

Lost Link / Mission Procedures:

The Hunter Unmanned Aircraft System is operated with pre-established procedures in the event of link loss. If lost link occurs, the UAS will execute the programmed Return Home Data Coordinates, airspeed and altitudes are programmed/loaded into the aircraft's modular central processing assembly (MCPA) flight control computer and can be modified in flight, if required.

Programmed setting for Cochise College Operations is 2 sec for return home, (5 min for flightplan or hold loiter with continue loss of link will "NOT" be selected.) This means the AV will go return home in 2 seconds after loss of link.

NOTE: The UAS operator normally recovers the UAS upon receiving a LINK LOSS warning on displayed on the UAS operator control console within the programmed time sequence. If link is not reestablished the UA executes RETURN HOME.

NOTE: During lost link the chase aircraft will remain with the UA until arrival at lost link recovery area providing necessary radio calls with dedicated observer. The chase aircraft is not released until the observer is in place and communication is established with the AVO who assumes all radio calls and has released the chase aircraft.

RETURN HOME parameters are:

In the event of Loss of Link/Return Home Point, the Hunter aircraft will fly the autonomous preprogram flight **at last assigned altitude** to a waypoint located one and one half mile North of Cochise College Airport (Figure 1), where the potential for reacquiring direct control of the aircraft is enhanced.

When the UA is operating within the boundaries of the present COA dimensions of 100 NM by 60 NM area of operation with appropriate Chase Plane and Qualified on-board Observer, **the return home plan will be loaded that maintains our assigned altitude at 60 KIAS**, until we are at the return home point and then spiral down in left hand turn not to exceed 15 degree bank angle in a 1300 meter orbit to 6200 ft MSL (2000ft AGL) until link is regained or the UA runs out of fuel, at which time the AV will automatically deploy the parachute.

Local pattern Link Loss-Return Home point is similar with the exception that the return home plan maintains pattern altitudes until reaching the return home point.

NOTE: There is ALWAYS a fully redundant ground control station operational/up and a standby operator ready to regain link with the AV if necessary, consisting of a separate One System Ground Control Station (OSGCS) and Ground Data Terminal (GDT) antenna that is always in the "hot" standby configuration ready to gain control should such an event occur.

The LOL/Return Home Point (Figure 1) overlays an uninhabited area that is flat terrain mitigating collateral damage to personnel and property. Additionally, the Hunter UAS has installed onboard a Flight Termination System (FTS) which is also preprogrammed prior to each flight to execute the parachute recovery system to safely recover the UA at the LOL/Return Home Point in the event that control is unattainable.

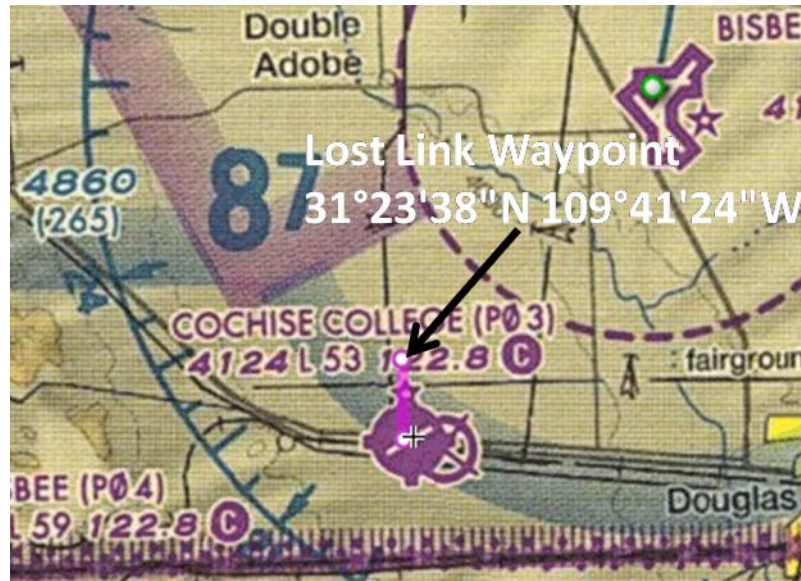


Figure 1 Lost Link Point