6925

Flight Director Checklist

NS-49

Launch Location = Clear Spring

Launch Date = 7/18

Attempt Number = 1

Payloads:

Host _____ 800 g

White Box _____ 2.2 lb/1 kg

Command Module _____ 4 lb

Turtle Nest _____ 600 g

Radar Reflector _____ 320 g

_____

_____

_____

_____

2720 g
2720 + 4 lb

5.996 + 4

9.996 lb

Parachute:

Comments:

One Month in Advance:
- ✓ Vehicle Rental (check that outlets work)
- ✓ Helium Ordered
- ___ HAM Radio Club notified about using UMD's call sign ✳

W3EAX9, W3EAX11, KC3EMR12

Launch Week

Pre-Flight Planning Checklist
- ✓ Launch Announcement Sent to Email List
- ___ Payloads Lined Up
- ___ Vehicles identified and configured for tracking
- ✓ Weather Check
- ✓ Ground Track Check
- ___ Create Zello Station
- ___ Print waivers

Pre-Flight Systems Checklist
- ✓ Inflation Bucket (check Inventory)
- ✓ Recovery Bucket (check Inventory)
- ✓ Balloon
- ✓ Backup Balloon
- ___ Batteries (check if charged)
- ✓ Bow Saw
- ✓ Clean Up Bucket (Broom, Dust Pan, Garbage)
- ~~Cardboard Tubes~~ ✓
- ✓ Extension Pole
- ✓ Helium
- ✓ Launch Kit AKA command module stuff
- ✓ Machete *Remind Steve
- ✓ Multimeter
- ✓ Parachute and Ring + Assembled Command Module
- ✓ Payload String + Tubing
- ✓ Phone Chargers (Reminder to Navigators)
- ✓ Power Inverter
- ✓ Scythe
- ✓ Sling Shot
- ___ Spring Scale + digital scale (check batteries)
- ✓ Sufficient Functioning Radios & GPS

✓ Tarp
✓ Tracking Antennas
✓ Van Keys
✓ Walkie-Talkies

✓ BLT

FAA Notification Checklist

___ Notify Secret Service / Air Security Program (ASP@usss.)
___ 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: _W3EAX9 , W3EAX-11, KC3EMR-12_
Main tracking van: _____
Second tracking van: _____
Specific payloads: _____
_____
_____

Capitol Technology University: _____

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
✓ "Harmless" tags on payloads
✓ 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 = ___14 16___

Pre-Release Checklist

- Clear to Launch (Range Safety)
- Payloads Ready (Payload Commander)
- 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 = ___9 : 57___

Initial Heading of Flight = ___UP___

SE

Chase Teams

Chase 1: Pilot = _____
       Navigator = _____   Tracking = _____
       Communications Officer = _____
       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: _____

Chase 2: Pilot = _____
       Navigator = _____   Tracking = _____
       Communications Officer = _____
       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:

ft
_____

5925 @
6971 @
8303
9000
11384
12716
14402
16200
18000
19500
21643
24000
25862
28736
29988
32102
34084
36131
37433
39269
41380
42883
44000
45921
47500
48168
48628

St James
School

7 min
8 min
9.5 min
10.5
10.5
13   est burst
           30 km
14.5

16.5min   50081   55   70763 1:23
18 min   51672   57   71878 1:24
20 min   52735   58.5   73076 1:26
22   53037   59   74018 1:27
24   53939   1:00
26   54500   1:01
28   55520   1:02
31   56690   1:04
32.5   57154   1:04.5
34.5   58204   1:06
36.5   59556   1:07:30
38.5   60140   1:08
40   61364   1:10
43   62480   1:11
44.5   63306   1:12:30
47   64451   1:14:30
49   65570   1:16
50/51   66672   1:17:30
52.5   67203   1:18:30
52/53
53.5