



1
00:00:00,000 --> 00:00:03,800
(Music)

2
00:00:03,800 --> 00:00:06,200
(Propeller starts and runs)

3
00:00:06,200 --> 00:00:08,230
Walter Vincente: The N-A-C-A was formed by

4
00:00:08,230 --> 00:00:12,890
an act of Congress in mid-1915.

5
00:00:12,890 --> 00:00:16,220
The acronym stood for National Advisory

6
00:00:16,220 --> 00:00:18,180
Committee for Aeronautics.

7
00:00:18,180 --> 00:00:20,270
Its original purpose was to advise

8
00:00:20,270 --> 00:00:23,100
the U.S. government on matters pertaining to

9
00:00:23,100 --> 00:00:26,080
the development of aeronautics.

10
00:00:26,080 --> 00:00:29,460
The N-A-C-A went on to do a number

11
00:00:29,460 --> 00:00:30,790
of notable things.

12
00:00:30,790 --> 00:00:33,470
The most prominent were the development of

13
00:00:33,470 --> 00:00:35,710

the world's first pressurized wind tunnel

14

00:00:35,710 --> 00:00:39,350

at Langley Field in the mid-1920s.

15

00:00:39,350 --> 00:00:42,550

They went then, in the 1930s, on to develop

16

00:00:42,550 --> 00:00:47,180

the famous N-A-C-A cowling and also, they went on

17

00:00:47,180 --> 00:00:50,730

to conceive of the idea and work out the details

18

00:00:50,730 --> 00:00:53,570

of the laminar flow airfoil.

19

00:00:53,570 --> 00:00:58,110

Those all became highly used in the aircraft industry.

20

00:00:58,110 --> 00:01:00,160

During the Depression, the Great Depression,

21

00:01:00,160 --> 00:01:02,550

money was hard to come by.

22

00:01:02,550 --> 00:01:05,850

The load on the Langley laboratory

23

00:01:05,850 --> 00:01:07,750

was becoming considerable.

24

00:01:07,750 --> 00:01:09,000

Glenn Bugos: The N-A-C-A Laboratory at

25

00:01:09,000 --> 00:01:10,720

Langley Field in Virginia was overbuilt.

26

00:01:10,720 --> 00:01:11,880

There was no room on the tarmac

27

00:01:11,880 --> 00:01:13,320

for flight research aircraft.

28

00:01:13,320 --> 00:01:14,670

There was no room for wind tunnels.

29

00:01:14,670 --> 00:01:16,310

Most importantly, there was no electricity

30

00:01:16,310 --> 00:01:18,720

available to drive any new wind tunnels

31

00:01:18,720 --> 00:01:19,940

that could be constructed there.

32

00:01:19,940 --> 00:01:23,190

(Music)

33

00:01:23,190 --> 00:01:25,270

Charles Lindbergh: We are on the verge of war,

34

00:01:25,270 --> 00:01:28,280

for which we are still unprepared.

35

00:01:28,280 --> 00:01:30,680

The American Army has only a few hundred

36

00:01:30,680 --> 00:01:34,240

thoroughly modern bombers and fighters.

37

00:01:34,240 --> 00:01:37,230

Less, in fact, than Germany is able to produce

38

00:01:37,230 --> 00:01:39,350

in a single month.

39
00:01:39,350 --> 00:01:41,250
Walter Vincente: Trips were made to Germany

40
00:01:41,250 --> 00:01:45,400
by George Lewis, the director of N-A-C-A

41
00:01:45,400 --> 00:01:48,060
and Charles Lindbergh to see

42
00:01:48,060 --> 00:01:50,930
what was going on in Germany.

43
00:01:50,930 --> 00:01:54,850
What they did see really opened their eyes.

44
00:01:54,850 --> 00:01:58,230
Germany was far ahead of the United States

45
00:01:58,230 --> 00:02:01,110
in aeronautical research.

46
00:02:01,110 --> 00:02:03,870
It seems to have been a growing consensus,

47
00:02:03,870 --> 00:02:08,820
among the military in particular, also the N-A-C-A,

48
00:02:08,820 --> 00:02:11,280
and some growing feeling in the Congress

49
00:02:11,280 --> 00:02:13,410
that something needed to be done.

50
00:02:13,410 --> 00:02:15,270
Russ Robinson: A) Our only laboratory

51

00:02:15,270 --> 00:02:16,810

is on the East Coast.

52

00:02:16,810 --> 00:02:21,140

B) The aircraft industry is moving to the West Coast.

53

00:02:21,140 --> 00:02:24,230

We ought to establish a second laboratory.

54

00:02:24,230 --> 00:02:29,070

A site selection committee was formed under Colonel Lindbergh.

55

00:02:29,070 --> 00:02:33,060

Walter Vincente: The N-A-C-A itself finally came up

56

00:02:33,060 --> 00:02:36,510

with a proposal to put a laboratory

57

00:02:36,510 --> 00:02:39,100

near Sunnyvale, California.

58

00:02:39,100 --> 00:02:44,670

The final act of Congress to fund the new laboratory

59

00:02:44,670 --> 00:02:51,620

here at Sunnyvale was in June of 1939.

60

00:02:51,620 --> 00:02:52,800

Glenn Bugos: Why Moffett Field?

61

00:02:52,800 --> 00:02:54,180

It was located on the West Coast,

62

00:02:54,180 --> 00:02:56,570

close to the West Coast aircraft manufacturers

63

00:02:56,570 --> 00:02:58,320

in Los Angeles and Seattle.

64
00:02:58,320 --> 00:03:00,030
But probably, most importantly, there was a

65
00:03:00,030 --> 00:03:02,700
craft tradition in the Bay Area.

66
00:03:02,700 --> 00:03:04,960
This came in very handy when Ames had to build

67
00:03:04,960 --> 00:03:07,950
huge wind tunnel hulls or very tiny electrodes

68
00:03:07,950 --> 00:03:13,840
that served for very sensitive instrumentation.

69
00:03:13,840 --> 00:03:15,790
Joseph Sweetman Ames was a professor of physics

70
00:03:15,790 --> 00:03:17,400
and later, president of the Johns Hopkins

71
00:03:17,400 --> 00:03:19,170
University in Baltimore.

72
00:03:19,170 --> 00:03:21,770
He was also a founding member of the N-A-C-A in 1915

73
00:03:21,770 --> 00:03:23,670
and served as the chairman of its main committee

74
00:03:23,670 --> 00:03:27,190
from 1927 until 1937.

75
00:03:27,190 --> 00:03:29,060
And because of the integrity and the trust

76

00:03:29,060 --> 00:03:31,610

that people in Congress and in the Executive Branch

77

00:03:31,610 --> 00:03:34,090

of the government had placed in Joseph Sweetman Ames,

78

00:03:34,090 --> 00:03:36,890

the laboratory here was established and in 1944,