

CRDA COA Application Procedures

LOST LINK/MISSION PROCEDURES Capabilities and Procedures

Under the CRDA project NMSU will operate a variety of UAS that will operate from a number of different airports or isolated open desert areas, all located within the confines of the UFTC operations airspace boundaries. Regardless of the launch and recovery location, procedures will be established to ensure a loss of link contingency is managed in the safest way possible. For each UAS flight operation a loss of link point (LLP) will be established, holding airspace at the loss of link waypoint will be defined, route to the loss of link waypoint will be specified, and altitudes that the UAS will autonomously operate at be included. Even though there is a primary lost link point for each airport or remote location that is used for UAS launch and recovery the may be conditions that make the use of a different loss of link waypoint more practical from a safety perspective considering such factors as weather, airport condition, other airspace users activities, etc. Therefore, in lieu of specifying a single LLP, route and altitude for any UAS flight operation, safety is enhanced by determining the most appropriate lost LLP, route, and altitude for each flight operation based on real time conditions and location of flight operations. The PIC is responsible for establishing the loss link waypoint and revising it as appropriate, notifying ATC when a loss link occurs and providing updates to ATC, as appropriate, while the lost link condition exists.

Additionally, flight termination points (FTPs) will be establish for emergencies to ensure safe locations for the UAS to terminate if required.

Loss Link Criteria:

- Lost link point (LLP) and the associated holding airspace at the waypoint will be determined based on existing factors, i.e., forecast weather, airport conditions, known general air traffic operations, etc.
- Route of flight from any location along the mission flight route to the lost link waypoint will ensure: (1) adequate terrain clearance, (2) no flight operations within 3 nautical miles of any city or town, and (3) avoidance of all restricted area and military operations area (MOA).
- Creation of single or multiple altitudes the UAS will operate at between the location where the loss of control link occurred and the LLP and the altitude to maintain while holding at the LLP.
- LLP and associated holding airspace shall be of sufficient distance from any airport so the traffic pattern at the airport are not affected.

PIC Responsibilities:

- Prior to launch/takeoff the PIC shall confirm that the appropriate loss of link waypoint, route, and altitude(s) have been entered into the UAS's FMCS.
- Ensure the loss of link waypoint, route, and altitude(s) are modified, as appropriate, during the flight.
- Notify ATC as soon as possible of the loss of link situation and provide details on the loss of link waypoint location, route to the waypoint, and holding airspace at the loss of link waypoint.
- Periodically, as appropriate, update ATC on any changes in the loss of link situation.