1
00:00:05,680 --> 00:00:21,429
beautiful

2
00:00:21,439 --> 00:00:38,650
so

3
00:00:38,660 --> 00:01:20,550
[Music]

4
00:01:20,560 --> 00:02:11,510
this one

5
00:02:11,520 --> 00:02:58,550
okay

6
00:02:58,560 --> 00:03:09,990
in the wrong place

7
00:03:55,830 --> 00:03:31,750
okay

8
00:03:55,840 --> 00:04:01,830
let's go

9
00:04:21,110 --> 00:04:04,690
oh

10
00:04:21,120 --> 00:06:34,100
so

11
00:06:34,110 --> 00:06:38,210
[Music]

12
00:06:38,220 --> 00:06:43,260
[Applause]

13
00:06:43,270 --> 00:06:46,830

[Music]

14
00:06:51,749 --> 00:06:49,990
yeah joel montalbano the deputy iss

15
00:06:53,430 --> 00:06:51,759
program manager here in baikon original

16
00:06:54,790 --> 00:06:53,440
and other soyuz on the pad ready to

17
00:06:57,189 --> 00:06:54,800
launch another crew

18
00:06:58,950 --> 00:06:57,199
in this case two americans launching the

19
00:07:00,870 --> 00:06:58,960
addition of a third nasa astronaut on

20
00:07:03,270 --> 00:07:00,880
board to start a year of that

21
00:07:06,230 --> 00:07:03,280
type of crew compliment how is that

22
00:07:08,870 --> 00:07:06,240
going to increase research and solidify

23
00:07:10,629 --> 00:07:08,880
all the utilization that you expect over

24
00:07:12,150 --> 00:07:10,639
the next year okay well thank you rob

25
00:07:14,710 --> 00:07:12,160
the the additional astronaut is

26
00:07:17,430 --> 00:07:14,720
fantastic this expedition will have

27
00:07:19,110 --> 00:07:17,440
almost 200 experiments with about 50 of

28
00:07:20,950 --> 00:07:19,120
those experiments being new for this

29
00:07:22,950 --> 00:07:20,960
crew and basically what we're doing with

30
00:07:25,029 --> 00:07:22,960
the extra crew time is we're doubling

31
00:07:27,350 --> 00:07:25,039
the amount of crew hands-on utilization

32
00:07:29,430 --> 00:07:27,360
and research so just one person we're

33
00:07:31,589 --> 00:07:29,440
going to be up to almost 70 hours 70

34
00:07:33,510 --> 00:07:31,599
crew hours of hands-on research and

35
00:07:35,430 --> 00:07:33,520
utilization per week average over the

36
00:07:38,150 --> 00:07:35,440
increment it's just an exciting time to

37
00:07:40,150 --> 00:07:38,160
be in the program how complex is this

38
00:07:42,550 --> 00:07:40,160

next six months in orbit going to be for

39
00:07:44,230 --> 00:07:42,560
acaba vanda high and misurkin oh you

40
00:07:46,469 --> 00:07:44,240
know right now with the additional crew

41
00:07:48,150 --> 00:07:46,479
member we continue to hit our stride on

42
00:07:50,309 --> 00:07:48,160
space station and doing more and more

43
00:07:52,230 --> 00:07:50,319
utilization and research and the ability

44
00:07:53,830 --> 00:07:52,240
to do the science do the research get

45
00:07:56,309 --> 00:07:53,840
those results to the scientists on

46
00:07:57,830 --> 00:07:56,319
ground it's just fantastic and and so

47
00:07:59,430 --> 00:07:57,840
we're looking forward to it and we're

48
00:08:01,589 --> 00:07:59,440
just happy to be here

49
00:08:03,430 --> 00:08:01,599
three weeks from now uh

50
00:08:05,430 --> 00:08:03,440
the 60th anniversary of the launch of

51
00:08:08,309 --> 00:08:05,440
sputnik from this very launch pad will

52
00:08:10,790 --> 00:08:08,319
be marked a very significant milestone

53
00:08:12,390 --> 00:08:10,800
in six decades of human space flight

54
00:08:14,550 --> 00:08:12,400
that have evolved since the launch of

55
00:08:17,589 --> 00:08:14,560
sputnik what

56
00:08:19,830 --> 00:08:17,599
how far have we come how far can we go

57
00:08:22,629 --> 00:08:19,840
we've as you know we've come a long way

58
00:08:24,869 --> 00:08:22,639
