WFP Aviation

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WFP Overview

Strengths
- Decades of Aviation Experience, Lead - Global Logistics Cluster
- Common Services Platform for Aviation & Logistics

RPAS/UAS Initiatives
- RPAS Cargo Delivery – Coordination with ICAO, IATA & CAAs for a 1.5 MT payload RPAS operation in multiple States.
- Prepositioning UAS at UN Humanitarian Response Depots and Regional Bureaus

UAS Coordination Cell (Aviation Service, Aviation Safety & TEC)

Footprint
- 83 Countries, 6 Regional Bureaus, 15 Aviation Field Operations
- 2017: 327K Pax, 34K MT of Cargo, 3,079 Food Airdrops 80K MT
UAS/RPAS Solutions

- Live Aerial Assessment
- High Altitude Platform Station - HAPS
- Mobile Towers for Point to Point Connectivity
- Delivery of Smaller Materials
- Operation Centric – Risk Based Approval Process
- RPAS Large Cargo Delivery
- Engagements

Super Typhoon Haiyan
Puerto Rico Response - Loon

Puerto Rico Response – AT&T
First Response Imagery

Wildfire Surveillance Operation
ANNEX 2 – APPENDIX 4

Rules of the Air

- RPA shall not be operated across the territory of a contracting State without a special authorization issued by each State in which the flight is to operate.
- This authorization may be in the form of agreements between the States involved.

REQUEST FOR AUTHORIZATION FORM
Operational approval is contingent upon acceptance by the CAA of a safety case that sufficiently identifies and addresses risks, hazards, and mitigations of the proposed operations.

RPAS flight planning should include provisions for any emergencies and contingencies:

- Emergency landing/ditching locations
- Loss of C2 Link
- Interception operations
Operation-centric, risk-based approach

INTEGRATION OF RPAS OPERATIONS INTO ATM

- **Right-of-way**: RPA are obliged to comply with the Annex 2 right-of-way rules.
- **RPAS operators will need to file flight plans in accordance with Annex 2**.
- **RPAS operator should define lost C2 ink procedures that are acceptable to the ANSP and regulator**.
- **It may be difficult for ANSPs, pilots of manned aircraft and other remote pilots to acquire visual contact with the RPA due to low conspicuity**.
CROSS-ARCTIC HIGH SEAS SCIENTIFIC & SEARCH AND RESCUE
ARCTIC UAS OPERATIONS & COMMUNICATIONS PLAN

Operator Contact Information: Phone: _______ Email: _______
SATCOM or Telephone #: _______ (For Vessel Launches) Radio Call Sign: _______
Vessel #: _______ Vessel Phone: _______ VSAT: _______ Iridium: _______ 

A. 7 Days prior: Distribute email, including authorization from appropriate civil aviation authorities (CAAs) to air traffic service (ATS) providers and appropriate government authorities (e.g., FAA, NavCanada, Transport Canada, U.S. Coast Guard, State Department, Defense Department, etc.). Area commercial aircraft operators shall also be notified of the pending operation.

B. 7 Days to 24 Hours in advance: Contact appropriate ATS provider, phone # to request a Notice to Airmen (NOTAM) be issued for the operation area. Emergency and National Disaster Operations authorizations may not be able to comply with standard NOTAM issuance timelines.

C. 1 Day prior (NLT 2200 hours): Provide operation area manned aircraft operator’s schedule for next day.

D. By _______ (local time) on day of flight, prior to flight: Participating manned aircraft operators will confirm their flight plan(s).

E. 1 Hour prior:
1. Operator files an ICAO flight plan through appropriate CAA or ATS unit. Flight plans shall be submitted in accordance with Chapter 3 of ICAO Annex 2, Rules of the Air.
2. Receive weather briefing, review NOTAMs, and determine if there are any other flight plans on file for the operating area.
3. Check Receiver Autonomous Integrity Monitoring (RAIM) notices (http://www.nstb.tc.faa.gov/24Hr_RAIM.htm) or appropriate agency website.
4. Contact appropriate ATS unit via SATCOM or other acceptable means to confirm that any special use airspace or ALTRV is active.

F. 10 Minutes prior to UAS launch: In preparation for launch, broadcast a warning announcement on Marine Common FM Ch 16 and VHF _______ MHz common traffic advisory frequency (CTAF), e.g., “UAS flight operations are commencing from LAT/LONG of research vessel, or launch site.” Maintain a listening watch on VHF _______ MHz (CTAF) and _______ MHz for any area traffic.

G. During flight operations: Periodically broadcast a warning announcement on VHF _______ MHz (CTAF), e.g., “UAS flight operations are in effect between the surface and _______ feet within 10 nautical miles of LAT/LONG.”

H. Lost Link/Lost Comms (Emergency Comms): Comply with the lost link/lost comms procedures stipulated in their authorization. Operator will immediately contact appropriate ANSP unit via SATCOM and report the Lost Link condition, time, and LAT/LONG. Immediately broadcast on VHF _______ MHz (CTAF), and VHF _______ MHz or other acceptable means; e.g., “UAS flight operations are commencing emergency return at six feet AGL.”

I. Coordination with State Aircraft protocols: Operator/research vessel will maintain continuous listening watch on Marine Common FM Ch 16 and the VHF and UHF 122.5 and 243.0 guard frequencies. All UAS operations will comply with Coast Guard and any other official SAR-participating aircraft or vessel requests.

This plan assumes the Operator has obtained an authorization to operate from the appropriate CAA.
RPAS Cargo Delivery

Future Collaboration and Engagements
THANK YOU