1
00:00:01,100 --> 00:00:08,500
[music]

2
00:00:08,740 --> 00:00:10,160
Two high-flying Global Hawk

3
00:00:10,160 --> 00:00:12,160
unmanned reconnaissance aircraft

4
00:00:12,160 --> 00:00:13,140
are now part of

5
00:00:13,140 --> 00:00:15,520
NASA Dryden Flight Research Center's family

6
00:00:15,520 --> 00:00:17,800
a highly advanced air vehicles.

7
00:00:19,660 --> 00:00:20,620
Built by Northrop Grumman,

8
00:00:21,140 --> 00:00:22,800
the two pre-production air vehicles,

9
00:00:22,800 --> 00:00:23,660
also known as,

10
00:00:23,660 --> 00:00:26,800
AV-1 and AV-6 were transferred from

11
00:00:26,800 --> 00:00:28,800
the US Air Force to NASA Dryden

12
00:00:29,220 --> 00:00:32,800
at Edwards Air Force Base in September 2007.

13
00:00:35,700 --> 00:00:38,600

AV-1 and 6 were among the first seven

14
00:00:38,760 --> 00:00:40,820
produced under the original advanced concept

15
00:00:41,000 --> 00:00:43,680
technology demonstration program sponsored by the

16
00:00:43,680 --> 00:00:46,540
Defense Advanced Research Projects Agency.

17
00:00:48,520 --> 00:00:50,380
As the World's first fully autonomous

18
00:00:50,380 --> 00:00:52,100
high-altitude, long-endurance,

19
00:00:52,100 --> 00:00:53,760
unmanned aircraft system,

20
00:00:54,080 --> 00:00:57,160
Global Hawk can soar up to 65,000 feet

21
00:00:57,160 --> 00:00:59,520
for more than 31 hours at a time.

22
00:01:00,720 --> 00:01:03,460
It can also fly above almost any type of weather

23
00:01:03,460 --> 00:01:05,420
at any time, which means that

24
00:01:05,420 --> 00:01:08,500
measuring, monitoring and observing remote locations

25
00:01:08,520 --> 00:01:11,260
of the Earth's surface are now possible

26
00:01:13,960 --> 00:01:17,220
Under a Space Act agreement signed in April 2008,

27
00:01:17,220 --> 00:01:19,780
NASA and Northrop Grumman will share use

28
00:01:19,900 --> 00:01:22,040
of the two early model Global Hawks,

29
00:01:22,040 --> 00:01:25,260
a new ground control station and maintenance facility.

30
00:01:27,620 --> 00:01:30,000
NASA will use the aircraft for Earth science

31
00:01:30,000 --> 00:01:31,940
and environmental research missions,

32
00:01:31,940 --> 00:01:33,780
while Northrup Grumman will conduct its

33
00:01:33,780 --> 00:01:35,200
own flight demonstrations for

34
00:01:35,200 --> 00:01:38,600
expanded markets, emissions and airborne capabilities

35
00:01:39,180 --> 00:01:41,580
including integration of unmanned aircraft systems

36
00:01:41,580 --> 00:01:43,600
into the National Airspace.

37
00:01:44,820 --> 00:01:47,760
With so many possible domestic and civil applications

38
00:01:47,760 --> 00:01:49,820

including accurate global warming

39
00:01:49,820 --> 00:01:51,980
and ozone depletion measurements,

40
00:01:52,200 --> 00:01:54,800
better hurricane tracking and landfall prediction

41
00:01:55,080 --> 00:01:56,800
improved weather forecasting,

42
00:01:56,820 --> 00:01:59,940
and other comprehensive Earth observations

43
00:02:00,520 --> 00:02:03,200
Global Hawk is on track to contribute to

44
00:02:03,200 --> 00:02:04,300
NASA Dryden's vision: