1
00:00:02,501 --> 00:00:11,577
[Background Sounds]

2
00:00:13,446 --> 00:00:14,647
>> Sergey.

3
00:00:14,647 --> 00:00:16,515
>> Mike, Mike.

4
00:00:17,616 --> 00:00:18,517
>> Mike Hopkins: Oh.

5
00:00:18,517 --> 00:00:25,191
[Background Sounds]

6
00:00:25,191 --> 00:00:27,393
>> Mike, you've just seen
your spacecraft ready to fly.

7
00:00:27,393 --> 00:00:28,794
What's your feeling like?

8
00:00:28,794 --> 00:00:29,562
>> Mike Hopkins: [Background
sounds] Oh, it's fantastic

9
00:00:29,562 --> 00:00:30,763
to see it at this point.

10
00:00:30,763 --> 00:00:32,431
It's all packed up, ready to go.

11
00:00:32,431 --> 00:00:34,467
It's kind of like a
pilot on his last walk

12
00:00:34,467 --> 00:00:36,168
around of the airplane

before it takes off.

13
00:00:36,168 --> 00:00:38,104
This is happening five
days before the launch

14
00:00:38,104 --> 00:00:40,039
but it's still pretty
neat to see it

15
00:00:40,039 --> 00:00:41,540
in its final configuration.

16
00:00:41,540 --> 00:00:49,081
[Background Sounds]

17
00:00:49,081 --> 00:00:52,551
>> Mike Hopkins:
Everyone, that's a rocket.

18
00:00:52,551 --> 00:01:01,560
[Background Sounds]

19
00:01:15,040 --> 00:01:17,243
>> Okay, so should
we sign it here?

20
00:01:17,243 --> 00:01:18,577
>> Yes, pick a spot.

21
00:01:18,577 --> 00:01:20,846
>> It looks like all
the spots are taken.

22
00:01:20,846 --> 00:01:26,852
So here's the very
first signature

23
00:01:26,852 --> 00:01:29,522

of one brave individual.

24
00:01:29,522 --> 00:01:38,597
[Background Conversation]

25
00:01:53,145 --> 00:01:54,580
>> [Inaudible] different
in any way?

26
00:01:54,580 --> 00:01:57,216
>> Mike Hopkins: Well,
of course it's different

27
00:01:57,216 --> 00:01:59,318
because you realize that
in five days you're going

28
00:01:59,318 --> 00:02:01,120
to be actually going on the
rocket and getting ready

29
00:02:01,120 --> 00:02:02,788
to launch into space
so it's certainly,

30
00:02:02,788 --> 00:02:05,024
a bit of a different
emotion here.

31
00:02:05,024 --> 00:02:08,861
But it's the same tradition
in the sense that we got to,

32
00:02:08,861 --> 00:02:12,531
after the second fit check, come
back, visit the museum here,

33
00:02:12,531 --> 00:02:13,766
a lot of history here,
a lot of great stories

34
00:02:13,766 --> 00:02:15,501
and so it's just
wonderful to be a part of.

35
00:02:15,501 --> 00:02:24,577
[Background Sounds]

36
00:05:23,355 --> 00:05:26,692
>> Joel Montalbano, Deputy
ISS Program Manager here

37
00:05:26,692 --> 00:05:31,930
in Baikonur, Joel, Soyuz
TMA-10M vehicle now vertical

38
00:05:31,930 --> 00:05:37,403
on the launch pad, set to go on
Wednesday afternoon U.S. time.

39
00:05:37,403 --> 00:05:38,704
Can it get any busier

40
00:05:38,704 --> 00:05:40,973
at the International
Space Station right now?

41
00:05:40,973 --> 00:05:42,541
>> Joel Montalbano: You know
Rob, it's a great day to be

42
00:05:42,541 --> 00:05:45,911
in Baikonur, you know, standing
in front of the launch pad

43
00:05:45,911 --> 00:05:47,813
that launched the
first human in space.

44

00:05:47,813 --> 00:05:50,649
There's just a magic here
and you feel that magic.

45
00:05:50,649 --> 00:05:52,050
Could it get busier?

46
00:05:52,050 --> 00:05:54,052
Yeah, it's going to get a little
busier for the rest of the year.

47
00:05:54,052 --> 00:05:56,455
We've got a real busy schedule
going but this is what we do

48
00:05:56,455 --> 00:05:57,823
and this is what we do best.

