



Flight Opportunities Program

Fly Early, Fly Often, Fly Safely

1
00:00:03,600 --> 00:00:09,333
[6, 5, 4, 3, 2, 1]

2
00:00:09,333 --> 00:00:24,533
■

3
00:00:24,533 --> 00:00:25,600
[Fire]

4
00:00:27,333 --> 00:00:28,267
Missile away.

5
00:00:28,267 --> 00:00:29,533
The flight opportunities program

6
00:00:29,533 --> 00:00:31,367
purchases commercial suborbital

7
00:00:31,367 --> 00:00:32,567
reusable launch
vehicle services

8
00:00:32,567 --> 00:00:34,267
to quickly fly technology

9
00:00:34,267 --> 00:00:35,767
payloads

10
00:00:35,767 --> 00:00:37,233
in space-like environments.

11
00:00:37,233 --> 00:00:38,267
[Plus 5.]

12
00:00:38,800 --> 00:00:40,833
[Release, release, release.]

13

00:00:42,200 --> 00:00:43,700
[It's stable]

14

00:00:43,700 --> 00:00:45,067
it's much cheaper to fly

15

00:00:45,067 --> 00:00:46,533
suborbitally than it is to say,

16

00:00:46,533 --> 00:00:47,467
put something on the

17

00:00:47,467 --> 00:00:49,167
international space station.

18

00:00:49,167 --> 00:00:51,933
So we can quickly fly payloads,

19

00:00:51,933 --> 00:00:53,167
technology payloads, to

20

00:00:53,167 --> 00:00:54,200
demonstrate that those will

21

00:00:54,200 --> 00:00:55,267
work in a space-like

22

00:00:55,267 --> 00:00:56,500
environment before we commit

23

00:00:56,500 --> 00:00:58,767
them to orbit or to deep space.

24

00:00:58,767 --> 00:00:59,999
[rocket blast]

25

00:01:00,000 --> 00:01:01,533
The ultimate goal of this whole

26

00:01:01,533 --> 00:01:02,600

thing is to get a payload

27

00:01:02,600 --> 00:01:05,000

put together quickly, fly it,

28

00:01:05,000 --> 00:01:06,667

it may or may not work but we

29

00:01:06,667 --> 00:01:08,000

can fly it, it's a whole

30

00:01:08,000 --> 00:01:09,000

twenty minutes for the flight.

31

00:01:09,000 --> 00:01:11,433

Return it to the PI.

32

00:01:11,433 --> 00:01:12,567

He can check it out.

33

00:01:12,567 --> 00:01:13,433

If it didn't work,

34

00:01:13,433 --> 00:01:14,500

put it back on, we'll

35

00:01:14,500 --> 00:01:16,500

fly it again that afternoon.

36

00:01:16,500 --> 00:01:18,000

Or if it did work,

37

00:01:18,000 --> 00:01:19,033

he can go on to the next

38

00:01:19,033 --> 00:01:20,167
level and send it, say,

39

00:01:20,167 --> 00:01:21,167
up to the space station.

40

00:01:21,867 --> 00:01:23,667
These are all commercial
opportunities.

41

00:01:23,667 --> 00:01:25,867
There are lots of
different choices.

42

00:01:25,867 --> 00:01:27,800
We have balloons.

43

00:01:27,800 --> 00:01:30,100
We have aircraft that fly

44

00:01:30,100 --> 00:01:32,333
parabolic flights to get to

45

00:01:32,333 --> 00:01:33,533
limited amounts of microgravity.

46

00:01:33,533 --> 00:01:35,100
And we have suborbital

47

00:01:35,100 --> 00:01:37,267
reusable launch vehicles

48

00:01:37,267 --> 00:01:38,867
that will get up to about four

49

00:01:38,867 --> 00:01:40,233
minutes of microgravity
at a shot.

50

00:01:40,233 --> 00:01:42,167

[Aircraft noise]

51

00:01:42,167 --> 00:01:43,833

We have selected up to seven

52

00:01:43,833 --> 00:01:45,433

different commercial vendors.

53

00:01:45,433 --> 00:01:47,167

Most of them are small companies

54

00:01:47,167 --> 00:01:49,000

there was one large company.