the ability to fly six people on space

59
00:08:26,550 --> 00:08:24,879
station like we have today is incredible

60
00:08:28,869 --> 00:08:26,560
we see these opportunities that are

61
00:08:30,950 --> 00:08:28,879
presented to us and allow us to do the

62
00:08:33,190 --> 00:08:30,960
utilization allow us to do the research

63
00:08:34,630 --> 00:08:33,200

and to keep moving forward and this is

64
00:08:36,550 --> 00:08:34,640
important as we look forward to

65
00:08:38,149 --> 00:08:36,560
exploration you know eventually space

66
00:08:40,149 --> 00:08:38,159
station will end and we'll have to go

67
00:08:42,389 --> 00:08:40,159
past low-earth orbit and go to system

68
00:08:44,070 --> 00:08:42,399
under space and these days these times

69
00:08:45,910 --> 00:08:44,080
that we've been working on these past 60

70
00:08:48,070 --> 00:08:45,920
years we're taking steps forward to go

71
00:08:50,150 --> 00:08:48,080
make that happen

72
00:08:51,670 --> 00:08:50,160
sean fuller the director of human space

73
00:08:52,829 --> 00:08:51,680
flight programs in russia here in

74
00:08:55,670 --> 00:08:52,839
baikonur

75
00:08:57,509 --> 00:08:55,680
shawn this is the second soyuz launch of

76
00:08:59,829 --> 00:08:57,519
a crew in just seven weeks it's pretty

77
00:09:01,750 --> 00:08:59,839
remarkable when you think about it

78
00:09:04,070 --> 00:09:01,760
let's talk a little bit about the pace

79
00:09:04,870 --> 00:09:04,080
of activity over the past several months

80
00:09:07,509 --> 00:09:04,880
and

81
00:09:09,750 --> 00:09:07,519
what clearly will be an incredibly busy

82
00:09:11,110 --> 00:09:09,760
end of the year for the program yeah rob

83
00:09:12,710 --> 00:09:11,120
it's certainly been a busy year but a

84
00:09:14,310 --> 00:09:12,720
great year we've got three crew members

85
00:09:16,070 --> 00:09:14,320
ready to join their crewmates that are

86
00:09:17,910 --> 00:09:16,080
on orbit now like i said they launched

87
00:09:19,350 --> 00:09:17,920
just seven weeks ago they've been on

88
00:09:21,030 --> 00:09:19,360

orbit doing a lot of research doing a

89
00:09:22,710 --> 00:09:21,040
lot of things to get us ready to explore

90
00:09:24,550 --> 00:09:22,720
beyond low earth orbit with this

91
00:09:26,150 --> 00:09:24,560
addition the crew will continue that

92
00:09:28,230 --> 00:09:26,160
we've seen a lot of visiting vehicles

93
00:09:30,070 --> 00:09:28,240
coming spacex is currently on the space

94
00:09:31,509 --> 00:09:30,080
station we'll be departing here in a

95
00:09:32,870 --> 00:09:31,519
couple weeks we'll be returning back to

96
00:09:34,790 --> 00:09:32,880
earth returning some of that science to

97
00:09:36,710 --> 00:09:34,800
the ground shortly after that we'll have

98
00:09:38,790 --> 00:09:36,720
a progress launching and then we'll have

99
00:09:39,990 --> 00:09:38,800
another spacex in orbit later this year

100
00:09:42,150 --> 00:09:40,000
the crew is also going to be doing some

101
00:09:43,910 --> 00:09:42,160
evas starting early next month as we

102
00:09:45,030 --> 00:09:43,920
prepare the outside and do some

103
00:09:46,949 --> 00:09:45,040
maintenance on the outside of the

104
00:09:48,949 --> 00:09:46,959
station so getting these crew members on

105
00:09:50,389 --> 00:09:48,959
orbit to do that increase our research

106
00:09:52,550 --> 00:09:50,399
we're going to have a fantastic time up

107
00:09:54,710 --> 00:09:52,560
there as we continue what started nearly

108
00:09:56,150 --> 00:09:54,720
17 years ago with the human presence on

109
00:09:58,389 --> 00:09:56,160
the space station

