

June 28, 2011

TAAC Conference Air Show Emergency Procedures

As per discussions with FAA UAPO (Marcello Mirabelli), due to the familiarity of the UAS to be flown at the TAAC Conference air show, the following procedures for the air show.

- 1) As per the FAA Memorandum of May 10, 2011, all items listed will be enacted and followed as part of the plan.
 - A. Helicopters with protection around the rotors will maintain at least a 50 foot lateral distance from spectators from launch to 50 ft AGL. Vertically from 50 to 300 feet AGL, the UA will have at minimum a lateral to vertical distance from the spectators. Above 300' AGL the UAS will maintain at least a 300 ft lateral distance.
 - B. All other VTOL or fixed wing UAS under 20 lbs will maintain a distance of 300 ft lateral at all times during flight.
 - C. The LLP will be in the middle of the air show flight box. Although each system will have a specific lost link specification, it will be set to the minimum programmable or 2 seconds if available to ensure safety of the spectators.
 - D. Flight routes will be set to maintain the safety of the spectators and flight of the UAS toward the spectators will be limited.
 - E. Contingency locations will be established in the flight box and away from spectators and buildings.
- 2) The following are procedures set for the air show and will be briefed prior to the air show and overseen by the FSDO (C2) Aviation Safety Inspector (ASI).
 - A. Emergency procedures, LLP and FTPs as needed for each system will be briefed and checked prior to flight.
 - B. Each system will brief an emergency procedure for their system regarding an emergency which might occur during the air show.
 - C. If communications of a system change into marginal, the flight will be concluded.
 - D. A NMSU TAAC Mission Commander will be with the UAS flight team during preflight and flight to ensure compliance with procedures and safety items.
 - E. Spectrum checks on each UAS's frequencies will be accomplished prior to flight.
 - F. Direct communications with the ABQ Enroute center will be established from the Air Show control trailer. Communications with the Flight Crew will be to the Mission Commander who will be beside the PIC for each UAS will be accomplished by UHF radio.
 - G. Comm checks will be performed and authorization given for each flight via this method.
- 3) The following are procedures in place for the air show:

- A. All flights will be below 700 ft AGL which will allow for a 300 ft buffer zone for the COA.
- B. All flight activity including launch, flight, and recovery will be inside the flight box (see attached)
- C. The flight box will be marked as per FAA Order 8900.1, Volume 3 (Chapter 6) or as directed by the FSDO C2 (ASI).
- D. Crowd line will be established prior to all flights and TAAC, Hotel, or Reservation Police will ensure compliance.
- E. Only essential personnel or those authorized by the FAA C2 and Air Boss will be allowed in the flight box.
- F. Fire/EMT will be on-site in case of emergency.
- G. Fuel will be limited as only the T-Hawk UAS uses gas, and a fire extinguisher will be located near the fuel.
- H. The Primary Observer will be located with the PIC and TAAC Mission Commander during flights.
- I. Situational awareness observers will be in other locations to ensure safety of flight. They will use UHF radios to provide any needed warnings to the Primary Observer and Mission Commander.