



1
00:00:00,500 --> 00:00:03,500
[Background sounds]

2
00:00:03,500 --> 00:00:04,470
>> The next members

3
00:00:04,470 --> 00:00:07,400
of the International Space
Station crew all believe

4
00:00:07,400 --> 00:00:09,980
that their 6 month mission
is an important part

5
00:00:09,980 --> 00:00:12,920
of the work that's needed to
help human beings continue

6
00:00:12,920 --> 00:00:15,530
to explore well beyond
their home planet.

7
00:00:15,530 --> 00:00:19,940
Pavel Vinogradov was born in
the far Eastern Russian town

8
00:00:19,940 --> 00:00:24,000
of Magadan and grew up in
the even farther Eastern town

9
00:00:24,000 --> 00:00:26,300
of Anoder [phonetic],
just 500 miles

10
00:00:26,300 --> 00:00:30,010
across the Bering Sea
from Nome, Alaska.

11
00:00:30,010 --> 00:00:30,130

>> Pavel Vinogradov:
[Foreign language spoken].

12

00:00:30,130 --> 00:00:36,270

>> If you have been to Alaska,
then it's pretty much the same.

13

00:00:36,270 --> 00:00:40,210

The nature is just fantastic.

14

00:00:40,210 --> 00:00:43,940

Of course the climate is very
harsh, 8 months of winter,

15

00:00:43,940 --> 00:00:47,830

lots of snow and
ice but I love it.

16

00:00:47,830 --> 00:00:48,980

I enjoy it.

17

00:00:48,980 --> 00:00:52,260

>> After a childhood spent
dreaming of becoming a pilot,

18

00:00:52,260 --> 00:00:54,870

Vinogradov left Anoder
after high school

19

00:00:54,870 --> 00:00:57,130

for the Moscow Aviation
Institute.

20

00:00:57,130 --> 00:00:59,610

He earned a degree in
rocket booster design.

21

00:00:59,610 --> 00:01:01,120

Then taught and did research

22

00:01:01,120 --> 00:01:03,510

at the institute while
earning a second degree

23

00:01:03,510 --> 00:01:06,390

in computer systems
and systems analysis.

24

00:01:06,390 --> 00:01:08,220

Vinogradov joined
the Design Bureau

25

00:01:08,220 --> 00:01:12,440

of the Rocket Space Corporation
Energia in 1983 and worked

26

00:01:12,440 --> 00:01:14,980

on the Meer [phonetic] Space
Station, the Boron Shuttle

27

00:01:14,980 --> 00:01:17,990

and other Energia vehicles
before being selected

28

00:01:17,990 --> 00:01:21,330

to Energia's cosmonaut
core in 1992.

29

00:01:21,330 --> 00:01:26,110

He logged 198 days in space as
the board engineer on Meer 24

30

00:01:26,110 --> 00:01:29,110

and made 5 space
walks to repair Meer

31

00:01:29,110 --> 00:01:31,580

after a progress crater
[phonetic] punched a hole in it

32

00:01:31,580 --> 00:01:33,720

in the summer of 1997.

33

00:01:33,720 --> 00:01:37,060

He made one more space
walk in 2006 as commander

34

00:01:37,060 --> 00:01:40,160

of the International Space
Stations' Expedition 13,

35

00:01:40,160 --> 00:01:44,050

a 183 day mission that restored
the station's crew complement

36

00:01:44,050 --> 00:01:45,220

to 3.

37

00:01:45,220 --> 00:01:48,630

He believes today's space
exploration bare comparison

38

00:01:48,630 --> 00:01:51,230

to the sea voyages of
the great explorers

39

00:01:51,230 --> 00:01:54,210

in the age of discovery.

40

00:01:54,210 --> 00:01:54,280

>> Pavel Vinogradov:
[Foreign language].

41

00:01:54,280 --> 00:01:59,540

>> People who were exploring
the earth did not know what --

42

00:01:59,540 --> 00:02:02,340

that they will discover America

in 4 months, for example.