110
00:10:00,230 --> 00:09:58,399
this is the first time since june of

111
00:10:02,310 --> 00:10:00,240
2010 that two americans will be

112
00:10:04,230 --> 00:10:02,320
launching on the soyuz what is the

113
00:10:06,550 --> 00:10:04,240

significance of having three nasa

114
00:10:08,550 --> 00:10:06,560
astronauts on board an expanded u.s

115
00:10:11,430 --> 00:10:08,560
orbital segment crew presence

116
00:10:13,190 --> 00:10:11,440
as you tackle all the tasks ahead yeah

117
00:10:14,710 --> 00:10:13,200
it's great to have that expanded u.s

118
00:10:16,470 --> 00:10:14,720
crew presence on orbit we've got a lot

119
00:10:17,910 --> 00:10:16,480
of research in store for them

120
00:10:20,069 --> 00:10:17,920
this particular crew along with their

121
00:10:21,590 --> 00:10:20,079
crewmates will be conducting over 250

122
00:10:23,190 --> 00:10:21,600
different investigations during their

123
00:10:25,990 --> 00:10:23,200
time on orbit that's going to cover the

124
00:10:27,990 --> 00:10:26,000
gamut of human research biotechnology

125
00:10:29,509 --> 00:10:28,000
earth sciences physical sciences really

126
00:10:31,350 --> 00:10:29,519
cover the spectrum of research that will

127
00:10:33,350 --> 00:10:31,360
benefit not only those of us here on the

128
00:10:35,350 --> 00:10:33,360
ground but it's also technology that'll

129
00:10:37,190 --> 00:10:35,360
be advancing us further into into the

130
00:10:38,790 --> 00:10:37,200
space as we go beyond low earth orbit so

131
00:10:41,030 --> 00:10:38,800
having that additional research we'll be

132
00:10:43,190 --> 00:10:41,040
able to double our research time on the

133
00:10:45,030 --> 00:10:43,200
u.s segment and so this is a really a

134
00:10:46,630 --> 00:10:45,040
fantastic step forward as we look ahead

135
00:10:48,710 --> 00:10:46,640
to commercial crew when we'll

136
00:10:49,670 --> 00:10:48,720
continually have four us os crew members

137
00:10:51,430 --> 00:10:49,680
on orbit

138
00:10:53,990 --> 00:10:51,440

you know we always talk about

139
00:10:55,590 --> 00:10:54,000
this launch pad its history

140
00:10:57,829 --> 00:10:55,600
we always talk about it in regard to

141
00:11:00,470 --> 00:10:57,839
yuri gagarin having launched on this pad

142
00:11:02,710 --> 00:11:00,480
but four years before gagarin was the

143
00:11:05,670 --> 00:11:02,720
launch of sputnik one on october 4th

144
00:11:07,350 --> 00:11:05,680
1957 that started all of this

145
00:11:08,630 --> 00:11:07,360
your thoughts on the significance of

146
00:11:11,030 --> 00:11:08,640
that how far

147
00:11:12,389 --> 00:11:11,040
we as a human race have come in 60 years

148
00:11:14,150 --> 00:11:12,399
yeah i think it's pretty spectacular

149
00:11:16,630 --> 00:11:14,160
like you said 60 years ago we took that

150
00:11:18,389 --> 00:11:16,640
first small step from here today we have

151
00:11:19,990 --> 00:11:18,399
humans living in space and i like to

152
00:11:22,310 --> 00:11:20,000
remind folks that we did start that on

153
00:11:23,750 --> 00:11:22,320
the space station 17 years ago and so

154
00:11:25,590 --> 00:11:23,760
there's a whole generation now that

155
00:11:27,509 --> 00:11:25,600
their life has been with people living

156
00:11:29,750 --> 00:11:27,519
in space we're now living in space and

157
00:11:31,910 --> 00:11:29,760
we'll start venturing farther uh beyond

158
00:11:33,590 --> 00:11:31,920
uh beyond low earth orbit and so we'll

159
00:11:35,509 --> 00:11:33,600
take those next steps just like we did

160
00:11:37,590 --> 00:11:35,519
exploring new worlds here on earth we're