
Getac

1
00:00:03,649 --> 00:00:01,730
really what a shockwave is is an

2
00:00:05,749 --> 00:00:03,659
instantaneous change in pressure and so

3
00:00:07,280 --> 00:00:05,759
that change of pressure papa gates

4
00:00:09,379 --> 00:00:07,290
through the air from the aircraft down

5
00:00:25,020 --> 00:00:09,389
to the ground and our ears hear that and

6
00:00:30,960 --> 00:00:27,690
this is the crew brief for since moved

7
00:00:32,190 --> 00:00:30,970
type 1 objectives for today is the

8
00:00:33,690 --> 00:00:32,200
real-time this is why I had the talk

9
00:00:41,189 --> 00:00:33,700
with Ralph's footprint in the rear

10
00:00:42,420 --> 00:00:41,199
cockpit of the f-18 we have 7 different

11
00:00:45,450 --> 00:00:42,430
recorders out in the field that we'll be

12
00:00:47,430 --> 00:00:45,460
using and we want to you know to record

13
00:00:48,900 --> 00:00:47,440

sonic booms and I will be the one

14
00:00:49,920 --> 00:00:48,910
communicating with the control room

15
00:00:53,430 --> 00:00:49,930
communicating with the rest of the

16
00:01:08,910 --> 00:00:53,440
project team as to the test points that

17
00:01:13,780 --> 00:01:12,130
that's affirmative then I repeat so my

18
00:01:15,670 --> 00:01:13,790
role is running the backseat and I have

19
00:01:17,350 --> 00:01:15,680
a tablet display is where the boom is

20
00:01:20,140 --> 00:01:17,360
saying the ground I'm giving the pilot

21
00:01:22,300 --> 00:01:20,150
feedback on speed up slow down just sort

22
00:01:24,220 --> 00:01:22,310
of get the boom where we you want to get

23
00:01:26,620 --> 00:01:24,230
your flight path in the right place in

24
00:01:28,480 --> 00:01:26,630
in space the scientists of course want

25
00:01:31,870 --> 00:01:28,490
this as accurately as possible we've got

26
00:01:34,630 --> 00:01:31,880
GPS receivers measuring things within at

27
00:01:37,090 --> 00:01:34,640
least 10 feet we aren't gonna hit 10

28
00:01:39,370 --> 00:01:37,100
feet accuracy every time except if we're

29
00:01:41,740 --> 00:01:39,380
lucky but we get as most as many of the

30
00:01:44,290 --> 00:01:41,750
parameters as close as we can the

31
00:01:46,960 --> 00:01:44,300
scientists can work the data out and see

32
00:01:48,400 --> 00:01:46,970
how see how we did but more importantly

33
00:01:49,950 --> 00:01:48,410
see how the algorithm did and see

34
00:01:54,370 --> 00:01:49,960
whether the displays working correctly

35
00:01:57,550 --> 00:01:54,380
three copies join 1.3

36
00:01:59,649 --> 00:01:57,560
over there this is the cockpit display

37
00:02:01,300 --> 00:01:59,659
for the cockpit interactive sonic boom

38
00:02:03,940 --> 00:02:01,310

display avionics or missus boomed up

39
00:02:05,980 --> 00:02:03,950
start to generate all the impact area

40
00:02:08,380 --> 00:02:05,990
where the Senate booms hit on the ground

41
00:02:08,859 --> 00:02:08,390
over here we had a bunch of sensors on

42
00:02:11,290 --> 00:02:08,869
the lakebed

43
00:02:15,340 --> 00:02:11,300
to measure the effect of the sonic games

44
00:02:18,340 --> 00:02:15,350
and for the tests we were looking at how

45
00:02:20,680 --> 00:02:18,350
the real-time display predicts the

46
00:02:22,780 --> 00:02:20,690
senate food where it hits when it hits

47
00:02:24,370 --> 00:02:22,790
and the intensity of the boom let's show

48
00:02:26,080 --> 00:02:24,380
them how the colors and we compare that

49
00:02:31,059 --> 00:02:26,090
to measurements on the ground look you

50
00:02:33,009 --> 00:02:31,069
got one we got one test point complete

51
00:02:36,420 --> 00:02:33,019
we did see is open house we're good to

52
00:02:38,010 --> 00:02:36,430
see the next row

53
00:02:40,380 --> 00:02:38,020
and that's fast we're gonna do what we

54
00:02:42,990 --> 00:02:40,390
call our low boom dive I'm familiar with

55
00:02:44,070 --> 00:02:43,000
it but the aircraft actually flies at

56
00:02:46,860 --> 00:02:44,080
about forty nine thousand feet

57
00:02:49,290 --> 00:02:46,870
subsonically does a dive an inverted

58
00:02:51,270 --> 00:02:49,300
dive to meet supersonic speeds and then

59
00:02:52,500 --> 00:02:51,280
recovers that's our little Bing dive if

60
00:02:53,720 --> 00:02:52,510
we use it a lot in our testing to

61
00:02:56,240 --> 00:02:53,730
simulate

62
00:03:06,040 --> 00:02:56,250
demonstrator a living aircraft might

63
00:03:11,180 --> 00:03:09,530

copy mark would PC boom and says boom

64
00:03:12,770 --> 00:03:11,190
does to compete where the booms going

65
00:03:14,840 --> 00:03:12,780
the knock number of the aircraft you

66
00:03:17,360 --> 00:03:14,850
have a certain shape of Mach cone kind

67
00:03:19,100 --> 00:03:17,370
of like a way coming off a motorboat

68
00:03:27,450 --> 00:03:19,110
would be a shaped wake but in an

69
00:03:33,730 --> 00:03:29,800
starting with Bravo please report what

70
00:03:35,920 --> 00:03:33,740
you heard so we're trying to do is

71
00:03:37,540 --> 00:03:35,930
design aircraft that produce quieter

72
00:03:42,820 --> 00:03:37,550
fine guns or as we're calling them low

73
00:03:44,560 --> 00:03:42,830
booms we're able to do that hopefully we

74
00:03:48,820 --> 00:03:44,570
can get some of the regulations change

75
00:03:50,920 --> 00:03:48,830
so that we can have sonic booms over