
NASA STUDENT LAUNCH

1
00:00:00,834 --> 00:00:03,403
>> THREE, TWO...

2
00:00:03,403 --> 00:00:04,804
LAUNCH!

3
00:00:17,717 --> 00:00:18,985
>> WELCOME TO NASA'S

4
00:00:18,985 --> 00:00:20,553
STUDENT LAUNCH COMPETITION,

5
00:00:20,553 --> 00:00:21,588
ONE OF NASA'S

6
00:00:21,588 --> 00:00:23,256
ARTEMIS STUDENT CHALLENGES.

7
00:00:23,256 --> 00:00:24,691
FOR OUR STUDENT TEAMS,

8
00:00:24,691 --> 00:00:26,860
IT ACTUALLY IS ROCKET SCIENCE.

9
00:00:26,860 --> 00:00:28,261
NASA STUDENT LAUNCH

10
00:00:28,261 --> 00:00:29,028
IS AN ANNUAL

11
00:00:29,028 --> 00:00:30,330
ENGINEERING COMPETITION

12
00:00:30,330 --> 00:00:31,865
DESIGNED TO INTRODUCE STUDENTS

13
00:00:31,865 --> 00:00:33,032

TO THE EXCITING WORLD

14
00:00:33,032 --> 00:00:34,901
OF HIGH-POWERED ROCKETRY.

15
00:00:34,901 --> 00:00:36,336
STUDENT LAUNCH ENGAGES

16
00:00:36,336 --> 00:00:37,537
STUDENTS FROM MIDDLE SCHOOLS

17
00:00:37,537 --> 00:00:39,105
TO UNIVERSITIES IN

18
00:00:39,105 --> 00:00:41,074
A 9-MONTH ENGINEERING DESIGN

19
00:00:41,074 --> 00:00:42,675
LIFE CYCLE PROGRAM,

20
00:00:42,675 --> 00:00:43,843
MIRRORING THE ACTIVITIES

21
00:00:43,843 --> 00:00:45,445
OF A SPACE FLIGHT PROGRAM.

22
00:00:45,445 --> 00:00:47,380
TEAMS DESIGN, BUILD,

23
00:00:47,380 --> 00:00:48,748
TEST, AND LAUNCH

24
00:00:48,748 --> 00:00:50,116
HIGH-POWERED ROCKETS

25
00:00:50,116 --> 00:00:51,618
AND SCIENTIFIC PAYLOADS.

26
00:00:51,618 --> 00:00:53,086
TEAMS ARE DIVIDED INTO

27
00:00:53,086 --> 00:00:54,587
TWO PRIMARY DIVISIONS,

28
00:00:54,587 --> 00:00:57,323
COLLEGE/UNIVERSITY, OR USLI,

29
00:00:57,323 --> 00:00:58,892
AND MIDDLE SCHOOL/HIGH SCHOOL

30
00:00:58,892 --> 00:01:00,160
OR SLI.

31
00:01:00,160 --> 00:01:02,195
EACH YEAR, USLI TEAMS

32
00:01:02,195 --> 00:01:03,496
ARE TASKED WITH COMPLETING

33
00:01:03,496 --> 00:01:04,431
A UNIQUE PAYLOAD

34
00:01:04,431 --> 00:01:05,799
OR MISSION OBJECTIVE.

35
00:01:05,799 --> 00:01:07,267
SLI TEAMS ARE PERMITTED

36
00:01:07,267 --> 00:01:08,902
TO DEVELOP A SCIENCE EXPERIMENT

37
00:01:08,902 --> 00:01:10,303
WHERE AN ENGINEERING PAYLOAD

38
00:01:10,303 --> 00:01:11,171

APPROPRIATE TO THEIR

39
00:01:11,171 --> 00:01:13,206
CAPABILITIES AND CURRICULUM.

40
00:01:13,206 --> 00:01:15,341
HOW HIGH DO ROCKETS GO?

41
00:01:15,341 --> 00:01:16,409
FOR OUR COMPETITION,

42
00:01:16,409 --> 00:01:17,444
THEY'LL REACH ALTITUDES

43
00:01:17,444 --> 00:01:20,213
BETWEEN 3,500 AND 6,000 FEET.

44
00:01:20,213 --> 00:01:21,147
INSTEAD OF TRYING

45
00:01:21,147 --> 00:01:22,248
TO FLY THE HIGHEST,

46
00:01:22,248 --> 00:01:23,616
TEAMS TRY TO FLY THE CLOSEST

47
00:01:23,616 --> 00:01:24,951
TO THEIR TARGET ALTITUDE,

48
00:01:24,951 --> 00:01:25,952
WHICH THEY SUBMIT

49
00:01:25,952 --> 00:01:26,853
DURING THE PRELIMINARY

50
00:01:26,853 --> 00:01:27,720
DESIGN REVIEW

51
00:01:27,720 --> 00:01:29,422
A FULL SIX MONTHS BEFORE

52
00:01:29,422 --> 00:01:30,957
THEIR COMPETITION LAUNCH.

