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1
00:00:00,506 --> 00:00:23,556
[Music]

2
00:00:24,056 --> 00:00:27,846
The solar array wing we tested
here today was the qualification

3
00:00:27,846 --> 00:00:31,386
model wing provided by Airbus
Defence and Space, Netherlands.

4
00:00:31,796 --> 00:00:34,726
For this test, we just
have one functional wing

5
00:00:35,126 --> 00:00:37,756
and it's the qualification
model wing that went

6
00:00:37,826 --> 00:00:40,656
through more full
qualification testing in Europe,

7
00:00:41,526 --> 00:00:43,446
and so this is the only
functional wing we have

8
00:00:43,446 --> 00:00:44,656
on this test article.

9
00:00:44,956 --> 00:00:47,596
All the others are represented
with mass simulators.

10
00:00:47,886 --> 00:00:50,926
When all four solar array
wings are deployed tip to tip,

11
00:00:51,416 --> 00:00:56,046

they're sixty-four feet long and
all four wings together generate

12
00:00:56,046 --> 00:00:57,446
around eleven kilowatts
of power.

13
00:00:58,186 --> 00:00:59,646
For this test, there
were several things

14
00:00:59,646 --> 00:01:00,336
that we looked at.

15
00:01:00,336 --> 00:01:03,336
This was the first time we
used those thermal knives

16
00:01:03,776 --> 00:01:05,556
to start the deployment sequence

17
00:01:06,036 --> 00:01:08,746
and that allowed-cut
some tethers

18
00:01:09,156 --> 00:01:12,166
that then allowed the
solar array to deploy.

19
00:01:12,476 --> 00:01:15,096
We wanted to test the
locking mechanisms to ensure

20
00:01:15,096 --> 00:01:18,636
that it locked properly
in space because anything

21
00:01:18,666 --> 00:01:22,356
that could possibly go wrong,
we wanted to see test down here

22
00:01:22,796 --> 00:01:25,386
so that we can ensure
a successful flight

23
00:01:25,386 --> 00:01:26,776
and deployment.

24
00:01:27,526 --> 00:01:28,616
After the test today,

25
00:01:28,616 --> 00:01:30,656
we're going to re-stow
the solar array wing.

26
00:01:30,656 --> 00:01:33,246
We're going to take the test
article to the vertical,

27
00:01:33,246 --> 00:01:36,446
and then we're going to install
a crew module mass simulator

28
00:01:36,886 --> 00:01:39,256
and the spacecraft adapter
jettison bolt bearings,

29
00:01:39,956 --> 00:01:43,586
and that will complete the
test article configuration

30
00:01:43,686 --> 00:01:46,976
for the next test, which
is an acoustic test.

31
00:01:47,056 --> 00:01:48,656
After we go through all
the tests that we're going

32

00:01:48,816 --> 00:01:50,476
to do here, we're going
to do some acoustic tests

33
00:01:50,896 --> 00:01:53,436
to simulate the launch
environment, vibration tests

34
00:01:53,436 --> 00:01:56,096
and some pyro tests,
and at the conclusion

35
00:01:56,096 --> 00:01:58,006
of those we'll do
another solar array test,

36
00:01:58,006 --> 00:01:59,456
and we'll determine whether