

ENGINEER BUILDS

SPACECRAFT

TO IMPACT

ASTEROID



1
00:00:00,560 --> 00:00:05,600

In case there was an asteroid coming towards the Earth, you're there, you can actually stop it.

2
00:00:05,600 --> 00:00:12,320

I mean that's kind of fantastic. I'm Elena Adams and I led the team that built the spacecraft to go

3
00:00:12,320 --> 00:00:17,520

and crash into an asteroid. Behind me you see the spacecraft. Once the solar arrays are deployed it's

4
00:00:17,520 --> 00:00:22,320

going to be the size of a school bus. As the solar array opens up, it's going to swing out

5
00:00:22,320 --> 00:00:27,680

in this direction. DART is the mission to go and hit an asteroid and see if we can change its

6
00:00:27,680 --> 00:00:33,600

trajectory just a little bit. But in space "just a little bit" is just enough to make an asteroid

7
00:00:33,600 --> 00:00:38,640

actually miss us if an asteroid was actually coming towards us. To me the most important thing

8
00:00:38,640 --> 00:00:44,400

and the most exciting thing is all the technical challenges. My job is primarily to make sure

9
00:00:44,400 --> 00:00:50,160

all the systems on the spacecraft work together. On top you see the NEXT-C thruster. Over here

10
00:00:50,160 --> 00:00:55,840

is our star tracker and then over here is our high-gain antenna. My job is to make sure we hit.

11

00:00:55,840 --> 00:01:00,640

My job is to make sure we launch. My job is to
make sure we're able to receive data back. There's

12

00:01:00,640 --> 00:01:06,320

DRACO on the bottom of the spacecraft. As well
of course is integration and test. As a mother

13

00:01:06,320 --> 00:01:11,760

of three boys now we spent lots of Saturdays
watching the spacecraft actually being integrated.

14

00:01:11,760 --> 00:01:16,720

They watched solar arrays deploy for the first
time just because we were all on Zoom at all

15

00:01:16,720 --> 00:01:21,680

hours of the day and night. I do Taekwondo I'm
working on my black belt and hopefully I will

16

00:01:21,680 --> 00:01:28,240

get it right around the same time as the launch of
DART so it's also been a very long journey for me.

17

00:01:28,240 --> 00:01:33,200

Taekwondo kind of teaches you a lot of respect
and a lot of patience for things you just need

18

00:01:33,200 --> 00:01:37,953

to keep doing and making it better and better
and it's the same with space missions.

19

00:01:37,953 --> 00:01:40,107

Go DART!
Woo-hoo!

20

00:01:41,040 --> 00:01:46,160

The dinosaurs are made completely extinct
by an asteroid impact so many years ago.