



ABS/Eutelsat-1 Mission

Mission Overview

SpaceX has two customers for the ABS/Eutelsat-1 mission: Asia Broadcast Satellite and Eutelsat. In this flight, the Falcon 9 rocket will deliver the ABS 3A and EUTELSAT 115 West B satellites to a supersynchronous transfer orbit.

The ABS/Eutelsat-1 launch window is targeted to open at approximately 10:49pm EST on Sunday, March 1, 2015, from Space Launch Complex 40 at Cape Canaveral Air Force Station, Florida. If all goes as planned, the satellites will be deployed beginning approximately 30 minutes after liftoff.



Official SpaceX ABS/Eutelsat-1 mission patch.

Satellite Payload

ABS 3A & EUTELSAT 115 WEST B

This mission will launch ABS 3A and EUTELSAT 115 West B, the first two of Boeing's all-electric 702SP satellites.

ABS 3A will be located at 3° West and will connect the Americas, Europe, Africa and the Middle East. With three C-band beams and four Ku-band beams, the satellite will support VSAT services, TV distribution, IP trunking, cellular backhaul and maritime services.

EUTELSAT 115 West B will be located at 114.9° West and will provide coverage from Alaska and Canada to South America. EUTELSAT 115 West B will renew resources at 114.9° West by providing 12 C-band transponders and 34 Ku-Band transponders, replacing EUTELSAT 115 West A's inclined orbit capacity.

Launch Vehicle

FALCON 9

ABS/Eutelsat-1 will launch on Falcon 9, a two-stage rocket designed from the ground up by SpaceX for the reliable and cost-efficient transport of satellites and SpaceX's Dragon spacecraft. As the first rocket completely developed in the 21st century, Falcon 9 was designed from the beginning for maximum reliability. Falcon 9's simple two-stage configuration minimizes the number of separation events – and with nine first-stage engines, it can safely complete its mission even in the event of an engine shutdown.

Web Resources

SPACE X MEDIA CONTACT | John Taylor, Director of Communications, 310-363-6703, media@spacex.com.

HIGH RESOLUTION PHOTOS | SpaceX will post high-resolution photographs after the mission at spacex.com/media.

WEBCAST | The launch will be webcast live at spacex.com/webcast beginning approximately 20 minutes before launch.

MORE RESOURCES ON THE WEB

spacex.com

twitter.com/elonmusk

twitter.com/spacex

facebook.com/spacex

plus.google.com/+SpaceX

youtube.com/spacex



eutelsat

ABS/Eutelsat-1 Mission Timeline

Times are subject to change.

COUNTDOWN

Hour:Min:Sec

Hour:Min:Sec	Events
- 10:00:00	Vehicle is powered on
- 3:00	Commence loading RP-1 (rocket grade kerosene)
- 2:35	Commence loading liquid oxygen (LOX)
- 1:30	LOX and RP-1 loading complete
- 0:10:00	Falcon 9 terminal count autosequence started
- 0:02:00	SpaceX Launch Director verifies go for launch
- 0:02:00	Range Control Officer (USAF) verifies range is go for launch
- 0:01:00	Command flight computer to begin final prelaunch checks
- 0:00:40	Pressurize propellant tanks
- 0:00:03	Engine controller commands engine ignition sequence
0:00:00	Falcon 9 liftoff

LAUNCH

Hour:Min

Hour:Min	Events
0:03	1st stage engine shutdown/main engine cutoff (MECO)
0:03	1st and 2nd stage separation
0:03	2nd stage engine start
0:04	Fairing separation
0:09	2nd stage engine cutoff-1 (SECO-1)
0:25	2nd stage engine restart
0:26	2nd stage engine cutoff-2 (SECO-2)
0:30	ABS satellite deployed
0:35	Eutelsat satellite deployed



A Falcon 9 rocket launches from SpaceX's launch site at Vandenberg Air Force Base, Calif.

Launch Facility

SPACE LAUNCH COMPLEX 40, CAPE CANAVERAL AIR FORCE STATION, FLORIDA

SpaceX's Space Launch Complex 40 at Cape Canaveral Air Force Station is a world-class launch site that builds on strong heritage: the site at the north end of the Cape was used for many years to launch Titan rockets, among the most powerful rockets in the US fleet. SpaceX took over the facility in May 2008 and has since launched from the site 14 times.



A Falcon 9 rocket launches from SpaceX's launch site at Cape Canaveral Air Force Station, Fla.

The center of the complex is composed of the concrete launch pad/apron and flame exhaust duct. Surrounding the pad are four lightning towers, fuel storage tanks, and the integration hangar. Before launch, Falcon 9's stages and the payload are housed inside the hangar. The payload is encapsulated within the fairing either at the hangar or at an offsite location and then transported to the hangar – ABS and Eutelsat were encapsulated at the hangar. A crane/lift system moves Falcon 9 into a transporter-erector system and the payload and fairing are mated to the rocket. The vehicle is rolled from hangar to launch pad on fixed rails shortly before launch to minimize exposure to the elements.

SpaceX Launch Control, also at Cape Canaveral, is responsible for operating the Falcon 9 throughout the launch countdown.