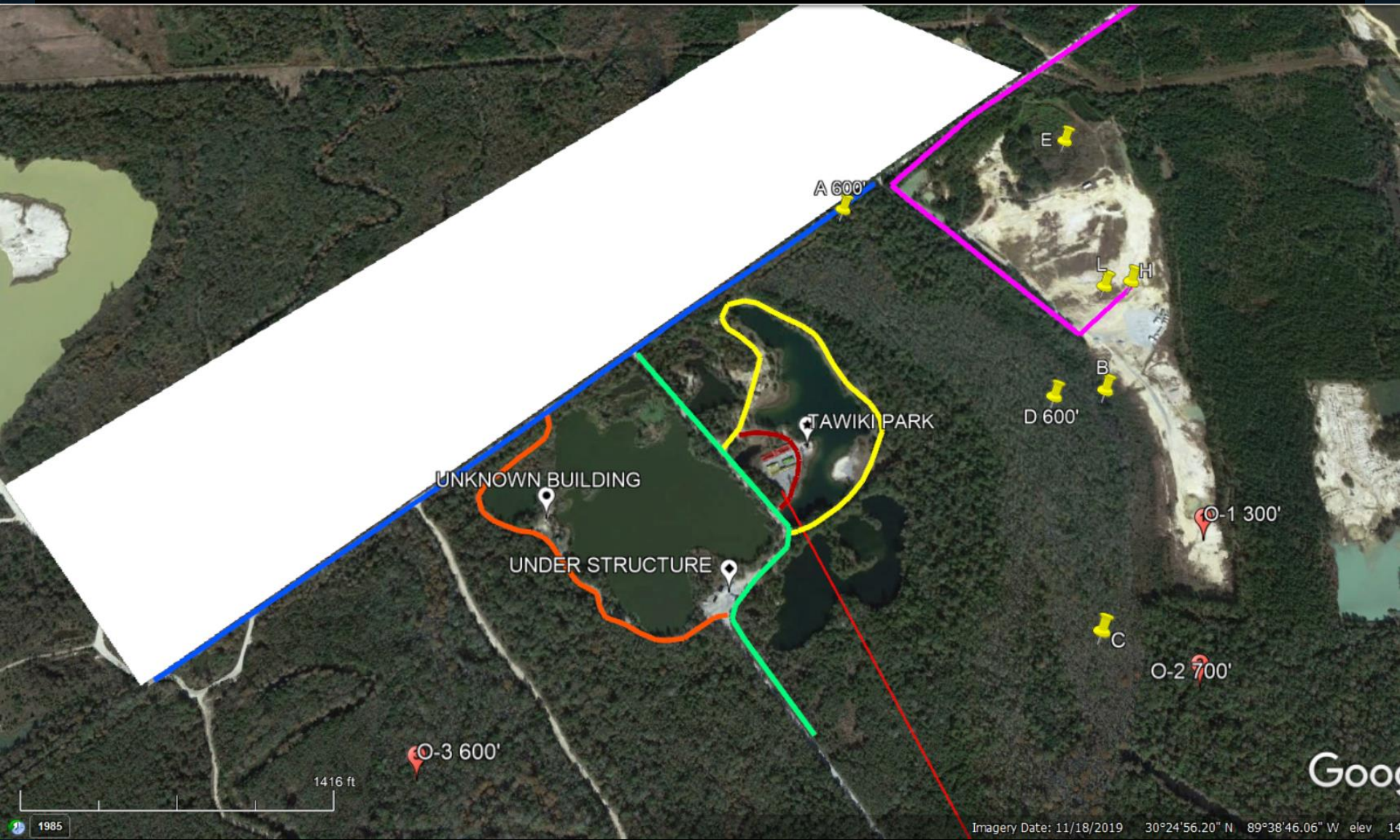
- **MISSION – TAWIKI OPS**
- **MISSION COMMANDER – LT ALFRED**