49
00:05:57,823 --> 00:06:00,459
>> The three crew members,
you have two first-time flyers

50
00:06:00,459 --> 00:06:02,828
and Mike Hopkins and Sergey
Ryazanskiy with a wealth

51
00:06:02,828 --> 00:06:05,697
of experience and the
Soyuz Commander Oleg Kotov.

52
00:06:05,697 --> 00:06:08,167
How will this crew blend
on orbit for what promises

53
00:06:08,167 --> 00:06:10,035
to be a very busy
five and half months?

54
00:06:10,035 --> 00:06:11,537
>> Joel Montalbano: This

crew's going to do great.

55
00:06:11,537 --> 00:06:13,338
Oleg is an outstanding
commander.

56
00:06:13,338 --> 00:06:15,607
We have a lot of
experience with him onboard.

57
00:06:15,607 --> 00:06:17,443
The two rookies have
trained together.

58
00:06:17,443 --> 00:06:18,710
The whole crew has
trained together.

59
00:06:18,710 --> 00:06:20,579
They've trained across the globe

60
00:06:20,579 --> 00:06:23,081
at the different
partner centers.

61
00:06:23,081 --> 00:06:24,216
We're looking forward to them.

62
00:06:24,216 --> 00:06:25,751
We expect these guys
are just going

63
00:06:25,751 --> 00:06:27,786
to do a fantastic job on orbit.

64
00:06:27,786 --> 00:06:30,789
>> You mentioned the busy time
ahead for the space station.

65

00:06:30,789 --> 00:06:31,990
Just six weeks from now

66
00:06:31,990 --> 00:06:34,426
yet another Soyuz
will be on the pad.

67
00:06:34,426 --> 00:06:36,428
You're going to have nine
crew members on the station

68
00:06:36,428 --> 00:06:37,496
for about three and half days,

69
00:06:37,496 --> 00:06:39,698
an Olympic torch
arriving onboard,

70
00:06:39,698 --> 00:06:41,700
symbolic for next
year's Winter Olympics.

71
00:06:41,700 --> 00:06:44,870
Talk a little bit about this
air traffic control pattern

72
00:06:44,870 --> 00:06:46,138
at the station.

73
00:06:46,138 --> 00:06:47,639
>> Joel Montalbano: Well,
as you said Rob, you know,

74
00:06:47,639 --> 00:06:49,842
we have the Soyuz in November.

75
00:06:49,842 --> 00:06:51,677
We have an orbital
mission right now that's

76
00:06:51,677 --> 00:06:53,345
in free flight that'll
be berthing

77
00:06:53,345 --> 00:06:54,646
to the space station this week.

78
00:06:54,646 --> 00:06:57,816
We have another orbital
mission scheduled in December,

79
00:06:57,816 --> 00:06:59,918
a space ex early next year.

80
00:06:59,918 --> 00:07:01,720
But this is what the
partnership does.

81
00:07:01,720 --> 00:07:02,888
We work together.

82
00:07:02,888 --> 00:07:04,990
We have a European
vehicle up there right now.

83
00:07:04,990 --> 00:07:08,126
We just orbited the
Japanese transfer vehicle.

84
00:07:08,126 --> 00:07:09,595
Again, we work together.

85
00:07:09,595 --> 00:07:10,796
We get things done.

86
00:07:10,796 --> 00:07:13,365
We use the space station
for what it's designed for

87
00:07:13,365 --> 00:07:16,268
and as you know, the space
station is the largest project

88
00:07:16,268 --> 00:07:19,538
ever taken upon by
human, human mankind

89
00:07:19,538 --> 00:07:22,040
and we just do a great
job and the partnership,

90
00:07:22,040 --> 00:07:24,076
they pull together
when you need them.

91
00:07:24,076 --> 00:07:26,578
>> And in November, the
15th anniversary Joel,

92
00:07:26,578 --> 00:07:30,916
of the first government launch
of the Zarya Module, the FGB.

93
00:07:30,916 --> 00:07:34,353
Talk a little bit about
how this complex has grown

94
00:07:34,353 --> 00:07:37,022
into this research
city in the sky

95
00:07:37,022 --> 00:07:39,491
from that single lone module.

96
00:07:39,491 --> 00:07:40,592
>> Joel Montalbano: You know,

97
00:07:40,592 --> 00:07:42,394

when we started the
space station we worked

98
00:07:42,394 --> 00:07:43,629
with the partnership.

99
00:07:43,629 --> 00:07:46,565
We had the first launch,
the FGB launch from Baikonur

100
00:07:46,565 --> 00:07:47,933
and we've built upon it.

101
00:07:47,933 --> 00:07:50,669
Now that assembly is complete
we use the space station

102
00:07:50,669 --> 00:07:51,603
for utilization.

