PSAR-17

USAF Special Tactics

and

Anti-Access / Area Denial (A2AD)

*A Concept

Capt Michael D. Smith
720th Special Tactics Group

OVERVIEW

- – Special Tactics Missions
- – A2AD Scenario
- – Low-Altitude SUAS Swarm
- – High-Altitude Balloon Network

Special Tactics Missions

– Global Access

Airfield Seizure / Survey: Launch Follow-on Missions / Off-site Raids

– Precision Strike

Interdiction / CAS / Kinetic Strike

– Personnel Recovery

CSAR / Battlefield Trauma Support and Austere Surgery

A2AD Scenario

- HALO / HAHO / Amphibious infiltration into extraction-denied, contested AO, followed by high-risk overland movement to mission-support site

- Isolated Special Tactics Teams (STT) conduct Access/Strike/PR for indefinite timeframe while denied GPS, air support, and resupply

- STTs leverage organic / national assets to open air superiority corridors while providing precision navigation and timing (PNT) for tanker bridge, strikers, and heavy airlift train

Low-Altitude SUAS Swarm

Diverse Systems at Coordinating Altitude

1x swarm per 9-man STT on 2nm (smart-hub digital tether) orbit

– **Targeting Support**

FMV, PNT (LIDAR/Celestial/Tron-Sucker), Acoustic Sensing, Geo-Tags

– **Communications Transmitter**

Enhanced LOS (Omni / Directionalized)

– **Sacrificial (Including Kinetics)**

Noise Decoys to Counter Enemy Direction-Finding / Lethal Payloads

– **Weather / Atmospherics**
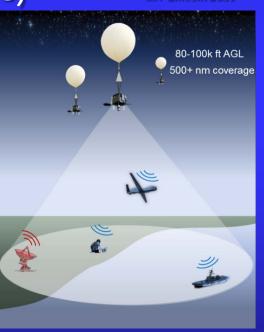
Ceiling, Visibility, Icing, Temperature, Illumination

Hierarchy with Internal Datalink and Redundancy

High-Altitude Balloon Network

– Multi-platform, distributed airborne sparse array is ground-launched or airdropped from uncontested domains for C2 (BLOS, DataLink, Gateway) and PNT (GPS, IMU)

-MIT Lincoln Labs

– Distributed aperture for jamming mitigation through beamforming

– Targeting achieved through "IFF" PID of users/emitters (known signature sequence)

– Drop resupply bundles to STTs

– Low-cost/survivable or expendable <$100k day

80-100k ft AGL
500+ nm coverage

Used in conjunction with SUAS swarm yields a diverse,

multi-layered network to support dislocated STTs for unlimited duration to extraction

Questions?

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