Lost Data Link Procedures

Due to the redundant systems it is highly unlikely for the MQ-9 to go lost link within the Cannon AFB Class D airspace. However, in the event of loss of command and control data link between the aircraft and the GCS/LRE when airborne, the aircraft will execute the pre-planned lost link route and proceed to one of the "published" orbit areas within the Cannon Class D airspace. Orbit areas will be pre-selected depending on which traffic patterns the pilot is flying. Traffic patterns that are on the north side of Cannon AFB will use the north orbit area. Traffic patterns on the south side of Cannon will use the south orbit area.

There are three lost link scenarios that pilots must be aware of: operations in Cannon Class D airspace, operations within Melrose Range (R-5104A), and operations while transitioning (corridor) between Cannon Class D airspace and R-5104A.

If the RPA is lost link in Cannon Class D airspace, all manned aircraft launches and recoveries will be suspended until the lost link RPA is established in its lost link orbit and verified by ATC Tower controller. The pilot will ensure the pre-programmed lost link route is set to the lost link orbit as assigned by the Launch and Recovery Flight Operations Supervisor (FOS).

If the RPA is lost link inside R-5104A, the RPA will initially hold at FORRD at the current assigned altitude for 15 minutes for the crew to attempt to regain link. If link cannot be regained within 15 minutes, pre-programmed lost link route will take the RPA to VOLVO (center of orbit located at N34 16 43/W103 43 50). Lost link profiles will be designed so that altitude changes do not occur until the RPA is established at VOLVO. If link cannot be regained at VOLVO, the RPA will continue holding until fuel starvation occurs.

While transitioning within the corridor from Cannon Class D to R-5104A, the crew will change the lost link orbit from DODGE to FORRD using the current ATC assigned altitude (ONLY after being cleared to proceed within the corridor and passing point Alpha).

While transitioning within the corridor from R-5104A to Cannon Class D, the crew will change the lost link orbit from FORRD to DODGE using the current ATC assigned altitude (ONLY after being cleared to proceed within the corridor and passing point Bravo).

The transponder will also be programmed to change to code 7600 and Tower Air Traffic Control (ATC) will be notified immediately that the MQ-9 has gone lost link and is proceeding to the published pre-coordinated orbit area. The incident will be treated as an emergency, however, the Tower ATC Watch Supervisor will determine if crash phone activation is necessary.

If the MQ-9 is in takeoff or taxi mode and link is lost, the aircraft will turn off the engine, apply the brakes and stop. Tower air traffic controllers will suspend runway operations until they ensure the MQ-9is clear of any movement areas or the runway and ground crew advises that the aircraft is under their control.

If link is lost when the MQ-9 has entered the corridor, a pre-programmed lost link procedure will be set that takes the MQ-9 to the "FORRD" holding area within R-5104A. The altitude must be preset to ensure that the MQ-9 remains within the approved corridor altitude. Once reaching the holding area, the MQ-9 will orbit for approximately 15 minutes while the pilot attempts to re-establish link. If link cannot be re-established after the initial 15 minute holding pattern, the MQ-9 will fly to the orbit waypoint N 34° 15' 16.00" W 103° 47' 50.00" (within R-5104A) and hold within the restricted airspace until link is re-established or fuel exhaustion."

Flight crews and air traffic controllers will be trained on lost link procedures. These procedures will be maintained in the tower and RADAR approach control emergency checklist procedures ready reference files.

LOST LINK ORBITS