NearSpace Launch Inc. (NSL) has flown 450+ systems in the past five years, with 100% mission success for all commercial and research missions. NSL manufactures and produces Globalstar enabled communication systems (EyeStar radios), ThinSats, CubeSats, and Black Boxes. NSL was founded following the successful mission of TSAT with Globalstar. The mission proved one could effectively connect 24/7 to an NSL EyeStar radio via the Globalstar constellation. Heritage of 115+ EyeStar radios in space.

About GLOBALSTAR

Globalstar operates a low-earth-orbit (LEO) constellation of 40+ satellites and provides mobile satellite voice and data products and service packages. Customers around the world in industries such as government, emergency management, marine and oil & gas rely on Globalstar satellites constellation to be smarter and faster.

About EyeStar & Black Box

The NSL/Globalstar radios provide continuous connectivity for your satellite in orbit no matter where in space it is, and anytime (24/7 coverage). Real-time data at low latency of a few seconds is critical for mission success during regular, discovering satellite health problems early, making real-time data available for payload triggering, failure analysis, or monitoring attitude performance. The Simplex radios have worked well in polar and lower inclinations and for tumbling spacecraft up to 12 rpm. Packet throughput is over 90%, over 100% of the earth (see AIAA Papers #11). No ground station is necessary with the NSL radio since all secure data is available on the internet in near real-time from the Globalstar commercial ground stations.
**EyeStar-S3**

End-to-End System, 24/7 connected to Globalstar constellation, with latency of seconds, Max 600 Kbytes/day, Anywhere-Anytime, 100% On-orbit success, Flight Ready, TRL 9, Compliant with new FCC requirements

The 140 gram 10x8.3x0.9cm Black Box and S3 can ID its satellite with GPS within a few minutes after turn-on while in LEO orbit from pole to pole 24/7. The Black Box is an independent barnacle that can track damaged satellites or identify problems early, several hours before ground station contact. TLE can be produced and sent automatically to the 18th Squadron and for the payload team within minutes of orbit deployment. The Black Box subsystems are TRL 9.

**EyeStar-Tag**

The 22 gram 5.3x2.5x0.9cm Tag and S3 can ID its satellite with integrated GPS within a few minutes after turn-on while in LEO orbit from pole to pole 24/7. The Tag can track damaged satellites or identify problems early, several hours before ground station contact. TLE can be produced and sent automatically to the 18th Squadron and for the payload team within minutes of orbit deployment. The Black Box subsystems are TRL 9.

**Black Box-Patch**

140 gram 10x8.3x0.9cm Black Box and S3 can ID its satellite with GPS within a few minutes after turn-on while in LEO orbit from pole to pole 24/7. The Black Box is an independent barnacle that can track damaged satellites or identify problems early, several hours before ground station contact. TLE can be produced and sent automatically to the 18th Squadron and for the payload team within minutes of orbit deployment. The Black Box subsystems are TRL 9.

**Black Box PC 104**

9x9.6x1.3 cm Black Box and S3 can ID its satellite with GPS within a few minutes after turn-on while in LEO orbit from pole to pole 24/7. The Black Box is an independent system that can track damaged satellites or identify problems early, several hours before ground station contact. TLE can be produced and sent automatically to the 18th Squadron and for the payload team within minutes of orbit deployment. The Black Box subsystems are TRL 9.

**Black Box-Standard**

140 gram Black Box and S3 can ID its satellite with GPS within a few minutes after turn-on while in LEO orbit from pole to pole 24/7. The Black Box is an independent barnacle that can track damaged satellites or identify problems early, several hours before ground station contact. TLE can be produced and sent automatically to 18th Squadron and for the payload team within minutes of orbit deployment. The Black Box subsystems are TRL 9.