103
00:07:51,603 --> 00:07:53,305
That's what it was designed for.

104
00:07:53,305 --> 00:07:56,542
We are doing the, we're
scheduled to do up to 40 hours

105
00:07:56,542 --> 00:07:59,945
of crew utilization,
crew time, per week,

106
00:07:59,945 --> 00:08:01,380
on the average for
this expedition.

107
00:08:01,380 --> 00:08:04,383
It'll be the largest [inaudible]
utilization we've done

108

00:08:04,383 --> 00:08:07,386
since we've been
flying space station.

109
00:08:07,386 --> 00:08:10,055
>> Ellen Ochoa, Director of the
Johnson Space Center, Ellen,

110
00:08:10,055 --> 00:08:12,424
welcome back to Baikonur.

111
00:08:12,424 --> 00:08:17,195
Crystal-clear day today for
Soyuz TMA-10M space craft,

112
00:08:17,195 --> 00:08:20,832
it is a complex time at the
International Space Station,

113
00:08:20,832 --> 00:08:23,602
a very intricate
choreography about to unfold.

114
00:08:23,602 --> 00:08:25,804
Talk a little bit
about the preparedness

115
00:08:25,804 --> 00:08:29,141
of our three crew members about
to embark on this journey.

116
00:08:29,141 --> 00:08:30,242
>> Ellen Ochoa: Well,
the three crew of course,

117
00:08:30,242 --> 00:08:32,144
have been trained
all over the world,

118
00:08:32,144 --> 00:08:33,812

including at Johnson
Space Center.

119
00:08:33,812 --> 00:08:34,813
They're well-prepared.

120
00:08:34,813 --> 00:08:37,716
I have no concerns
at all about that.

121
00:08:37,716 --> 00:08:40,018
It's a very interesting
time at the station.

122
00:08:40,018 --> 00:08:43,188
I was lucky enough to be at
Wallops, on the east coast

123
00:08:43,188 --> 00:08:46,124
of the United States last
week to see the launch

124
00:08:46,124 --> 00:08:49,828
of Antares Insignia and now I
get to be here for this launch

125
00:08:49,828 --> 00:08:51,229
and so we're looking forward

126
00:08:51,229 --> 00:08:55,233
to two vehicles coming
towards the station this week.

127
00:08:55,233 --> 00:08:56,268
>> [Background sounds]
Air traffic control

128
00:08:56,268 --> 00:08:57,469
around the station, a very,

129
00:08:57,469 --> 00:09:00,372
very complex choreography
about to unfold.

130
00:09:00,372 --> 00:09:04,142
Just six weeks from now, yet
another Soyuz will be on the pad

131
00:09:04,142 --> 00:09:07,179
for the next trio
to be launched.

132
00:09:07,179 --> 00:09:09,448
The five and a half months that
lie ahead for Mike Hopkins,

133
00:09:09,448 --> 00:09:13,518
Oleg Kotov and Sergey Ryazanskiy
will be very challenging.

134
00:09:13,518 --> 00:09:15,621
Talk a little bit about that.

135
00:09:15,621 --> 00:09:17,255
>> Ellen Ochoa: Yes, so
the vehicle traffic is one

136
00:09:17,255 --> 00:09:20,425
of the things that they'll
be having to deal with,

137
00:09:20,425 --> 00:09:23,629
but as well, it's a
very busy time in terms

138
00:09:23,629 --> 00:09:25,697
of science onboard the station.

139
00:09:25,697 --> 00:09:27,699

So we do fundamental
science up there.

140
00:09:27,699 --> 00:09:29,434
We do research and development.

141
00:09:29,434 --> 00:09:32,270
That's more associated with
direct benefits on Earth,

142
00:09:32,270 --> 00:09:38,243
including in human health
as well as Earth-observing,

143
00:09:38,243 --> 00:09:39,611
many other types of things.

144
00:09:39,611 --> 00:09:40,812
And then of course we're using

145
00:09:40,812 --> 00:09:43,181
that as a testbed
for exploration.

146
00:09:43,181 --> 00:09:47,152
We've got an experiment
onboard, or a mean swing bed,

147
00:09:47,152 --> 00:09:50,956
a testbed that's looking at
a new way of scrubbing CO2

148
00:09:50,956 --> 00:09:53,325
out of the atmosphere
that we hope to use

149
00:09:53,325 --> 00:09:55,494
for the Orion spacecraft

150

00:09:55,494 --> 00:09:58,697
which will take crew
beyond the Earth orbit,