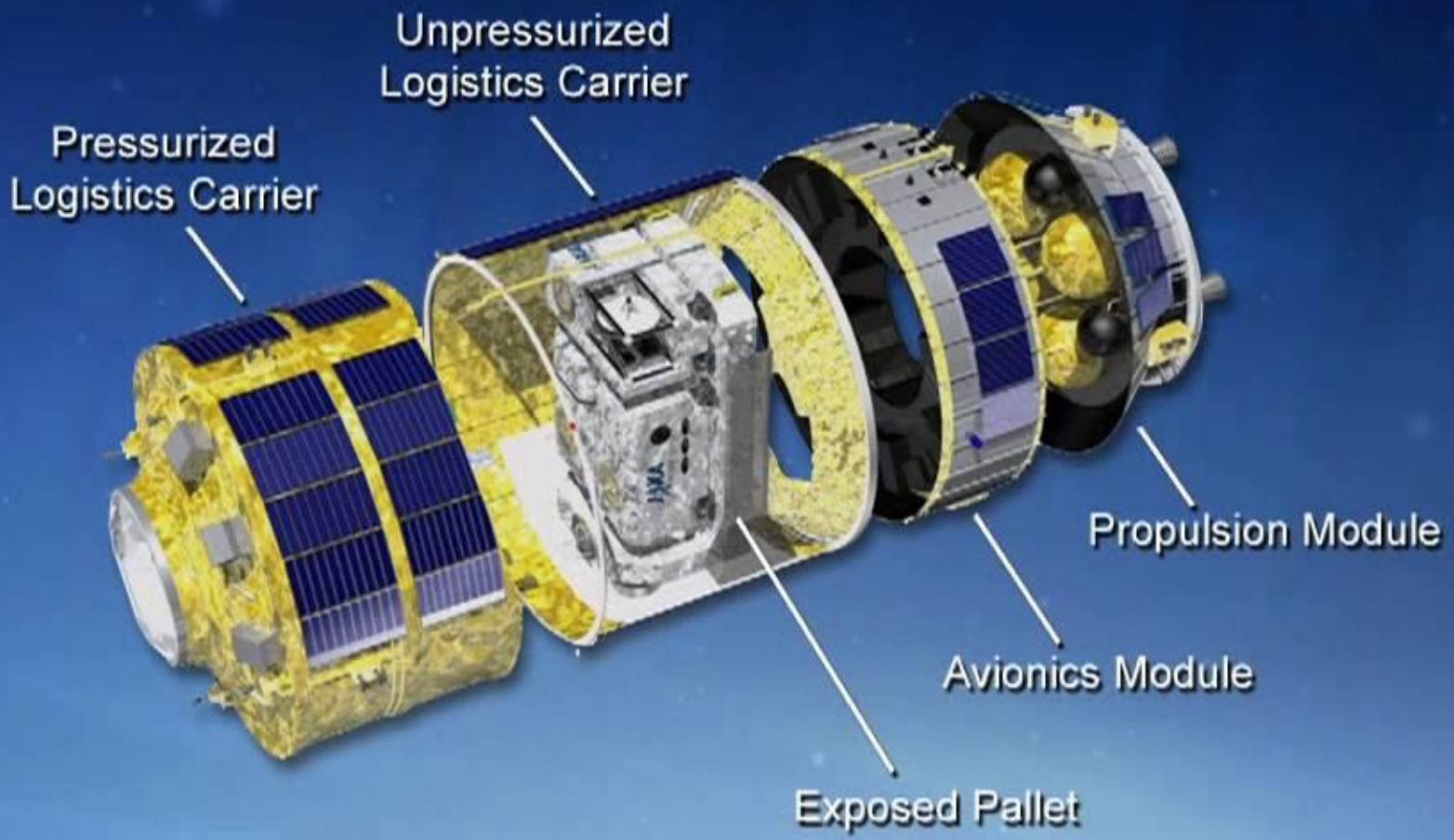
H-II Transfer Vehicle (HTV)



1
00:00:05,226 --> 00:00:07,546
>> Good day and welcome
to Space Station Live

2
00:00:07,596 --> 00:00:10,976
for Wednesday, August 7, 2013.

3
00:00:11,636 --> 00:00:14,336
The Expedition 36 crew has
been involved in a variety

4
00:00:14,336 --> 00:00:15,816
of experiments today

5
00:00:15,816 --> 00:00:19,016
and research activities
including one called the Ace

6
00:00:19,016 --> 00:00:22,466
Experiment, the Advanced
Colloids Experiment,

7
00:00:22,716 --> 00:00:23,756
the first in a series

8
00:00:23,756 --> 00:00:27,136
of microscopic imaging
investigations of materials

9
00:00:27,276 --> 00:00:31,096
to determine how better
to formulate materials

10
00:00:31,096 --> 00:00:33,366
in the micro-gravity
environment of space.

