



1
00:00:00,130 --> 00:00:01,130
Hi!

2
00:00:01,130 --> 00:00:05,420
My name is Matt Moholt; I'm a structures
Engineer, at NASA's Armstrong Flight Research

3
00:00:05,420 --> 00:00:17,520
Center in The Flight Load Laboratory.

4
00:00:17,520 --> 00:00:21,769
As a structures Engineer, I develop advanced
structures, using new materials, which of

5
00:00:21,769 --> 00:00:25,919
course involves, lot's of testing here in
the Flight Loads Laboratory.

6
00:00:25,919 --> 00:00:30,220
In the Flight Loads Laboratory, we test advanced
structures such as the Hypersonic Inflatable

7
00:00:30,220 --> 00:00:33,590
Aerodynamic Decelerator or as we call it,
HIAD.

8
00:00:33,590 --> 00:00:39,040
HIAD is a technology that will allow larger
spacecraft to enter the Martian atmosphere,

9
00:00:39,040 --> 00:00:41,080
thus paving the way for human missions.

10
00:00:41,080 --> 00:00:48,010
I designed a test fixture to load each individual
torres in compression which allowed the designers

11
00:00:48,010 --> 00:00:52,050
to have a better understanding of the mechanical

performance of the structure.

12
00:00:52,050 --> 00:00:57,970
HIAD will help humans explore Mars by enabling larger vehicles to slow down by providing

13
00:00:57,970 --> 00:01:02,460
a deployable method to increase the drag in the Martian atmosphere.

14
00:01:02,460 --> 00:01:06,789
NASA turned science fiction into science fact by creating inflatable structures that will

15
00:01:06,789 --> 00:01:11,670
one day, enable humans to explore Mars by creating bigger vehicles that can slow down

16
00:01:11,670 --> 00:01:12,890
in the Martian atmosphere.