53
00:01:30,957 --> 00:01:32,192
A RIGOROUS AND COMPETITIVE

54
00:01:32,192 --> 00:01:33,827
PROPOSAL SELECTION PROCESS

55
00:01:33,827 --> 00:01:34,494
KICKS OFF

56
00:01:34,494 --> 00:01:35,929
THIS ARTEMIS STUDENT CHALLENGE.

57
00:01:35,929 --> 00:01:36,963
ONCE SELECTED,

58
00:01:36,963 --> 00:01:38,198
COMPETING TEAMS MUST COMPLETE

59
00:01:38,198 --> 00:01:39,899
A SERIES OF MILESTONE REVIEWS,

60
00:01:39,899 --> 00:01:41,034
MIRRORING THE NASA

61
00:01:41,034 --> 00:01:42,669
ENGINEERING DESIGN LIFE CYCLE.

62
00:01:42,669 --> 00:01:44,671
EACH REVIEW INVOLVES PREPARING

63
00:01:44,671 --> 00:01:45,738

A TECHNICAL REPORT

64
00:01:45,738 --> 00:01:47,073
DETAILING THE LAUNCH VEHICLE

65
00:01:47,073 --> 00:01:48,041
AND PAYLOAD DESIGN,

66
00:01:48,041 --> 00:01:49,442
TECHNICAL DRAWINGS,

67
00:01:49,442 --> 00:01:50,710
SIMULATION DATA,

68
00:01:50,710 --> 00:01:52,612
SAFETY AND HAZARDS ANALYSIS,

69
00:01:52,612 --> 00:01:54,380
TEST DATA, TIMELINE

70
00:01:54,380 --> 00:01:55,782
AND BUDGET ESTIMATIONS,

71
00:01:55,782 --> 00:01:57,450
AND STEM ENGAGEMENT.

72
00:01:57,450 --> 00:01:58,852
TEAMS PRESENT EACH MILESTONE

73
00:01:58,852 --> 00:02:00,620
VIA VIDEO TELECONFERENCE

74
00:02:00,620 --> 00:02:01,521
TO A REVIEW PANEL

75
00:02:01,521 --> 00:02:02,689
COMPRISED OF NASA

76
00:02:02,689 --> 00:02:04,557
SUBJECT MATTER EXPERTS.

77
00:02:04,557 --> 00:02:05,658
TO FINISH OUT

78
00:02:05,658 --> 00:02:06,693
THE SEASON IN APRIL,

79
00:02:06,693 --> 00:02:07,994
TEAMS COMPETE IN A FINAL

80
00:02:07,994 --> 00:02:09,329
COMPETITION LAUNCH EVENT

81
00:02:09,329 --> 00:02:10,830
HOSTED IN ROCKET CITY,

82
00:02:10,830 --> 00:02:12,232
HUNSTVILLE, ALABAMA,

83
00:02:12,232 --> 00:02:13,266
HOME OF NASA'S

84
00:02:13,266 --> 00:02:14,901
MARSHALL SPACE FLIGHT CENTER.

85
00:02:14,901 --> 00:02:17,871
FOR THE 2021 AND 2022

86
00:02:17,871 --> 00:02:19,239
COMPETITION SEASONS,

87
00:02:19,239 --> 00:02:20,640
TEAMS UNABLE TO GATHER

88
00:02:20,640 --> 00:02:21,975

OR TRAVEL EFFECTIVELY

89
00:02:21,975 --> 00:02:23,009
ARE PERMITTED TO JOIN

90
00:02:23,009 --> 00:02:24,210
THE NEW DESIGN DIVISION.

91
00:02:24,210 --> 00:02:25,512
THE DESIGN DIVISION

92
00:02:25,512 --> 00:02:26,579
MAINTAINS THE FOCUS

93
00:02:26,579 --> 00:02:27,647
AND TECHNICAL EXCELLENCE

94
00:02:27,647 --> 00:02:28,715
OF THE ARTEMIS

95
00:02:28,715 --> 00:02:30,183
STUDENT CHALLENGE PROGRAMS

96
00:02:30,183 --> 00:02:31,551
WITHOUT REQUIRING A ROCKET

97
00:02:31,551 --> 00:02:33,319
TO BE CONSTRUCTED OR FLOWN.

98
00:02:33,319 --> 00:02:34,387
IF YOU WOULD LIKE TO LEARN MORE

99
00:02:34,387 --> 00:02:35,788
ABOUT NASA STUDENT LAUNCH

100
00:02:35,788 --> 00:02:37,390
OR OTHER NASA ARTEMIS

101
00:02:37,390 --> 00:02:38,525
STUDENT CHALLENGES,

102
00:02:38,525 --> 00:02:40,026
VISIT US AT OUR WEBSITE

103
00:02:40,026 --> 00:02:41,294
OR ON SOCIAL MEDIA.

104
00:02:43,563 --> 00:02:47,133
>> VISIT STEM.NASA.GOV/ARTEMIS

105
00:02:47,133 --> 00:02:48,401
AND SEE HOW YOU CAN JOIN