11
00:00:33,706 --> 00:00:35,096
Astronaut Karen Nyberg,

12
00:00:35,096 --> 00:00:38,466
her gloved hands inside the
micro-gravity science glove box

13
00:00:38,756 --> 00:00:43,256
earlier today had an opportunity
to prepare for the next run

14
00:00:43,256 --> 00:00:46,786
of data collection with the
Advanced Colloids Experiment.

15
00:00:47,066 --> 00:00:49,936
Again, in the micro-gravity
science glove box

16
00:00:49,936 --> 00:00:53,546
in the Destiny Laboratory of
the International Space Station.

17
00:00:53,546 --> 00:00:56,416
Just one of a variety of
experiments being conducted

18
00:00:56,416 --> 00:00:58,936
on board the International
Space Station.

19
00:00:59,496 --> 00:01:02,456
Meanwhile Russian
Cosmonauts Fyodor Yurchikhin

20
00:01:02,456 --> 00:01:05,376
and Alexander Misurkin were
busy in the Russian segment

21
00:01:05,376 --> 00:01:08,776
of the complex preparing
their Orlan space suits

22
00:01:08,776 --> 00:01:13,246
for two space walks coming up
on August 16th and August 22nd.

23
00:01:13,476 --> 00:01:16,736
The first of those two space
walks to be conducted outside

24
00:01:16,736 --> 00:01:19,576
of the Pirs Docking
Compartment by Yurchikhin

25
00:01:19,576 --> 00:01:22,986
and Misurkin will install
a panel of experiments

26
00:01:22,986 --> 00:01:25,986
on the Poisk module,
deploy a gap spanner

27
00:01:25,986 --> 00:01:28,146
between the Zarya
module and Poisk,

28
00:01:28,446 --> 00:01:31,816
and to install Ethernet
cables on the Poisk module

29
00:01:31,816 --> 00:01:34,366
that will be part of
the hardware associated

30
00:01:34,366 --> 00:01:37,166
with the arrival of a new
Russian laboratory module

31
00:01:37,166 --> 00:01:38,356
at the end of the year.

32
00:01:38,776 --> 00:01:41,186
Six days later, they'll
venture back outside

33
00:01:41,186 --> 00:01:44,116
of the Pirs Docking
Compartment on August 22nd

34
00:01:44,116 --> 00:01:47,256
for another space walk
in which they will trade

35
00:01:47,256 --> 00:01:51,116
out a laser experiment on the
outside of the Russian segment

36
00:01:51,116 --> 00:01:54,146
of the space station for
a pointing platform upon

37
00:01:54,146 --> 00:01:57,866
which an optical telescope will
be launched in the near future.

38
00:01:58,406 --> 00:02:02,016
The Japanese cargo ship,
the H-II transfer vehicle

39
00:02:02,016 --> 00:02:04,236
or the HTV4 continues

40
00:02:04,236 --> 00:02:07,336
to fly smoothly toward the
International Space Station,

41
00:02:07,676 --> 00:02:09,326
having conducted a series

42
00:02:09,326 --> 00:02:13,086

of rendezvous maneuvers again
throughout the past 24 hours.

43
00:02:13,446 --> 00:02:17,656
As of a few minutes ago,
the HTV was traveling just

44
00:02:17,656 --> 00:02:21,626
under 5,000 statute miles behind
the International Space Station.

45
00:02:21,906 --> 00:02:26,176
Some 70 statute miles below the
complex facing back toward the

46
00:02:26,176 --> 00:02:28,226
International Space
Station at a rate

47
00:02:28,226 --> 00:02:31,576
of about 770 statute
miles per orbit.

48
00:02:31,946 --> 00:02:37,146
The HTV is poised to be captured
by Astronauts Karen Nyberg

49
00:02:37,146 --> 00:02:40,066
and Chris Cassidy, using
the station's robotic arm

50
00:02:40,296 --> 00:02:42,786
on Friday morning
the capture scheduled

51
00:02:42,786 --> 00:02:45,336
at 6:29 a.m. Central time.

52
00:02:46,146 --> 00:02:50,166
Cassidy and Nyberg are also

working inside the Japanese Kibo

53
00:02:50,166 --> 00:02:55,026
module preparing a series of
satellites called SPHERES,

54
00:02:55,306 --> 00:02:59,256
the acronym for the Synchronized
Position, Hold, Engage, Reorient

55
00:02:59,256 --> 00:03:02,616
and Experimental
Satellites for some test runs

56
00:03:02,616 --> 00:03:05,316
that will be conducted
in an ongoing competition

57
00:03:05,316 --> 00:03:07,536
with students that will
be gathered next Tuesday

58
00:03:07,766 --> 00:03:10,296
at the Massachusetts
Institute of Technology

59
00:03:10,546 --> 00:03:13,506
where the experiment's principle
investigators are housed.

60
00:03:13,796 --> 00:03:17,436
The SPHERES experiments
enable students to engage

61
00:03:17,436 --> 00:03:20,076
in a competition in which
they program the satellites

62
00:03:20,356 --> 00:03:24,226
to gather data on the operation

of free-flying satellites

63
00:03:24,226 --> 00:03:26,086
in a micro gravity environment.