1
00:00:00,000 --> 00:00:01,800
[Music]

2
00:00:02,140 --> 00:00:07,740
>>There's various benefits to integrating unmanned
aircraft into the National Air Space.

3
00:00:08,880 --> 00:00:16,160
A couple of them are being able to monitor
specific weather systems; also, monitor fires

4
00:00:16,160 --> 00:00:21,650
over specific areas of the country or world,
they're also able to fly longer durations

5
00:00:21,650 --> 00:00:23,859
than some manned aircraft out there.

6
00:00:23,859 --> 00:00:28,660
The smaller platforms are able to help in
various ways as well, such as delivering packages

7
00:00:28,660 --> 00:00:31,300
to your doorstep.

8
00:00:31,300 --> 00:00:32,780
[Music]

9
00:00:32,780 --> 00:00:36,260
The UAS in the NAS project has had various
campaigns.

10
00:00:36,260 --> 00:00:42,140
For Flight Test 4, we utilized the Ikhana,
which is an MQ-9 Predator-B platform, and

11
00:00:42,140 --> 00:00:48,240
from there we were able to test larger UAS
and also larger sensors.

12
00:00:48,240 --> 00:00:50,680
[Music/Background noise]

13
00:00:50,840 --> 00:00:55,860
Flight Test 6 is based off of smaller type
UAS platforms and sensors.

14
00:00:55,860 --> 00:00:59,180
[Music/Background noise]

15
00:00:59,360 --> 00:01:05,340
We flew the Navmar Applied Sciences Corporation
Tiger Shark Block 3 XP.

16
00:01:07,220 --> 00:01:13,060
We started with system checkout flights, moved
on to some basic radar characterization in

17
00:01:13,070 --> 00:01:17,470
which we collected a bunch of radar data,
then we moved into the scripted encounters

18
00:01:17,470 --> 00:01:22,671
portion, where we specifically tested the detect
and avoid system, and then from there we were

19
00:01:22,671 --> 00:01:25,550
ready to start our full mission.

20
00:01:25,550 --> 00:01:32,030
For the full mission aspect of FT6, we utilized
both virtual traffic, which was a simulated

21
00:01:32,030 --> 00:01:36,920
aircraft, and then we also used a live intruder
aircraft as well.

22
00:01:36,920 --> 00:01:39,340

>>We're at six miles...

23
00:01:40,700 --> 00:01:46,260
>>We had a ground control station that was only
for the Navmar Tiger Shark

24
00:01:48,340 --> 00:01:56,120
We also had a mobile operations facility 5, in which remote pilots were also able to man that station

25
00:01:56,120 --> 00:01:58,789
and control the aircraft.

26
00:01:58,789 --> 00:02:04,079
Then we also had Mission Control Center 3,
where the test conductor controlled the intruder

27
00:02:04,079 --> 00:02:09,250
aircraft and the Tiger Shark, and we also
had the Live Virtual Constructive Environment

28
00:02:09,250 --> 00:02:13,420
at Armstrong and it connected Ames and Armstrong
together.

29
00:02:15,820 --> 00:02:20,209
Through the sensor suite that was onboard
the Tiger Shark, all of that data was telemetered

30
00:02:20,209 --> 00:02:26,519
down to the pilot, and he was then able to
make any corrective maneuvers through the

31
00:02:26,520 --> 00:02:29,040
detect and avoid display and system.

32
00:02:29,540 --> 00:02:31,080
>>Good encounter...

33
00:02:31,780 --> 00:02:37,410

>>We're collecting data for the FAA and also
RTCA.

34
00:02:37,410 --> 00:02:42,681
With the completion of Flight Test 6, from
all the data that we're able to collect, they're

35
00:02:42,681 --> 00:02:49,860
able to inform minimum operational performance
standards for integrating UAS into the National