

JOB SAFETY ANALYSIS

Task	Hazards	Controls
Testing	Miscommunication	<p>-ANYONE can call ALL STOP at any point if an unsafe condition/act is perceived/observed.</p> <p>-Cell phone use is PROHIBITED in test area while N.U.G.G.E.T is powered.</p> <p>-Ensure all team members are aware of procedures and roles within procedure.</p> <p>-Ensure all participants are wearing correct PPE.</p> <p>-Ensure participants/witnesses are wearing adequate clothing for weather conditions and take breaks whenever necessary.</p>
Thruster Testing	<p>Hair/Fingers/Clothing being caught in the thrusters</p> <p>Mounting Failure</p> <p>Loose wire connections</p>	<p>-Ensure all team members and spectators are a safe distance from the N.U.G.G.E.T.</p> <p>-Tie back long hair, tuck in lanyards, and secure loose clothing.</p>

<p>Thruster Testing cont.</p>		<p>-Ensure all bolts are tightened before activating thrusters</p> <p>-Ensure that all thruster guards are in place and undamaged.</p> <p>-Double check that all wires are connected and all penetrators are properly sealed</p>
<p>Manipulator Testing</p>	<p>Hair/Clothing being caught in the motor/ worm gear</p> <p>Fingers getting caught in the claws</p> <p>Loose wire connections</p>	<p>-Ensure that all team members have their hands off of the manipulator and are aware that the N.U.G.G.E.T. is being powered on for manipulator testing.</p> <p>-Tie back long hair.</p> <p>-Secure loose clothing and tuck away lanyards/earbuds/any other items that might get caught in the manipulator.</p> <p>-double check all connection and penetrator seals.</p>
<p>Liftbag Testing</p>	<p>Improper sealing</p>	<p>-Double check all o-ring seals before underwater testing.</p>
<p>Leveler Testing</p> <p>Leveler Testing cont.</p>	<p>Loose wire connections</p> <p>Poor poly magnet connection</p>	<p>-Double check the connections are good and penetrators are properly sealed and tightened.</p> <p>-ensure the surface between the poly magnets is clean of debris and the poly magnet connects properly.</p>

Launching the N.U.G.G.E.T	Miscommunication	<ul style="list-style-type: none">-Only one person has hands on N.U.G.G.E.T. as its launched.-Communication with pilots about where the N.U.G.G.E.T. is and when to engage.-Make sure pilots and the person launching have a vocal signal to let each other know when they are ready.