

**NEW MEXICO STATE UNIVERSITY (NMSU)
PHYSICAL SCIENCE LABORATORY (PSL)
TECHNICAL ANALYSIS & APPLICATIONS CENTER (TAAC)**

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SUBJECT:

Clarification of Lost Link Operations for the Orbiter UAS

Operations:

The Orbiter on board flight control system is program to operate in the following manner if there is a loss of control link between the pilot and the Orbiter UA:

1. The flight will return to the defined loss of control link, which is normally set to be near the launch point, consistent with the following criteria:

a. Via a direct route, unless, a specific route was defined in the control system prior to launch.

b. At the last assigned altitude.

2. Upon reaching the lost link point the Orbiter system will perform the following maneuvers:

a. Enter a figure 8 holding pattern.

b. Descend to the altitude that was inserted prior to launch, normally 500 feet AGL.

c. Hold for two-minutes, and then initiate the recovery mode, which entails an autonomous analysis of the prevailing wind and subsequent deployment of a parachute for descent to the surface.