
# SPACEX CREW-5

## SCIENTIFIC MISSION

1
00:00:00,633 --> 00:00:03,837
On the left, Josh Cassada
and on the right, Commander Nicole Mann.

2
00:00:03,870 --> 00:00:08,041
And here come our second two astronauts,
mission specialist Koichi Wakata.

3
00:00:08,274 --> 00:00:09,776
And Ana Kikina.

4
00:00:19,352 --> 00:00:21,187
It's incredible to be in space!

5
00:00:21,187 --> 00:00:24,157
Mom look, I'm finally in space!

6
00:00:24,157 --> 00:00:27,660
It's like coming back
to a home away from home for me.

7
00:00:27,827 --> 00:00:32,132
And I cannot wait to work
with this wonderful crew on Expedition 68.

8
00:00:33,133 --> 00:00:36,302
It is so important,
the science that we're doing on board

9
00:00:36,302 --> 00:00:40,373
the space station, a lot of the science
is about our human bodies.

10
00:00:40,440 --> 00:00:45,478
A lot of it is technology demonstrations
for a future exploration into space.

11
00:00:45,879 --> 00:00:48,782
But also a lot of what we do

on the International Space Station

12
00:00:48,948 --> 00:00:53,186
benefits humans back on Earth
and focuses on our planet

13
00:00:53,186 --> 00:00:56,122
and how important it is
that we gather this information

14
00:00:56,356 --> 00:00:59,859
and this data to understand
how we are affecting the planet

15
00:00:59,859 --> 00:01:01,027
and how to take care of it.

16
00:01:02,462 --> 00:01:06,032
This morning, I was helping
set up an experiment for plant growth.

17
00:01:06,032 --> 00:01:09,602
We're going to grow a little dwarf
tomatoes up here, and we're trying

18
00:01:09,602 --> 00:01:14,474
all different kinds of varieties of light
in terms of color, in terms of duration,

19
00:01:14,641 --> 00:01:18,344
so that eventually we can start growing
our own fruits and vegetables up here.

20
00:01:18,478 --> 00:01:20,680
And then we're really going to need
that for deep space.

21
00:01:21,314 --> 00:01:26,086
Station is a wonderful testbed for future
exploration and I'm so excited to be part

22
00:01:26,086 --> 00:01:31,124
of this experiment that will benefit us
for exploration of the Moon and Mars.

23
00:01:32,125 --> 00:01:33,293
Great work down there today.

24
00:01:33,293 --> 00:01:36,463
We're excited to uh to unpack
and get to work.

25
00:01:37,230 --> 00:01:37,997
The experiments up here

26
00:01:37,997 --> 00:01:40,834
that I get really excited about
because I did physics before I got here.

27
00:01:41,334 --> 00:01:43,169
There's a big one on top of the space
station.

28
00:01:43,169 --> 00:01:47,040
It's called the Alpha Magnetic
Spectrometer, super cool experiment

29
00:01:47,040 --> 00:01:50,844
that is just collecting cosmic rays
from the universe and answering questions

30
00:01:50,844 --> 00:01:52,712
about dark matter and dark energy.

31
00:01:52,712 --> 00:01:55,215
We've got another one
that's called the Cold Atom Lab,

32
00:01:55,215 --> 00:01:57,951

where we're looking at something
called a Bose-Einstein condensate.

33
00:01:58,051 --> 00:01:59,252
It's the same technology

34
00:01:59,252 --> 00:02:03,022
we have on the ground, but up here
you don't have to fight gravity.

35
00:02:03,022 --> 00:02:09,329
And so we can actually see quantum
mechanics happen at the macroscopic level.

36
00:02:09,329 --> 00:02:11,331
I'm often asked, what is it
we're going to learn?

37
00:02:11,598 --> 00:02:14,834
And I know that if we already know
what we're going to find, then

38
00:02:15,101 --> 00:02:17,370
I'll tell you what,
there's no reason to be doing the science.

39
00:02:17,370 --> 00:02:19,205
The reason we're doing
the science is because we don't know

40
00:02:19,205 --> 00:02:20,106
what we're going to find.