 TEAM OVERVIEW

Mojave Aerospace Ventures, LLC

A joint venture between investor and philanthropist Paul G. Allen and Burt Rutan’s Scaled Composites LLC, Mojave Aerospace Ventures was formed to investigate the possibility of commercially viable sub-orbital space flight. Allen, who is the co-founder of Microsoft® and the founder and chairman of Vulcan Inc., has been named one of the top 10 philanthropists in America. Scaled Composites is the world’s most productive aerospace prototype development company. Scaled is currently developing new composite manufacturing processes for application to general and military aviation, and new space launch vehicles. The company currently employs 95 people at the Mojave, California airport.

MISSION SPECIFICATIONS:

Name: SpaceShipOne™
Country of Origin: Mojave, California, USA

VEHICLE SPECIFICATIONS:

Name: SpaceShipOne™
Wingspan: 16.4 feet (5 m)
Diameter: 5.4 feet
GTOW: undisclosed
Dry Weight: undisclosed
Engines: One hybrid rocket engine
Total Thrust: undisclosed
Payload Capacity: 3 crew members
Crew Environment: Short-sleeved, pressurized cabin
Launch Method: Carrier aircraft (White Knight™)
Max Accel. Force on Ascent: 3-4 Gs
Max Speed: Mach 3.5 (240 knots)
Max. Altitude: 62 miles (100 km)
Time in Weightless Conditions: 210 seconds
Landing Method: Unpowered horizontal
Total Flight Duration: 90 minutes

FLYING YOUR ROCKET

Choose a large field (500 ft. [152 m] square) free of dry weeds and brown grass. The larger the launch area, the better your chance of recovering your rocket. Football fields and playgrounds are great. Launch only with little or no wind and good visibility. Always follow the National Association of Rocketry (NAR) SAFETY CODE.

MISFIRES

TAKE THE KEY OUT OF THE CONTROLLER. WAIT ONE MINUTE BEFORE GOING NEAR THE ROCKET! Disconnect the igniter clips and remove engine. Take the plug and igniter out of the engine. If the igniter has burned, it worked but did not ignite the engine because it was not touching the propellant inside the engine. Put a new igniter all the way inside the engine without bending it. Push the plug in place. Repeat the steps under Countdown and Launch.

PRECAUTIONS

NO DRY GRASS OR WEEDS

NAR Safety Code

ESTES LAUNCH SUPPLIES

(Sold Separately)
• Recovery Wadding (included with some Engines)
• Igniters (with Engines)
• Igniter Plugs (with Engines)
• Recommended Engines: B4-2, B6-2, C6-3
1. ATTACH PARACHUTE

A. Pass shroud lines through eyelet.  
B. Pass parachute through loop.  
C. Pull parachute tight.

HELPFUL HINT: IF NOSE CONE/COUPLER FIT IS...  
TOO TIGHT  
ADD MASKING TAPE.  
SAND FOR FIT.

TOO LOOSE

2. PREPARE PARACHUTE FOR FLIGHT

A. Insert 2-3 squares of loosely crumpled recovery wadding into rocket.  
B. Spike parachute.  
C. Fold.  
D. Roll.  
E. Wrap lines loosely. Insert 'chute, shock cord and nose cone into body tube.

IMPORTANT: Parachute should slide easily into body. If fit is too tight, unfold and repack again.

NOTE: Only Estes Wadding (302274) Recommended.

PREPARE ENGINE

WARNING: FLAMMABLE

To avoid serious injury, read instructions & NAR Safety Code included with engines.

PREPARE YOUR ENGINE ONLY WHEN YOU ARE OUTSIDE AT THE LAUNCH SITE PREPARING TO LAUNCH!

If you do not use your prepared engine, remove the igniter before storing your engine.

A. Separate igniter and plug.  
B. Insert igniter.  
C. Insert plug.  
D. Push down.  
E. Gently bend wires to form leads as shown.  
F. Insert engine.