Balloon: 1200 grams, Balloon Date: August 2018

1

Garmin

2

Cameras

3

O3sonde

4

MSA

5

N/A

Helium

Payload Mass: 3633 g

Payload Weight: 8.0 lb

Total Mass: 4350 g

Total Weight: 9.6 lb

Fill Ballast Weight: 14.4 pounds

Size of Tank #1:

Tank #1 Starting Pressure: psi; Ending Pressure: psi

Flow meter reading at end of tank #1 usage:

Size of Tank #2:

Cutdown (two)

Mass: 324 grams

Tank #2 Starting Pressure: psi; Ending Pressure: psi

Flow meter reading at end of tank #2 usage:

Size of tank #3:

Tank #3 Starting Pressure: psi; Ending Pressure: psi

Flow meter reading at end of tank #3 usage:

Parachute

Mass: 393 grams

Total “psi used” (Actual volume depends on tank size.)

Cylinder capacities if full: 200 tanks = 5663 L, 300 tanks = 8495 L

Cylinder volumes: 200 tanks = 43.9 L, 300 tanks = 49.8 L

Ideal gas law example: V2 = V1\*(P1/P2) = 49.8 L \* (*2500* psi/12.27psi)

(12.27psi is ambient at 5000 ft)

Calculated volume from tank 1: \_\_\_\_\_\_\_\_\_\_\_\_

Mass 1: 431 grams

Calculated volume from tank 2: Tank 3:

Total helium volume used: \_\_\_\_\_\_\_\_\_\_\_\_

Mass 2: 1400 grams

Cut Down System. Design/Type = Page. See below for settings.

Parachute Description: Orange, 60-inches, center hole

Mass 3: 995 grams

Payload #1 Description:

Garmin 360 full surround video camera with external battery.

Payload #2 Description:

G.B. Guest Payload with cameras and visual cutouts for display.

Mass 4: 398 grams

LoJack tracking beacon.

Payload #3 Description:

Ozonesonde/radiosonde: Frequency = 403 MHz

Payload #4 Description:

Mass 5: 0 grams

Multi-Sensor Array (MSA). Test flight for version 2.0 in Rubbermaid

housing.

Payload #5 Description:

Radio

Mass: 387 grams

N/A

RATS call signs \_\_KE7ROS-11\_ and \_\_KD7ICN-11\_

Launch Site Location: , North: West:

Arrival Time at Launch Site:

Launch site wind speed and direction:

Cloud cover and type:

Fill start time: Fill stop time: Total time for fill: .

Cut Down Flight Pin Pulled Time (start of timer) =

Cut Down Duration: Estimated Cut Down Time:

Cut Down Terminal Altitude(s):

Approximate Balloon Dimensions at launch: Diameter: meters, Height: meters

Launch Time:

Average Ascent Rate: ft/min = m/s

Burst Altitude: ft = m

Burst Time:

Landing Time:

Average Descent Rate: ft/min = m/s

Landing Location: , North: West:

Notes: