



1
00:00:00,000 --> 00:00:02,530
(Music)

2
00:00:02,550 --> 00:00:09,460
NARRATOR: For over seventy years NASA Ames Research Center has been shaping the science of flight.

3
00:00:09,480 --> 00:00:16,980
From wings that enable modern commercial aircraft, to spacecraft that return our astronauts safely to Earth.

4
00:00:17,000 --> 00:00:24,210
Ames has the world-class expertise and facilities to enable a broad spectrum of aeronautics research.

5
00:00:24,230 --> 00:00:30,300
(Music)

6
00:00:30,320 --> 00:00:36,190
NARRATOR: Located in the heart of Silicon Valley, NASA Ames is able to leverage the capabilities

7
00:00:36,210 --> 00:00:40,500
of nearby world-renowned companies and universities.

8
00:00:40,520 --> 00:00:45,210
For fifty years and counting our wind tunnels have been used in the development

9
00:00:45,230 --> 00:00:49,790
of nearly every US commercial and military aircraft.

10
00:00:49,810 --> 00:00:55,010
The arc-jet simulates the heating of atmospheric entry, enabling researchers to develop

11
00:00:55,030 --> 00:01:01,830
Thermal Protection Systems for every NASA Space Transportation and Planetary program.

12
00:01:01,850 --> 00:01:08,510
Ames flight simulators can model a wide range of commercial, military and space vehicles.

13
00:01:08,530 --> 00:01:14,030

This allows our researchers to develop and test advanced flightdeck displays and

14
00:01:14,050 --> 00:01:18,250
next-generation intelligent flight control systems.

15
00:01:18,270 --> 00:01:24,250
Ames is pushing the envelope with revolutionary concepts for air traffic optimization.

16
00:01:24,270 --> 00:01:29,310
Our advanced air traffic modeling and simulation capabilities are critical for developing

17
00:01:29,330 --> 00:01:33,330
the Next-Generation Air Transportation System.

18
00:01:33,350 --> 00:01:40,290
Our supercomputing capability brings state-of-the-art data analysis and high-fidelity data visualization

19
00:01:40,310 --> 00:01:43,860
to research partners across the globe.

20
00:01:43,880 --> 00:01:48,850
We are investigating sustainable fuel alternatives and developing new aircraft

21
00:01:48,870 --> 00:01:55,850
and operational concepts to make air transportation more environmentally responsible.

22
00:01:55,870 --> 00:02:03,500
The visionary scientists and researchers at Ames are constantly innovating to enable the next leap forward.

23
00:02:03,520 --> 00:02:08,550
Whether we travel in the Earth's atmosphere, or through it to another world,