COBRA	GATOR	VIPER
MERU (VO)	SCAN EAGLE (VO)	HUANG (VO)
MARK (MO)	LOPEZ (MO)	PAICHON (MO)

COA NO 1 (MLCOA)



COA NO 2 (MDCOA)



MISSION DETAIL

TEAM DETAIL	COBRA	GATOR	VIPER
CHANNEL	010	030	050
LOCATOR	1	3	5
ALTITUDE	300-600 FT	300-600 FT	300-600 FT
LOL	GO TO RALLY (60 MIN)	GO TO RALLY (60 MIN)	GO TO RALLY (60 MIN)

FLIGHT SCHEDULE

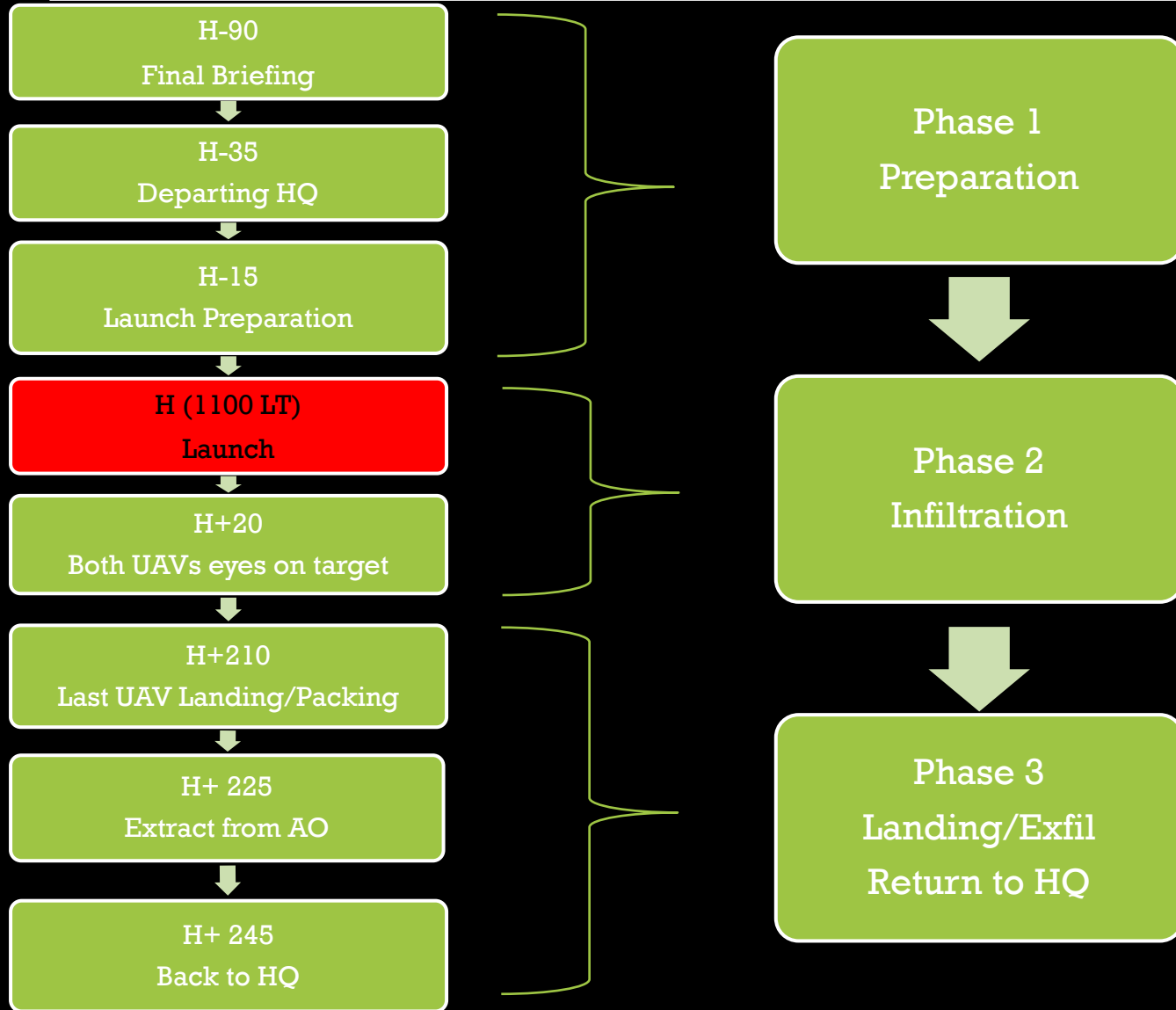
FLIGHT INTERVAL – 20 MIN

TOTAL FLIGHTS – 9

TOTAL FLIGHT HOURS – 415 MIN

SERIAL	TEAM	FLIGHT TIME	DURATION	ROUTE
1.	COBRA	1100 - 1145	45 MIN	1
2.	GATOR	1120 - 1205	45 MIN	2
3.	VIPER	1140 - 1225	45 MIN	1
4.	COBRA	1200 - 1245	45 MIN	2
5.	GATOR	1220 - 1305	45 MIN	1
6.	VIPER	1240 - 1325	45 MIN	2
7.	COBRA	1300 - 1345	45 MIN	1
8.	GATOR	1320 - 1405	45 MIN	2
9.	VIPER	1340 - 1435	55 MIN	1

Initial Timeline



DETECTION PLAN

- Enough Battery (> 21.5)
 - Switch to follow mode
 - pack up all equipment and leave the LRS, while on defensive position
 - Recover aircraft at different location along the way
 - inform security/QRF

- Low Battery (< 21.5)
 - set a different landing zone near the way back to FOB
 - Recover aircraft at different location along the way
 - inform security/QRF

GO/NO-GO CRITERIA

- **UNAVAILABILITY OF PERSONNEL.**
- **UNAVAILABILITY OF AIRCRAFT AND OTHER EQUIPMENT.**
- **WIND GREATER THAN 26 KNOTS.**
- **EXTREME FOG AND PRECIPITATION.**

ENEMY COA

EMLCOA:

- Regular Patrol by members
 - In case of compromised:
 - Leave location immediately
 - Abort transaction
 - Find new location and date
-

EMDCOA:

- Regular Patrol by members
- In case of compromised:
 - Try to shoot down AV
 - Find LRS location
 - Attack Friendly Forces

