this week at NASA all three engines up
and burning two one zero and liftoff the
final liftoff of Atlantis shoulders of
the Space Shuttle America will continue
the dream space shuttle Atlantis lifted
off from launch pad 39a at the kennedy
space center on july eight to begin
sts-135 the final mission of nasa's
space shuttle program we got to witness
something really really special and
something really amazing the shuttle
program has been truly phenomenal and I
take great pride in esteem and thank
them for all they've done we still got a
lot to do before it's over and they're going to be doing some a lot of work on orbit and then we're going to we're going to bring them home safe and I'm looking forward to that landing back here at the Cape the Atlantis crew of commander Chris Ferguson pilot Doug Hurley and mission specialists sandy Magnus and Rex Walheim is delivering cargo and supplies to the International Space Station that are crucial for its post shuttle operation upon will have about 15,000 pounds of cargo inside and we have the mid-deck in the mid deck
well mold about another 8,000 pounds of cargo we have a lot of clothing a lot of food to the tune of about 4,000 pounds and of course we want to put the space station in a good position to to be self-sustaining for up to a year officially designated ov or orbital vehicle 10 4 Atlantis began its maiden voyage on october third 1985 STS 51 J a mission that took into space a classified Department of Defense payload when this flight is in the history books Atlantis will have flown 33 of the space shuttle programs 135
missions

44 00:01:57,799 --> 00:02:02,759
scientists analyzing data from NASA's

45 00:02:00,569 --> 00:02:05,459
Cassini spacecraft now have the

46 00:02:02,759 --> 00:02:07,468
first-ever up-close details of a Saturn

47 00:02:05,459 --> 00:02:09,899
storm that's eight times the surface

48 00:02:07,468 --> 00:02:11,939
area of Earth the storm that's been

49 00:02:09,899 --> 00:02:14,909
raging since Cassini's first detected it

50 00:02:11,939 --> 00:02:18,269
on December 5th 2010 wraps around the

51 00:02:14,909 --> 00:02:21,000
entire planet covering approximately 1.5

52 00:02:18,269 --> 00:02:24,090
billion square miles the storm is about

53 00:02:21,000 --> 00:02:26,519
500 times larger than the biggest storm

54 00:02:24,090 --> 00:02:28,860
previously seen by Cassini and its rate

55 00:02:26,519 --> 00:02:31,469
of lightning flashes is ten times more

56 00:02:28,860 --> 00:02:34,010
frequent than any other storm monitored

57 00:02:31,469 --> 00:02:39,959
since Cassini's arrival at Saturn in
2004 NASA's largest supercomputer Clea DS has been ranked seventh fastest in the world named for the prominent Pleiades star cluster in the night sky. The supercomputer can theoretically perform approximately one point three two quadrillion calculations per second yet has a simple interface compatible with standard desktop engineering workstations and NASA desktop computers located at the Ames Research Center more than a thousand active users around the country rely on Pleiades to help advance our knowledge of the earth solar system.
and the universe the ranking was announced at the 26th international supercomputing conference in Hamburg Germany and now centerpieces free ignition we have liftoff of the nasa launched a US Air Force Minotaur one rocket carrying the Department of Defense's operationally responsive space officers or s1 satellite jun 29 from the range at wallops flight facility and the mid-atlantic regional spaceport in virginia ors one satellite is significant because it's the first completely DoD Department of Defense
owned and operated satellite rapidly

developing and fielding or s1 there's an important step to demonstrate the capability to meet emerging and persistent warfighter needs on operationally relevant timelines you can imagine that if you were deployed out in some very remote part of the world not knowing what was over the next ridge line would be a big concern satellite like Kohler s1 will actually allow them to understand what is over that Ridge line and both good and bad the Minotaur one rocket is a
four-stage vehicle that stands about 70

feet tall and five feet wide the launch

vehicle tonight is provided by Orbital

Sciences Corporation this is a Minotaur

1 launch vehicle the first and second

stages are left over and retrofitted

ICBM motors the upper two stages are

commercial motors the operationally

responsive space office and Department

of Defense dedicated this launch to the

Medal of Honor winners from the US

Central Command area of operation nearly

90 students from minority serving

institutions and community colleges

around the country visited Johnson Space
Center to participate in the reduced gravity education flight program.

Participants were selected to design build and fly experiments onboard an aircraft that flies parabolic arcs to simulate microgravity. This program ties right into NASA’s goal of preparing students for jobs in STEM careers by allow them to take their own research all the way from the proposal design construction and testing phase of parabolic flight we treat of just like NASA researchers the flight week for minority and community college students.
was designed to inspire students from underrepresented and underserved populations to pursue careers in science the flight really provides him an opportunity to realize that yeah I can do this I see other people who look like me and talk like me are doing this it's exhausting but it's also in straw denair intellectually stimulated I think when you can feel see and touch something it makes that much more real rather than just reading about it in a book
in addition to science engineering and research skills the students also honed other abilities the most important thing I've learned from these experiences about teamwork and leadership skills JSC's Education Office will host student and teacher groups during several other reduced gravity flight weeks this summer it was awesome it was the word of the day it was the best experience of my life and I don't think anything could ever top what I was able to experience the astronomical science and education programs of the stratospheric
Observatory for infrared astronomy or

00:06:41,300 --> 00:06:46,250
Sofia where the focus of a media day at

00:06:44,329 --> 00:06:50,319
the Dryden aircraft operations facility

00:06:46,250 --> 00:06:50,319
in Palmdale California

00:06:50,769 --> 00:06:55,359
numerous speakers detail the Sofia

00:06:53,259 --> 00:06:57,610
program its science missions and

00:06:55,360 --> 00:06:59,379
educational outreach activities to

00:06:57,610 --> 00:07:01,538
members of both the professional news

00:06:59,379 --> 00:07:04,750
media and followers of the Twitter

00:07:01,538 --> 00:07:06,759
social media website in addition two of

00:07:04,750 --> 00:07:08,740
the first six teachers who flew aboard

00:07:06,759 --> 00:07:11,199
the Sofia as part of the airborne

00:07:08,740 --> 00:07:13,598
astronomy ambassadors program during a

00:07:11,199 --> 00:07:16,270
recent mission share their experiences

00:07:13,598 --> 00:07:19,149
with reporters and other attendees this
has been a huge privilege it's been a huge gift it's been way up there with one of the most important events of my life astronaut butch Wilmore appeared at life astronaut butch Wilmore appeared at NASA night at the gladiators cleveland's arena football league team wilmore participated in on phil activities at Quicken Loans Arena that included the game's official coin toss a halftime demonstration by the Great Lakes Science Center and a postgame autograph session and that's this week @nasa for more on these and other stories log on to WWF