Payload assembly consisted of three parts, the nosecone, the electronic data collection and transmission bay, and a foldable propeller with rotating shaft connected to a R/C brushless motor. Brushless motor leads are then connected the electronics bay.

Eyelet on top of propeller connected to a swivel and parachute.
Photograph #2 – Assembled Payload.

Assembled payload. Electronics bay is inserted and secured to the nose cone and the base of the propeller system is secured to the shoulder of the nose cone.
Micro Ni-cad batteries to be charged by propeller on decent.

Eagle Tree Systems 10Hz GPS Expander Module

Eagle Tree Systems USB flight data recorder.

Li-ion battery to power flight data recorder

Programmable Castle current limiter used to extend battery life and bring voltage to within flight data recorder operation range

Photograph #3 – Electronic Bay.

Close-up of electronics bay main section.
Eagle Tree Systems servo current monitor module used to measure current provided to the Ni-cad batteries for the rotating propellers on decent.

Leads used to plug into brushless R/C motor.

Eagle Tree System 2.4 GHz transmitter

Photograph #4 – Electronic Bay.

Close-up of electronics bay back section.

Data Downlink for In Flight InSight

Kenny Bergschultz, NAR #86971

2014 NAR National Sport Launch
Photograph #5 – Remote Receiver and Live Data Collection.

Typical Eagle Tree System Seagull Wireless Dashboard connected by USB cable to a Dell X1 laptop computer.

Eagle tree System Data Recorder Software shown with specified data collection.
Photograph #6 – Remote Receiver.

Eagle Tree System Seagull Wireless Dashboard connected by USB cable to a Dell X1 laptop computer for real time data collection.
GPS location of payload during launch and decent. Enter 43 15.8028, -86 1.9295 for 2014 NSL launch location verification in Google Maps. (Muskegon, MI)

Photograph #7 – Typical Screen Capture – Live Data Feed.

Eagle Tree System Seagull Wireless Dashboard connected by USB cable to a Dell X1 laptop computer for real time data collection.

Note: Direct video creation of live feed is not available with data recorder. Attached video created from a series of screen shots during decent.