

Command Module 1 Checklist

NS-_____

Pre-Flight Checklist

Cell Tracker

- Tighten Cell Tracker GPS Connection
- Cell Tracker SD Card
- Tighten Cell tracker cellular connection
- Power connection
- Clear SD card

Habduino (Top Plate)

- Tighten Habduino GPS Connection
- Tighten 2M RF Connector (Out the back)
- Power connection

Habduino (Bottom Plate)

- Tighten Habduino GPS Connection
- Tighten 2M RF Connector(Out the front)
- Power connection

Link

- Tighten Antenna Connection (bottom)
- Tighten Antenna Connection (side)
- Power connection

Systems Check

-Top Plate

- Top LVC Switched on
- Cell Tracker On
- Habduino On
- Receive Text from cell tracker
- Received Packets from Hab
- Place desiccants

-Bottom Plate

- Bottom LVC Switched on
- Habduino On
- LINK On
- Received Packets from Hab
- Ground receiving packets from Link and all payloads
- Place desiccants

Seal Box

Packing Checklist

Split Launch and Recovery

NS- 76

Launch Vehicle:

- Inflation Equipment
- Balloons *tomorrow*
- Helium tanks *~ Dale*
- Tarp (Big)
- Parachute and Ring *tomorrow*
- Command Module kit *tomorrow*
- Broom
- Trash Bag
- Square Plywood Bases
- Scale for Measuring Payloads

Payloads

- Battery box *~ tomorrow*
- Battery Charger *~ tomorrow*
- Payloads *~ tomorrow*
- ~~Spare LVCs~~
- Tyler's Weather Ground Station

Kits/Buckets

- BLT Bucket
- Inflation Bucket
- Launch Kit
- Main tracking box *tomorrow*
- Launch Solder Kit

Tracking/Communications

- Tracking Laptop *tomorrow*
- Tracking Antennas
- ~~900s Ground station~~
- Radios
- Walkie-Talkies
- Wi-Fi hotspot
- Power Inverter
- ~~Car magnets~~

Recovery Vehicle:

Recovery

- Bow Saw
- Extension Pole
- Seythe
- Sling Shot
- Tarp (Small)

Kits/Buckets

- Recovery Bucket *~ ziploc bags / bean bags*

Tracking/Communications

- Tracking Laptop
- Tracking Antennas
- Radios
- Walkie-Talkies
- Wi-Fi hotspot
- Power Strip(s) *tomorrow*
- ~~Car magnets~~
- Car battery

Launch Director Checklist

NS-76

Launch Location: Valley Elementary School Jefferson, MD

Launch date: 4/14/18

Payload Lineup:

Payload Name	POC Name	Passed Inspection	Inspector Initials
Helios	Walker		
Command	Shailesh/Jonathan		
BITS	Tyler		
VIRDE	Zach		
AETHER	CTU		
AOSC2			
AOSC2			
Turtle Nest	Michael Osca		
Axis			

Balloon Size(s): 1600s

Callsigns:

L-3 Day Checklist

___ Verify all payloads have submitted launch readiness forms

L-2 Day Checklist

___ Conduct ground track meeting

___ Print van inspection forms

___ Create van position roster

L-1 Day Checklist

Pick up vans

Conduct van inspections (attach checklists)

___ Van 1 (Callsign: _____)

___ Van 2 (Callsign: _____)

___ Van 3 (Callsign: _____)

___ Van 4 (Callsign: _____)

___ Inspect all payloads against payload requirements document

Charge batteries

Portable car battery

Wi-fi hotspot (AT&T)

Wi-fi hotspot (Sprint)

Verify AT&T hotspot is paid

Inventory launch supplies (checklists in respective boxes)

BLT Bucket

Inflation Bucket

Recovery Bucket

Launch Kit

Main tracking box

Launch Solder Kit

Verify completion of Command Module L-1 day checklist (attach checklist)

Pack (attach checklist)

L-0 Pre-Departure Checklist

- Conduct head count against van roster
- Signed waivers from all participants
- Verify all convoy vehicles have Zello
- Radio check

L-0 Launch Site Checklist

Launch/Inflation Setup Checklist

- Pre-launch setup meeting (See PAO)
- Tarp setup (indicate full or half configuration)
- Place BLT in optimal launch location
- Indication direction of payload string from balloon
- Parachute-to-balloon lanyard configured
- Parachute and ring untangled
- Command Module in place
- Harmless payload stickers on each payload
- Payload string lined up and assembled

Pre-Inflation Checklist

- Hook lanyard from parachute around balloon neck before connecting to inflation tube***
- Slings* Tethers in place
- N/A* Brief 2 tether handlers (See PAO)
- Did Dr. Bowden call the tower? (See Dr. Bowden)
- Balloon in BLT ready to go (See BLT Engineer)

Pre-Release Checklist

- Check payloads are ready
- Final communications check

Countdown & Release

- ___ Inform payload PoCs to hold payloads above the launch pad
- ___ Tether handlers ready
- ___ Slowly raise payload string
- ___ Measure Total Free Lift = _____ (optional)
- ___ Countdown from 10 (Final Countdown Song Optional)
- ___ Release!

Release Time Mark = _____

L-0 Post-Launch Checklist

- ___ Ensure all materials are stowed in correct boxes/kit
- ___ Stow all materials in lab
- ___ Ensure vans are cleaned out
- ___ Download APRS logs from aprs.fi and upload to server
- ___ Remind payload designers to upload data to server