43

00:02:02,340 --> 00:02:09,850

The risks were great but I
have no doubt that likewise,

44

00:02:09,850 --> 00:02:14,500

we as those explorers,
we need to explore space.

45

00:02:14,500 --> 00:02:17,380

>> Retired Russian Air Force
Lieutenant Colonel Alexander

46

00:02:17,380 --> 00:02:20,170

Misurkin is a product
of Western Russia.

47

00:02:20,170 --> 00:02:23,040

Born in Yershichi in
the Smolensk region

48

00:02:23,040 --> 00:02:25,890

and raised a couple of
hundred miles away in Oryol.

49

00:02:25,890 --> 00:02:29,030

He calls his childhood a
typical one and says even

50

00:02:29,030 --> 00:02:30,640

as a young boy he wanted

51

00:02:30,640 --> 00:02:33,560

to go places no one
had been to before.

52

00:02:33,560 --> 00:02:36,990

>> Alexander Misurkin: I wanted
and decided to be a cosmonaut

53

00:02:36,990 --> 00:02:38,440
when I was a little boy.

54

00:02:38,440 --> 00:02:45,450
When I was 13 years old, I
went to the Aviation Club.

55

00:02:45,450 --> 00:02:50,530
There I made [inaudible]
that I was flying on gliders.

56

00:02:50,530 --> 00:02:57,950
>> Becoming a pilot
was next on his list.

57

00:02:57,950 --> 00:03:00,340
After school in Oryol,
Misurkin went

58

00:03:00,340 --> 00:03:02,420
to the Kacha High Air
Force Pilot School

59

00:03:02,420 --> 00:03:05,140
in Vulgograd [phonetic] then
he finished his pilot training

60

00:03:05,140 --> 00:03:07,680
at the Armavir Military
Aviation Institute

61

00:03:07,680 --> 00:03:10,040
in Krasnodar in southern Russia.

62

00:03:10,040 --> 00:03:12,680
He spent the next 7 years
in the Russian Air Force

63

00:03:12,680 --> 00:03:14,100
as a pilot instructor

64

00:03:14,100 --> 00:03:17,410
as the Krasnodar Military
Aviation Institute before being

65

00:03:17,410 --> 00:03:20,480
selected as a cosmonaut in 2006.

66

00:03:20,480 --> 00:03:22,650
Misurkin shares the
philosophical view

67

00:03:22,650 --> 00:03:26,470
of the Russian rocket science
pioneer Constantine Silkowski

68

00:03:26,470 --> 00:03:29,540
who believed that earth
is the cradle of humanity

69

00:03:29,540 --> 00:03:32,610
but that mankind can't
stay in the cradle forever.

70

00:03:32,610 --> 00:03:39,930
>> am: He was positive that
we are going to the space

71

00:03:39,930 --> 00:03:48,730
and we will live in -- in other
worlds in other different ways

72

00:03:48,730 --> 00:03:53,180
and it's -- the time will
come for this I'm sure.

73

00:03:53,180 --> 00:03:57,230
That is why I think

we should do this job.

74

00:03:57,230 --> 00:04:00,790

>> U.S. Navy Commander Chris Cassidy is a native of Salem,

75

00:04:00,790 --> 00:04:03,570

Massachusetts, who grew up in York, Maine,

76

00:04:03,570 --> 00:04:05,190

on the Atlantic Coast.

77

00:04:05,190 --> 00:04:07,990

He was aware of the space program as a young boy

78

00:04:07,990 --> 00:04:10,510

but admits, he wasn't particularly interested.

79

00:04:10,510 --> 00:04:13,100

>> Chris Cassidy: I was just like every other boy.

80

00:04:13,100 --> 00:04:17,690

I mowed lawns, had a couple odd jobs in restaurants and things

81

00:04:17,690 --> 00:04:21,650

in the summertime but that was all too really pay my gas

82

00:04:21,650 --> 00:04:24,210

to drive to the basketball court.

