

NASA Press Conference Transcript February 22: Perseverance Rover Searches for Life on Mars

Dave Gruel: (11:28)

So now the reaction to the EDL cam videos has been absolutely amazing around JPL. And we're super excited to actually share with all of you video imagery of Perseverance landing on the surface of Mars. Please roll the video.

Speaker 1: (11:47)

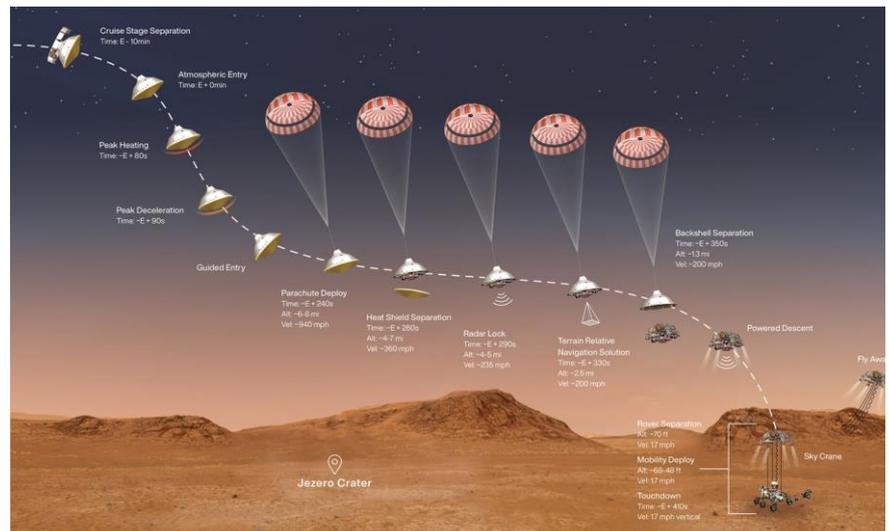
Starting the straighten up and fly right maneuver where the spacecraft will jettison the entry [inaudible 00:11:52] in preparation for parachute deploy and to roll over to give the radar a better look at the ground.

Speaker 2: (12:00)

[inaudible 00:12:00] indicates chute deployed.

Speaker 1: (12:03)

The navigation has confirmed that the parachute has deployed and we are seeing significant deceleration in the velocity. Her current velocity is 430 meters per second at an altitude of about 12 kilometers from the surface of Mars.



Speaker 2: (12:18)

Heat shield sep.

Speaker 1: (12:21)

Perseverance has now slowed to subsonic speeds and the heat shield has been separated. This allows both the radar and the cameras to get their first look at the surface. Current velocity is 145 meters per second at an altitude of about nine and a half kilometers above the surface.

Speaker 2: (12:53)

We have filter converge. [Inaudible 00:12:55] solution 3.3 meters per second, altitude 7.4 kilometers.

Speaker 1: (12:59)

Now has radar locked on the ground. Current velocity is about 100 meters per second. 6.6 kilometers above the surface of Mars.

Speaker 1: (13:11)

Perseverance is continuing to descend on the parachute. We're coming up on the initialization of terrain relative navigation and subsequently the priming of the landing engines. Her current velocity is about 90 meters per second at an altitude of 4.2 kilometers.

Speaker 2: (13:27)

LDS valid.

Speaker 1: (13:34)

We have confirmation that the land division system has produced a valid solution and part of terrain relative navigation.

Speaker 2: (13:41)

[inaudible 00:13:41] TBA is [inaudible 00:13:44]

Speaker 1: (13:43)

We have priming of the landing engines.

Speaker 2: (13:51)

Back shell sep.

Speaker 1: (13:53)

High velocity is 83 meters per second at about 2.6 kilometers from the surface of Mars. We have confirmation that the back shell has separated. We are currently performing the divert maneuver. Current velocity is about 75 meters per second, at an altitude of about a kilometer off the surface of Mars.

Speaker 2: (14:11)

[inaudible 00:14:11] safety bravo.

Speaker 1: (14:14)

We have completed our terrain relative navigation. Current speed is about 30 meters per second. Altitude of about 300 meters off the surface of Mars. We have started our constant velocity accordion, which means we are about to conduct the Skycrane maneuver.

Speaker 1: (14:38)

Skycrane maneuver has started about 20 meters off the surface.

Speaker 2: (14:50)

We're getting signals from [MRL 00:14:51].

Speaker 3: (14:53)

Tango delta.

Speaker 1: (14:54)

Touchdown confirmed. Perseverance safely on the surface of Mars, ready to begin seeking the signs of past life.