



BOEING



BOEING HYPERSOUND

C

1
00:00:04,080 --> 00:00:06,340
After months of comprehensive ground and

2
00:00:06,340 --> 00:00:09,420
T-33 testing the first care vehicle is

3
00:00:09,430 --> 00:00:12,100
deemed ready for its much-anticipated

4
00:00:12,100 --> 00:00:13,500
first flight.

5
00:00:13,500 --> 00:00:14,980
The flight test must prove

6
00:00:14,980 --> 00:00:18,040
not only vehicle air worthiness but also

7
00:00:18,240 --> 00:00:19,860
that the command and control link

8
00:00:19,870 --> 00:00:23,040
between the aircraft and the mission
control station

9
00:00:23,040 --> 00:00:24,280
is reliable.

10
00:00:25,720 --> 00:00:27,140
Build your knowledge.

11
00:00:27,920 --> 00:00:31,340
Yeah, apparently they [inaudible]

12
00:00:31,500 --> 00:00:33,900
May 22nd 2002

13

00:00:34,620 --> 00:00:38,240

The Sun slowly rises over
Rogers Dry Lake,

14

00:00:38,240 --> 00:00:41,500

It is an auspicious morning that marks the first

15

00:00:41,500 --> 00:00:43,720

demonstration of theUCAV system.

16

00:00:45,900 --> 00:00:47,340

The flight will be commanded from the

17

00:00:47,340 --> 00:00:49,470

Mission Control console in the on-site

18

00:00:49,470 --> 00:00:51,800

Mission Control station trailer.

19

00:00:52,540 --> 00:00:55,340

This console will provide the operator with

20

00:00:55,350 --> 00:00:57,860

the decision aids and situation awareness

21

00:00:57,860 --> 00:01:00,199

necessary to control theUCAV.

22

00:01:01,180 --> 00:01:04,080

Though only one air vehicle will be tested
today

23

00:01:04,540 --> 00:01:06,320

the mission control console is

24

00:01:06,320 --> 00:01:10,120

designed to control up to four drones simultaneously

25

00:01:11,940 --> 00:01:14,880
Take off my mark...Ready...Ready...Mark

26
00:01:15,800 --> 00:01:17,400
Take off command issued.

27
00:01:19,260 --> 00:01:20,780
Crow mix is in.

28
00:01:21,100 --> 00:01:22,260
Throttle up

29
00:01:22,620 --> 00:01:27,500
[music]

30
00:01:27,780 --> 00:01:28,780
50 knots

31
00:01:28,780 --> 00:01:38,360
[music]

32
00:01:38,920 --> 00:01:40,360
120 knots

33
00:01:40,740 --> 00:01:50,220
[music]

34
00:01:50,220 --> 00:01:51,420
She's off

35
00:01:51,420 --> 00:01:54,860
[music]

36
00:01:55,080 --> 00:01:58,580
NASA 852...Standby...Right turn...52

37
00:01:58,780 --> 00:02:06,160
[music]

38
00:02:06,720 --> 00:02:09,640
And Stingray One...I'm showing One Niner Seven knots,

39
00:02:09,640 --> 00:02:13,740
7540 feet...Stingray One

40
00:02:16,460 --> 00:02:18,040
Line up is good...Aim point is good.

41
00:02:18,580 --> 00:02:29,240
[music]

42
00:02:30,080 --> 00:02:30,820
Touchdown

43
00:02:31,940 --> 00:02:34,120
The day is a complete success.

44
00:02:34,740 --> 00:02:38,520
In the 14-minute flight, the X-45A reaches an

45
00:02:38,520 --> 00:02:44,320
airspeed of 195 knots and an altitude of 7500 feet

46
00:02:44,320 --> 00:02:46,280
It is a significant jump in

47
00:02:46,280 --> 00:02:49,160
the maturing of the program's innovative technologies.

48
00:02:50,200 --> 00:02:52,840
The flight marks the beginning of what will be a

49
00:02:52,880 --> 00:02:55,880
nine month-long flight demonstration system check out.

50

00:02:57,780 --> 00:02:59,420
After months of meticulous planning

51
00:02:59,800 --> 00:03:01,340
the team is ready for flight.

52
00:03:04,100 --> 00:03:07,300
It is the first ever multi-vehicle demonstration

53
00:03:07,300 --> 00:03:09,780
by a single operator and a must need

54
00:03:09,780 --> 00:03:11,560
achievement for the program.

55
00:03:11,560 --> 00:03:19,000
[music]

56
00:03:19,200 --> 00:03:21,020
Commanding go...Sting Ray One

57
00:03:21,020 --> 00:03:27,960
[music]

58
00:03:28,120 --> 00:03:29,640
Commanding go...Sting Ray Two

59
00:03:33,480 --> 00:03:38,760
[music]

60
00:03:38,760 --> 00:03:40,780
The air vehicles must maintain formation

61
00:03:40,780 --> 00:03:43,940
relative to a simulated third aircraft

62
00:03:43,940 --> 00:03:45,940
that is to be their virtual lead.

63

00:03:48,880 --> 00:03:51,020

843....Release brakes now

64

00:03:52,360 --> 00:03:53,920

Take off commaning...Sting Ray One

65

00:03:54,160 --> 00:04:00,460

[music]

66

00:04:00,460 --> 00:04:06,520

[sound of jet engine powering up]

67

00:04:07,300 --> 00:04:08,640

120...go for flight

68

00:04:10,380 --> 00:04:13,780

Edwards tower...Sting Ray Zero One is airborne.

69

00:04:13,780 --> 00:04:15,640

Takeoff commanded Sting Ray Two

70

00:04:22,340 --> 00:04:24,760

Edwards tower...Sting Ray Zero Two is airborne.

71

00:04:24,760 --> 00:04:32,520

[music]

72

00:04:32,900 --> 00:04:35,520

The vehicles join up at 15,000 feet.

73

00:04:36,000 --> 00:04:38,640

With over a mile of lateral separation they

74

00:04:38,640 --> 00:04:41,940

autonomously maneuver to preserve their configuration.

75

00:04:41,940 --> 00:04:47,140
[music]

76
00:04:47,340 --> 00:04:49,780
Engaging formation maneuver

77
00:04:49,780 --> 00:05:01,140
[music]

78
00:05:01,540 --> 00:05:04,860
Edwards tower...Sting Ray Zero One inbound landing

79
00:05:04,860 --> 00:05:06,300
Lakebed Two...Three...Right

80
00:05:06,300 --> 00:05:11,800
[music]

81
00:05:12,160 --> 00:05:13,840
And Edwards Tower...Sting Ray Zero Two's