# STUDENT ROCKET LAUNCH GUIDE

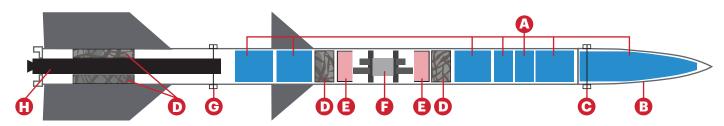


### Launch Day Schedule

Saturday, July 15<sup>th</sup> Gates Open: 9 a.m. ULA Rocket Launches: 10 a.m. – Noon Additional Rocket Launches: 10 a.m. – 3 p.m. \*Times are approximate and subject to change

### **Inside Each Rocket**

- A. Payloads
- B. Nose Cone
- C. Forward Attach/Separation Bolts
- **D.** Parachute and Riser/Shock Cord
- E. Piston
- F. Avionics Module
- G. Aft Attach/Separation Bolts
- H. Engine



## **Technical Specs**

Height:	19 ft, 6 in (5.94 m)
Width:	11.7 in (30 cm) diameter
Liftoff Mass:	225 lbs (102.1 kg)
Initial Thrust:	1,067.9 lbs (4,750.3 N)
Average Thrust:	768.1 lb (3416.7 N)
Total Impulse:	21,062 N-s (4735 lb*sec)
Performance:	0 to 325 mph in 5 sec (0 to 523 kph in 5 sec)
Altitude Target:	4,200 ft (1280.2 m)
Liftoff Acceleration:	5 Gs

### **Payload Teams**

Ball Aerospace — Boulder, Colorado Golden High School — Golden, Colorado Green Mountain High School — Lakewood, Colorado Hackberry Hill Elementary — Arvada, Colorado Mad Scientists Club — Harrison, Michigan Peak to Peak Charter — Erie, Colorado Peak to Peak Charter — Louisville, Colorado Rocklin Academy Gateway — Golden, Colorado St. Bridget School — Cheshire, Connecticut STEM School — Littleton, Colorado Vestavia Hills Elementary - Dolly Ridge — Vestavia, Alabama





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#### What You Need to Know

- Bring sunscreen, hats, folding chairs, portable shade, cameras, binoculars and wear sturdy, closed-toe shoes
- · You may bring your own water, food and snacks
- Pets, alcohol, smoking materials, weapons, drones and drugs are prohibited
- · Children must be supervised at all times
- · Port-a-potties and handwashing stations will be available on site
- The launch site is wheelchair accessible
- Please pick up your trash and help us leave Hudson Ranch even cleaner than when we arrived
- Please join us in thanking our event hosts, the Southern Colorado Rocketeers (SCORE) for their time and support
- For launch and weather status, visit <u>twitter.com/ulalaunch</u>, <u>instagram.com/ulalaunch</u> or <u>facebook.com/ulalaunch</u> — look for the #StudentsRockIt hashtag!

## **Map/Directions**

#### Use your favorite map app to route to the "Hudson Ranch Rocket Launch Site"

- Take I-25 south to Pueblo
- Take Exit 94 (Pueblo Blvd)
- Turn right on Pueblo Blvd and go approximately 3 miles to W. Northern Ave.
- Turn left on W. Northern Ave. (which later becomes Hwy 78) and go 9.5 miles
- Look for signage to direct you to the launch site

Total drive time from the intersection of C-470 and I-25 is approximately 1 hour and 50 minutes.

