



SPACE STATION STORIES

1
00:00:08,790 --> 00:00:06,630
with every day on orbit the

2
00:00:10,870 --> 00:00:08,800
international space station changes the

3
00:00:13,350 --> 00:00:10,880
way the commercial sector thinks about

4
00:00:15,110 --> 00:00:13,360
doing business in space

5
00:00:16,470 --> 00:00:15,120
after the designation of the iss

6
00:00:18,870 --> 00:00:16,480
national laboratory

7
00:00:21,189 --> 00:00:18,880
we saw the emergence of small startup

8
00:00:22,950 --> 00:00:21,199
companies commercial entities that were

9
00:00:24,950 --> 00:00:22,960
making a business

10
00:00:27,109 --> 00:00:24,960
out of doing research and technology

11
00:00:28,870 --> 00:00:27,119
development on the space station

12
00:00:31,429 --> 00:00:28,880
the space station needs supplies

13
00:00:33,350 --> 00:00:31,439

delivered so nasa encouraged private

14

00:00:34,709 --> 00:00:33,360

companies to look into the space

15

00:00:36,549 --> 00:00:34,719

freighter business

16

00:00:38,310 --> 00:00:36,559

the key precursor was the completion of

17

00:00:39,830 --> 00:00:38,320

the space station to have a destination

18

00:00:40,549 --> 00:00:39,840

in space

19

00:00:43,510 --> 00:00:40,559

that

20

00:00:45,029 --> 00:00:43,520

where it made sense to apply competitive

21

00:00:46,389 --> 00:00:45,039

commercial activity

22

00:00:48,069 --> 00:00:46,399

if you know that you've got a contract

23

00:00:50,389 --> 00:00:48,079

that could last for years

24

00:00:52,229 --> 00:00:50,399

and the program such as the iss will

25

00:00:54,310 --> 00:00:52,239

actually benefit from it it motivates

26
00:00:55,990 --> 00:00:54,320
both sides to put a lot into it and make

27
00:00:58,709 --> 00:00:56,000
sure it's successful

28
00:01:00,869 --> 00:00:58,719
being in orbit 250 miles above the earth

29
00:01:02,150 --> 00:01:00,879
the station is a launching pad for small

30
00:01:03,189 --> 00:01:02,160
satellites

31
00:01:04,469 --> 00:01:03,199
if we didn't have access to the

32
00:01:06,710 --> 00:01:04,479
international space station we wouldn't

33
00:01:09,030 --> 00:01:06,720
have nearly as frequent access to space

34
00:01:11,190 --> 00:01:09,040
and that would have set back our ability

35
00:01:13,670 --> 00:01:11,200
to rapidly iterate our technology and

36
00:01:15,510 --> 00:01:13,680
now today we're able to operate the

37
00:01:17,670 --> 00:01:15,520
largest fleet of earth imaging

38
00:01:19,830 --> 00:01:17,680

satellites in human history

39

00:01:21,990 --> 00:01:19,840

the weightless environment is ideal for

40

00:01:22,870 --> 00:01:22,000

laboratory science that can't be done on

41

00:01:25,109 --> 00:01:22,880

earth

42

00:01:27,749 --> 00:01:25,119

the international space station offers

43

00:01:30,310 --> 00:01:27,759

researchers like me an opportunity to

44

00:01:32,710 --> 00:01:30,320

find the key variables to crystal growth

45

00:01:35,830 --> 00:01:32,720

and these crystalline suspensions have

46

00:01:38,870 --> 00:01:35,840

applications such as manufacturing drug

47

00:01:40,390 --> 00:01:38,880

delivery we're looking at a new molecule

48

00:01:42,950 --> 00:01:40,400

that has some very interesting

49

00:01:45,030 --> 00:01:42,960

properties in muscle wasting and it

50

00:01:46,789 --> 00:01:45,040

counters muscle wasting diseases

51
00:01:49,190 --> 00:01:46,799
and with the station as a commercial

52
00:01:51,270 --> 00:01:49,200
destination there is a business to run

53
00:01:53,350 --> 00:01:51,280
arranging the transportation

54
00:01:55,510 --> 00:01:53,360
we've flown over 200 experiments to the

55
00:01:56,870 --> 00:01:55,520
space station everything from plant

56
00:01:59,590 --> 00:01:56,880
growth to

57
00:02:00,630 --> 00:01:59,600
silver plating to slime molds growing in

58
00:02:04,389 --> 00:02:00,640
space

59
00:02:07,510 --> 00:02:04,399
powering private expansion into the

60
00:02:08,790 --> 00:02:07,520
cosmos and enabling future deep space

61
00:02:11,430 --> 00:02:08,800
exploration

62
00:02:13,750 --> 00:02:11,440
fostering international cooperation