

# Flight Director Checklist

NS- 48

Launch Location = Clear Springs Elementary School

Launch Date = June 18<sup>th</sup>, 2015

Attempt Number = 1

## Payloads:

④	BADASS	4.5lb
①	Specter v3	1lb/2lb
②	Looking Glass	3lb
	Command Module	(3lb)
	BADASS Host	< 1lb
③	TMU Test Payload	< 1lb
	} Atmos	1/2 lb

## Parachute:

## Comments:

balloon bible  
↳ twitter Bismar  
↳ zello  
↳ rope coiling

### One Month in Advance:

- ✓ ~~Vehicle Rental (check that outlets work)~~
- ✓ Helium Ordered
- ✓ tell HAM Radio Club that we're using their callsign

### Launch Week

### Pre-Flight Planning Checklist

- ✓ Launch Announcement Sent to Email List
- ✓ ~~Launch Site Confirmed~~
- \_\_\_ ~~Launch Site Accommodations~~
- \_\_\_ Payloads Lined Up
- \_\_\_ Vehicles identified and configured for tracking
- \_\_\_ Weather Check
- \_\_\_ Ground Track Check

✓ create zello

— Waivers

### Pre-Flight Systems Checklist

- ✓ ~~Inventory~~ Bucket (check Inventory)
- ✓ Recovery Bucket (check Inventory)
- \_\_\_ Balloon
- ✓ Backup Balloon
- \_\_\_ Batteries (check if charged)
- ✓ Bow Saw
- ✓ Cardboard Tubes
- \_\_\_ Helium
- \_\_\_ Launch Kit
- \_\_\_ Machete
- ✓ Multimeter (~~add to IB~~) → put in soldering bucket
- \_\_\_ Parachute and Ring + Assembled Command Module
- ✓ Payload String + Tubing
- \_\_\_ Phone Chargers★
- \_\_\_ Power Inverter
- ✓ Sling Shot
- \_\_\_ Spring Scale (check batteries) (~~add to IB~~) ←★ get one that measures over 20 lbs
- ✓ Sufficient Functioning Radios & GPS
- ✓ Tarp
- \_\_\_ Tracking Antennas
- \_\_\_ Van Keys
- ✓ Waivers
- ★ Walkie-Talkies (charging)

→ create a soldering still bucket

→ add a garbage bucket

✓ scythe

✓ extension pole

— bowm (to sweep tarp)

## FAA Notification Checklist

- Notify Secret Service / Air Security Program ([ASP@ussf.gov](mailto:ASP@ussf.gov).)
- 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 (NB: Tower opens at 7am on weekdays)
  - 2 hours prior
  - before inflation
  - 5 min before release
  - after release
  - after touchdown

*7am  
US call tower*

## Radios + Callsigns Checklist

- Command Module: W3EAX-11, KB3721-9 (~~KB3721-8~~)
- Main tracking van: KD2DRT-1
- Second tracking van: Cooper's car: KC3EMR-1
- Specific payloads: KC3EMR-17
- \_\_\_\_\_
- \_\_\_\_\_

Capitol Technology University: X

## Launch Day

### Assignments

- Still Photographer: \_\_\_\_\_
- Video Photographer: \_\_\_\_\_
- Payload Commander: \_\_\_\_\_
- Balloon Controllers
- Tether Line Handlers
- Clean Up Crew
- Navigators for each Chase Vehicle

### 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, HCC station, or home?
- Chase Vehicles will need to leave semi-immediately (so go potty now and be ready to leave right after release)
- Those who are not chasing should stick around long enough to clean up and secure everything

### Final Checks

- \_\_\_ Weather Check
- \_\_\_ Ground Track Check

### Vehicle Integration

- \_\_\_ Parachute to Balloon lanyard configured
- \_\_\_ Parachute and Ring assembled
- \_\_\_ Command Module in place
- \_\_\_ Payload string lined up and assembled
- \_\_\_ Payload string weighed: Necessary Free Lift = \_\_\_\_\_
- \_\_\_ Antennas clear
- \_\_\_ No sharp edges, no weak links

### Pre-Inflation Checklist

- Helium Tanks uncovered and regulator hooked up
- Hook lanyard from chute around balloon neck before connecting to inflation tube!**
- Instructions and Gloves to balloon handlers
- Instructions given to tether handlers & tether in place
- Full payload string laid out and ready to go
- Get lift measuring setup in place and measure total lift as needed

### Inflation

Start inflating at max flow rate

Inflation Complete: Measure Total Free Lift = 215 lbs

### Pre-Release Checklist

- Clear to Launch (Range Safety)
- Payloads Ready (Payload Commander) → ✓ / *no release keys*
- Tracking Good (CapComm)

### Countdown & Release

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

Release Time Mark = 8:14 am

Initial Heading of Flight = \_\_\_\_\_

## Chase Teams

**Chase 1:** Pilot = Nick  
 Navigator = Neel Dale Tracking Neel  
 Communications Officer = Camden  
 Back Seat 1 = Thomas      Back Seat 6 = \_\_\_\_\_  
 Back Seat 2 = \_\_\_\_\_      Back Seat 7 = \_\_\_\_\_  
 Back Seat 3 = \_\_\_\_\_      Back Seat 8 = \_\_\_\_\_  
 Back Seat 4 = \_\_\_\_\_      Back Seat 9 = \_\_\_\_\_  
 Back Seat 5 = \_\_\_\_\_      Back Seat 10 = \_\_\_\_\_  
 Cell Phone Number: \_\_\_\_\_

Cooper? **Chase 2:** Pilot = Cooper  
 Navigator = Sky Tracking Steve  
 Communications Officer = James  
 Back Seat 1 = \_\_\_\_\_      Back Seat 6 = \_\_\_\_\_  
 Back Seat 2 = \_\_\_\_\_      Back Seat 7 = \_\_\_\_\_  
 Back Seat 3 = \_\_\_\_\_      Back Seat 8 = \_\_\_\_\_  
 Back Seat 4 = \_\_\_\_\_      Back Seat 9 = \_\_\_\_\_  
 Back Seat 5 = \_\_\_\_\_      Back Seat 10 = \_\_\_\_\_  
 Cell Phone Number: \_\_\_\_\_

Cars: Bowden → nephew & daughter  
 [Cooper → Steve, Sky, James]  
 Bryan → <sup>Van</sup>~~(som)~~ Bianca, ~~truck~~ (com) Josh, Lauren  
 Van → Nick, Neel, <sup>truck</sup>~~(som)~~, Camden (com)  
 Dale (van) Thomas

- ~~\*~~ Josh
- ~~\*~~ Camden
- ~~\*~~ (Cooper)
- ~~\*~~ (Sky)
- ~~\*~~ (Steve)
- ~~\*~~ Neel
- ~~\*~~ ~~Josh~~
- ~~\*~~ (Bryan)
- ~~\*~~ Nick
- ~~\*~~ Lauren?
- ~~\*~~ Bianca
- ~~\*~~ Dale
- ~~\*~~ James?
- ~~\*~~ ~~Neel~~ Julia?

Bryan's Pilot: Bryan  
 Navigator: ~~Bianca~~ Tracking  
 Comm: Josh  
 Back seat: Lauren