

Annie Zhou

Report Date: 20 October 2024

Launch Date: 12 October 2024

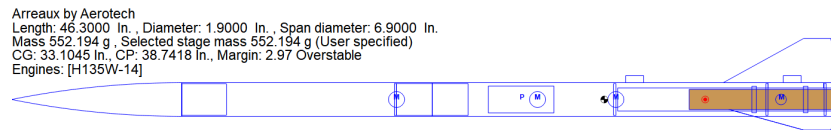
NAR Certification Level (After Launch): L1

## 1. Launch Mission Description.

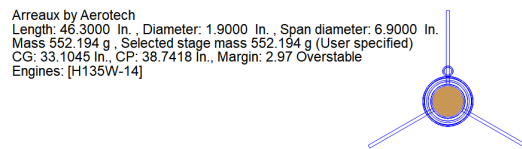
- High Power Launch Time Period: 8:00-13:00
- Real Launch Time: 11:30
- Wind Speed: 2.24m/s (5mph) 202°
- Ground Temperature (Celsius): 12.2°-22.7°
- Humidity: 73%
- Precipitation Probability: 24%
- Rocket Kit: AeroTech production
- Motor: H135W-14A
- Launch Connector Used: Rail Launch Pad
- Launch Pad: D1, RocStock Site
- Location: 34° 29' 47.92" North Latitude 117° 2' 30.07"
- Uv index: 4

## 2. Rocket Flight Status.

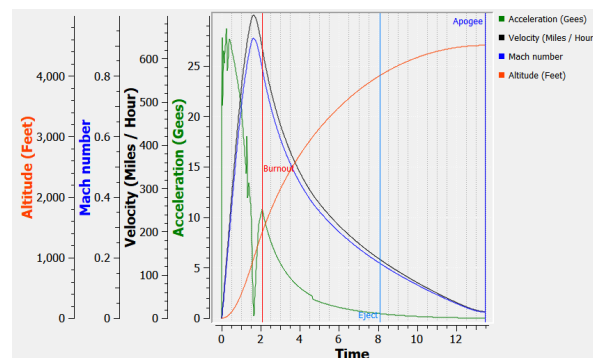
- Flight Simulation:



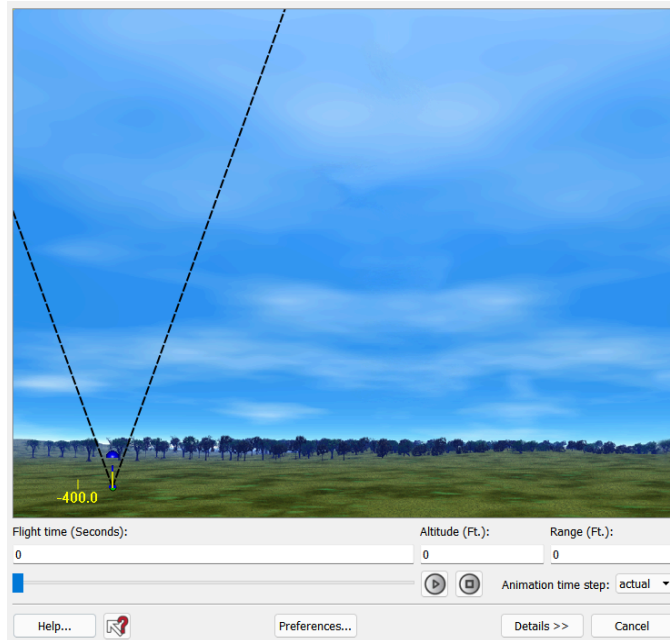
**Figure 1:** Basic information of the rocket.



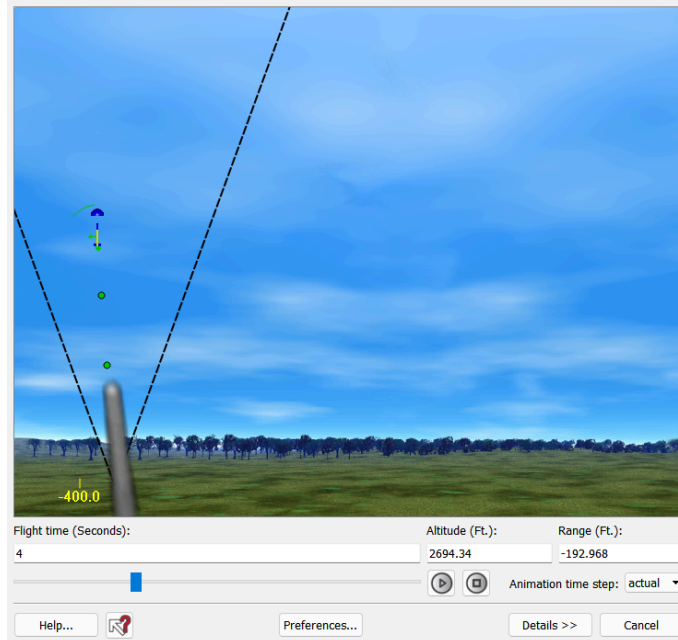
**Figure 2:** Basic information of the rocket.



**Figure 3:** Flight simulation curve of the rocket.



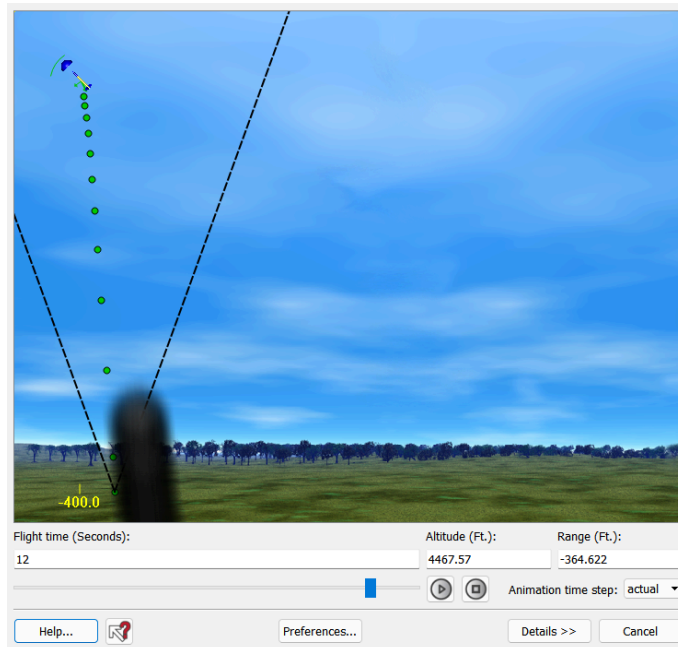
**Figure 4:** Physical model of the rocket's flight simulation.



**Figure 5:** Physical model of the rocket's flight simulation.



**Figure 6:** Physical model of the rocket's flight simulation.



**Figure 7:** Physical model of the rocket's flight simulation.

- Rocket Recovery Status: In prime conditions, no significant marks of damage, repair/reconstruction not required.
  - Unplanned Launch Conditions: Changing launch pad to save time.
3. The Recovery.
- The rocket's parachute opening and landing:

After launching, the two body tubes opened and the rocket's yellow parachute caught the wind after rising to a certain altitude, dragging significantly to slow the rocket's fall. It gradually descended, and then landed on the ground.

- Recovery Status:

The rocket was lying in complete construction without any damage to the nose cone, two body tubes, and fins. There aren't any significant marks of damage, the two body tubes were separate and linked by the parachute, works of repair and/or reconstruction are not required. With everything taken in account, the rocket is prime condition and eligible to be used again.