

Flight Director Checklist

NS-55

Launch Location = Clear Spring MD

Launch Date = Saturday June 25, 2016

Attempt Number = 1

Payloads:

① Cmd ~4.5 lb

② Bach's Box ~2.5 lb

③ TuikHonest ~2 lb

④ SCORCH ~.6 lb

⑤ BADASS ~ 3lb

Comments:

One Month in Advance:

- Vehicle Rental (check that outlets work)
- Helium Ordered
- HAM Radio Club notified about using UMD's call sign

Launch Week

Pre-Flight Planning Checklist

- Send the launch announcement email
- Create Zello station
- Print waivers
- Preliminary weather check
- Preliminary ground track check
- Payloads determined and ordered
- Vehicles identified and configured for tracking

Pre-Flight Systems Checklist

- BLT Bucket (check Inventory) ready ✓
- Inflation Bucket (check Inventory) ready ✓ (need lighter) (and gloves)
- Recovery Bucket (check Inventory) ready ✓
- Launch Kit (check Inventory)
- Balloons (2) 1 3000g ✓ 1 1600g ✓
- Batteries (check if charged)
- Bow Saw
- Clean Up Bucket (Broom, Dust Pan, Garbage) remind Bowden
- Extension Pole
- Functioning Radios and GPS
- Helium
- Machete (Steve)
- Parachute and Ring + Assembled Command Module kit
- Phone Chargers
- Power Inverter
- Scythe
- Sling Shot
- Radios/GPS
- Tarp (Big and Small)
- Tracking Antennas 1/2
- Van Keys 1/2
- Walkie-Talkies 3/3
- Payloads
- Cookies

Wi-Fi hotspot

FAA Notification Checklist

- File NOTAM (6 hours prior) via fax: ~~703-777-8807~~
- Call NOTAM desk (866-225-7410 ext 9) to verify that fax came through and get assigned NOTAM number:
NOTAM # _____
- _____ Call Washington Center (2 hours prior): 703-771-3470
- _____ Call HGR Tower 301-797-2039 at 7am

Radios + Callsigns Checklist

Command Module: _____
Main tracking van: _____
Second tracking van: _____
Specific payloads: _____

Others: _____

PRE-LAUNCH MEETING / PRE-LAUNCH DAY

- Launch Confirmation/Postponement Email
- Print Contact Information Sheet (Payload Comm, Comm Officer, etc.)

Pre-Launch Meeting

- Everyone should have signed a waiver: new ones collected, sign-in sheet for other visitors
- Everyone needs to decide right now where they are going after the launch: chase, or home?
- Chase Vehicles will need to leave semi-immediately (so go potty now and be ready to leave right after release)
- Everyone helps clean up, so we can get out efficiently

Final Checks

Waiver Check

Weather Check

Ground Track Check

Launch Day

TorHonest on @ 9:09
GPS Lock @ 9:15

On launch pad

- Parachute to Balloon lanyard configured
- Parachute and Ring assembled
- Command Module in place
- Payload string lined up and assembled
- Harmless payload stickers on each payload
- Payload string weighed: Necessary Free Lift = _____
- Antennas in place
- No sharp edges or weak links

Pre-Inflation Checklist

- Helium Tanks uncovered and regulator hooked up
- Hook lanyard from parachute around balloon neck before connecting to inflation tube!**
- Instructions and Gloves to BLT anchors
- Instructions given to tether handlers & tether in place
- Full payload string laid out and ready to go
- Balloon in BLT ready to go

Inflation

BLT Instructions: (Always use BLT!!!)

- Lay out BLT with inside facing up (Velcro side down). Immediately fold together to prevent moisture from getting inside the BLT.
- When ready for inflation, Place balloon in the center with the neck facing one open end.
- Fold around the balloon, the Velcro seam should be towards one side so it doesn't end up on the top when fully inflated
- Designate people to hold BLT down. (At least 4 people)

Start inflating at max flow rate

Inflation Complete: Measure Total Free Lift = _____

Pre-Release Checklist

- Check payloads are ready
- Good final communications check

Countdown & Release

- All Payloads turned on
- Raise Stack above pad in full flight configuration
- Telemetry and Downlink good
- Tether handlers ready
- Countdown from 10
- Release

Release Time Mark = _____

Initial Heading of Flight = _____

Post launch (during chase)

- Call Washington Center
 - 60,000 ft.
 - Burst
 - Landing