55

00:01:49,000 --> 00:01:50,400

But essentially, they are all

56

00:01:50,400 --> 00:01:52,567

gearing up to provide multiple

57

00:01:52,567 --> 00:01:53,967

flights per year.

58

00:01:54,733 --> 00:01:56,000

Pilot: RSO, how do you read?

59

00:01:56,000 --> 00:01:57,033

RSO: RSO is green.

60

00:01:59,000 --> 00:02:00,067

Pilot: Copy

61

00:02:00,067 --> 00:02:01,000

Pilot: Surveillance?

62

00:02:01,000 --> 00:02:02,233

Surveillance:
Surveillance ready.

63
00:02:02,233 --> 00:02:03,733
We are working with researchers

64
00:02:03,733 --> 00:02:05,933
right now to develop their

65
00:02:05,933 --> 00:02:07,767
technologies and take it from

66
00:02:07,767 --> 00:02:10,233
a lab-bench environment to

67
00:02:10,233 --> 00:02:13,033
an actual flight
operations environment.

68
00:02:13,033 --> 00:02:14,000
Pilot: Extending the feather

69
00:02:14,000 --> 00:02:15,533
Control Room: Feather's moving.

70
00:02:15,533 --> 00:02:17,000
Part of the real value of the

71
00:02:17,000 --> 00:02:18,000
flight opportunities program

72
00:02:18,000 --> 00:02:19,067
is that it is effectively

73
00:02:19,067 --> 00:02:20,433
priming the pump for an

74
00:02:20,433 --> 00:02:22,200

entire industry in lots of

75

00:02:22,200 --> 00:02:23,400
different ways.

76

00:02:23,400 --> 00:02:24,767
It's helping us as the vehicle

77

00:02:24,767 --> 00:02:26,033
providers figure out how

78

00:02:26,033 --> 00:02:28,167
best to service the research
community.

79

00:02:28,167 --> 00:02:30,433
But also because the flight
opportunities program

80

00:02:30,433 --> 00:02:31,233
flights are specifically

81

00:02:31,233 --> 00:02:32,800
geared towards technology,

82

00:02:32,800 --> 00:02:34,167
it's helping develop the actual

83

00:02:34,167 --> 00:02:36,067
systems and the technologies

84

00:02:36,067 --> 00:02:38,000
and the sensors that in turn are

85

00:02:38,000 --> 00:02:39,400
going to enable all this
science.

86

00:02:39,500 --> 00:02:41,500
[Rocket noise]

87
00:02:42,500 --> 00:02:43,900
The work that we're doing under

88
00:02:43,900 --> 00:02:44,867
flight opportunities helps

89
00:02:44,867 --> 00:02:46,633
provide validation that yes, it

90
00:02:46,633 --> 00:02:48,367
can be done and yes, this is the

91
00:02:48,367 --> 00:02:49,867
sort of thing that is worth

92
00:02:49,867 --> 00:02:51,033
these other companies investing

93
00:02:51,033 --> 00:02:52,167
their money in.

94
00:02:54,067 --> 00:02:55,267
The flight opportunities program

95
00:02:55,267 --> 00:02:57,167
brings together
payload providers

96
00:02:57,167 --> 00:02:58,567
and flight service providers

97
00:02:58,567 --> 00:03:00,000
in such a way that

98
00:03:00,000 --> 00:03:01,367

benefits everyone.

99

00:03:01,367 --> 00:03:02,967

NASA is very excited

100

00:03:02,967 --> 00:03:04,800

about helping this industry

101

00:03:04,800 --> 00:03:05,533

get going.

102

00:03:05,533 --> 00:03:07,233

This industry will serve our

103

00:03:07,233 --> 00:03:09,900

country as a whole new economy,

104

00:03:09,900 --> 00:03:13,067

a whole new industry as well as

105

00:03:13,067 --> 00:03:15,067

making space accessible to a

106

00:03:15,067 --> 00:03:17,600

whole broad, a much broader

107

00:03:17,600 --> 00:03:19,000

portion of the population.

108

00:03:19,333 --> 00:03:22,200

Control: 3, 2, arm