83

00:04:24,210 --> 00:04:26,620

>> Cassidy left York after high school.

84

00:04:26,620 --> 00:04:30,140

First for a year at the Naval Academy Prep School and then

85

00:04:30,140 --> 00:04:33,740

onto Annapolis where he earned a Bachelor's in Mathematics.

86

00:04:33,740 --> 00:04:36,030

Next stop was San Diego to begin training

87

00:04:36,030 --> 00:04:38,850

in special operations as a Navy Seal.

88

00:04:38,850 --> 00:04:42,120

After 4 years stationed in Virginia, he earned a Master's

89

00:04:42,120 --> 00:04:46,390

in Ocean Engineering at MIT and about that time, he became aware

90

00:04:46,390 --> 00:04:50,710

of a fellow Navy Seal who'd had a similar career art to his,

91

00:04:50,710 --> 00:04:52,610

Astronaut Bill Shepherd [phonetic].

92

00:04:52,610 --> 00:04:54,890

>> Chris Cassidy: So one day I actually met him or called him

93

00:04:54,890 --> 00:04:57,320

and we had a -- he gave some great information

94

00:04:57,320 --> 00:05:00,160
and I thought you know
what that sounds really --

95

00:05:00,160 --> 00:05:01,330
like a really fun job.

96

00:05:01,330 --> 00:05:02,250
I think I'd like to do that.

97

00:05:02,250 --> 00:05:07,540
So I was probably 26
or 27 when the first --

98

00:05:07,540 --> 00:05:10,120
when the idea first
popped into my head.

99

00:05:10,120 --> 00:05:13,670
>> Cassidy applied but didn't
get the call from NASA.

100

00:05:13,670 --> 00:05:17,110
The next year just weeks
after September 11th,

101

00:05:17,110 --> 00:05:20,000
the Seal Platoon he
commanded did get the call

102

00:05:20,000 --> 00:05:20,950
and he was deployed

103

00:05:20,950 --> 00:05:24,570
to the Afghanistan region
before the first of October.

104

00:05:24,570 --> 00:05:27,370

He returned home to
another posting in Virginia

105

00:05:27,370 --> 00:05:29,370

and he was selected for
the astronaut program

106

00:05:29,370 --> 00:05:32,680

in 2004 just days
after coming home

107

00:05:32,680 --> 00:05:35,390

from a second deployment
to Afghanistan.

108

00:05:35,390 --> 00:05:38,090

Cassidy made 3 space
walks on his first trip

109

00:05:38,090 --> 00:05:39,920

to the International
Space Station

110

00:05:39,920 --> 00:05:42,330

on the 2009 space
shuttle mission

111

00:05:42,330 --> 00:05:45,040

that delivered the components
to complete construction

112

00:05:45,040 --> 00:05:47,310

of the Kibold [phonetic]
Laboratory Complex.

113

00:05:47,310 --> 00:05:50,560

He's enthusiastic about his
part in laying the groundwork

114

00:05:50,560 --> 00:05:53,100

for some future generation
of earthlings

115

00:05:53,100 --> 00:05:56,700

to fulfill their destination,
to find a new home in space.

116

00:05:56,700 --> 00:05:57,730

>> Chris Cassidy: But
there'll be a time

117

00:05:57,730 --> 00:06:00,060

when there'll be people
living on other planets

118

00:06:00,060 --> 00:06:03,680

and it's the work, the hard
work that we're doing right now,

119

00:06:03,680 --> 00:06:07,270

all of us across the globe,
that are going to set the stage

120

00:06:07,270 --> 00:06:08,590

for that type of environment.

121

00:06:08,590 --> 00:06:10,960

Just like Christopher
Columbus set sail one day

122

00:06:10,960 --> 00:06:12,640

across the ocean and thanks