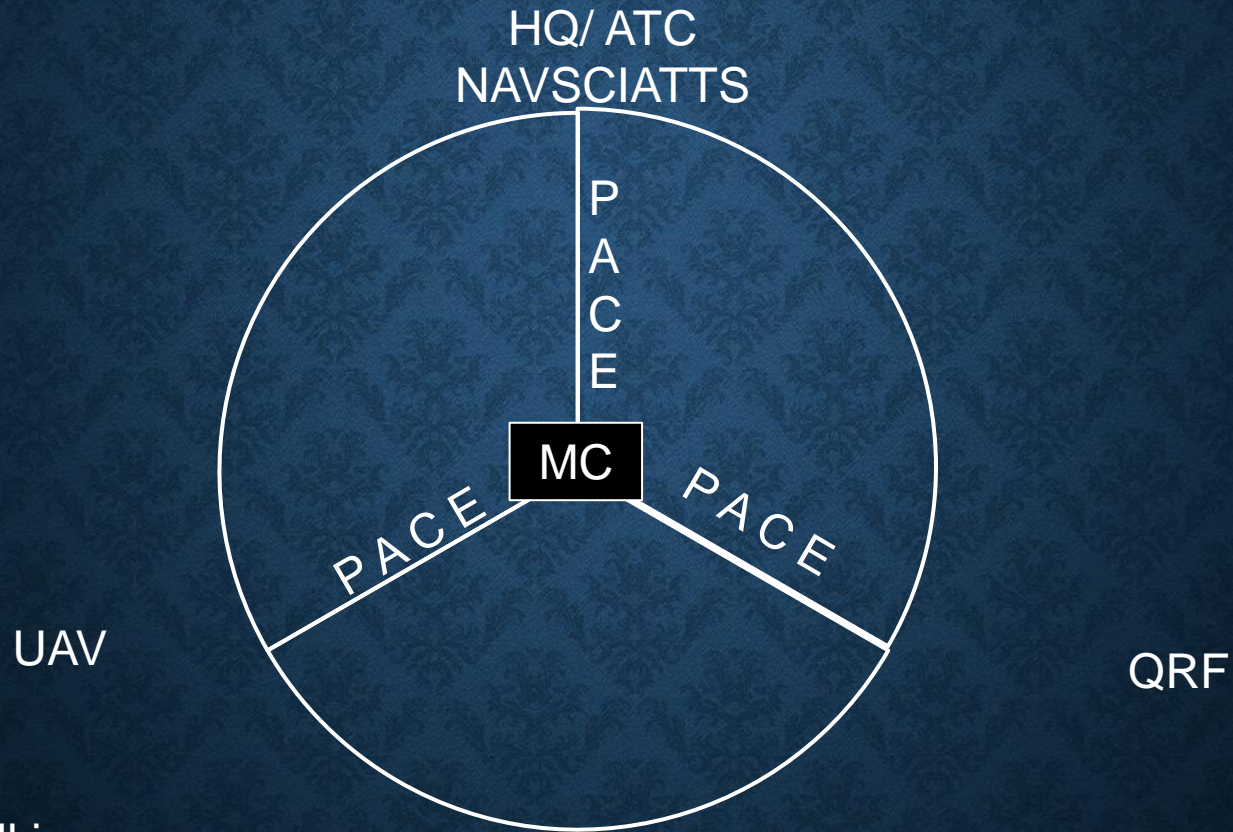
Administration & Logistics

Medical: Trauma kit Level 1

Water: Self-contained/ 2X barrel in tail trail for refill

Equipment	Minimum	Required
UAV	3	6
UAV Battery	6	9
Gimbaled	3	6
Laptop with battery	3	4
GCS with battery	3	4
Truck with Tailtrail	2	2
Radio	1	2
Satellite phone	1	2

Command & Control



P: HF
A: Walkie Talkie
C: Satellite phone
E: Mobile phone

CONSTRAINTS & RESTRAINTS

CONSTRAINTS “must do”:

- Remain undetected
- Strict to timeline
- Readiness for extraction
- Low footprint

RESTRAINTS “may not to do”:

- Flying lower than 300ft
- Flying during rain $\geq 0.26'$

OPERATIONAL CRITERIA

SUCCESS:










- Gather all the required intel according to our mission.
- Achieve Commander's Intent
- Remain undetected

FAIL:

- UAS teams detected during infil (Phase 1)
- Enemy troops gathered at area of take off (Phase 2)
- UAVs detected during flight (Phase 3)

WEATHER

Tuesday, September 6

8:30 am	79°	 Sunny	3%	N 1 mph	
8:45 am	79°	 Mostly Sunny	4%	N 1 mph	
9:00 am	80°	 Partly Cloudy	4%	NNW 1 mph	▼
10:00 am	83°	 Partly Cloudy	4%	NW 2 mph	▼
11:00 am	85°	 Partly Cloudy	3%	NW 3 mph	▼
12:00 pm	86°	 Cloudy	15%	WNW 4 mph	▼
1:00 pm	87°	 Cloudy	15%	WNW 4 mph	▼
2:00 pm	87°	 Cloudy	15%	NW 5 mph	▼
3:00 pm	87°	 Cloudy	15%	NW 4 mph	▼

Q & A

MISSION FIRST,
SAFETY IS PARAMOUNT