

Payload Operations Integration Center

NASA Marshall Space Flight Center
Huntsville, Alabama



1
00:00:06,470 --> 00:00:04,150
as the crew continues to work on various

2
00:00:08,710 --> 00:00:06,480
science activities there's a team on the

3
00:00:10,629 --> 00:00:08,720
ground that helps them they're located

4
00:00:12,549 --> 00:00:10,639
in huntsville alabama at the payload

5
00:00:14,789 --> 00:00:12,559
operations integration center at the

6
00:00:17,029 --> 00:00:14,799
marshall space flight center let's join

7
00:00:20,150 --> 00:00:17,039
lori meigs there to learn more about one

8
00:00:21,990 --> 00:00:20,160
of the leaders of this science team lori

9
00:00:24,310 --> 00:00:22,000
we talk a lot about the research that

10
00:00:25,990 --> 00:00:24,320
goes on itself but we don't say so much

11
00:00:28,070 --> 00:00:26,000
about the folks that you see behind me

12
00:00:29,750 --> 00:00:28,080
they work 24 hours a day seven days a

13
00:00:32,069 --> 00:00:29,760

week to accomplish those science goals

14

00:00:33,430 --> 00:00:32,079

and it's very fascinating and very

15

00:00:34,790 --> 00:00:33,440

interesting and very hard work so we

16

00:00:36,630 --> 00:00:34,800

want to learn more about it today

17

00:00:39,110 --> 00:00:36,640

joining me now is stephanie dudley she

18

00:00:40,630 --> 00:00:39,120

is a payload operations director here at

19

00:00:41,910 --> 00:00:40,640

marshall and stephanie you were a flight

20

00:00:43,830 --> 00:00:41,920

control leader and we thought it'd be

21

00:00:46,549 --> 00:00:43,840

interesting to see what it's like maybe

22

00:00:50,790 --> 00:00:46,559

to live a day in the life in your shoes

23

00:00:53,110 --> 00:00:50,800

yes so we work here 24 7 as you said and

24

00:00:54,709 --> 00:00:53,120

we're responsible for all of nasa's

25

00:00:56,709 --> 00:00:54,719

science on the international space

26

00:00:59,830 --> 00:00:56,719

station so the flight control team you

27

00:01:01,510 --> 00:00:59,840

see here are responsible for actually

28

00:01:04,149 --> 00:01:01,520

talking to the crew

29

00:01:06,390 --> 00:01:04,159

sending commands to enable the resources

30

00:01:08,870 --> 00:01:06,400

that the payloads the experiments need

31

00:01:10,710 --> 00:01:08,880

getting the data and video to the ground

32

00:01:14,469 --> 00:01:10,720

making sure the crew can find the tools

33

00:01:15,350 --> 00:01:14,479

that they need to do the experiments and

34

00:01:17,429 --> 00:01:15,360

so

35

00:01:19,109 --> 00:01:17,439

the payload operations director pod is

36

00:01:21,510 --> 00:01:19,119

the leader of the flight control team

37

00:01:23,350 --> 00:01:21,520

that you see here and we work very

38

00:01:24,390 --> 00:01:23,360

closely with the flight director in

39

00:01:25,350 --> 00:01:24,400

houston

40

00:01:29,190 --> 00:01:25,360

and

41

00:01:31,030 --> 00:01:29,200

japanese flight director to do

42

00:01:32,789 --> 00:01:31,040

nasa science

43

00:01:35,190 --> 00:01:32,799

it's exciting we know it takes the crew

44

00:01:36,710 --> 00:01:35,200

special touch but it also takes the work

45

00:01:39,109 --> 00:01:36,720

of you guys tell us a little bit more

46

00:01:40,550 --> 00:01:39,119

about the functions in this room and and

47

00:01:42,389 --> 00:01:40,560

how you help with these experiments

48

00:01:43,749 --> 00:01:42,399

you've got a lot of a lot of experiments

49

00:01:45,749 --> 00:01:43,759

going on now it could be a

50

00:01:48,389 --> 00:01:45,759

record-breaking week i hear actually yes

51
00:01:52,149 --> 00:01:48,399
we are in the middle of what will be a

52
00:01:55,429 --> 00:01:52,159
record-breaking week for crew hours uh

53
00:01:58,550 --> 00:01:55,439
to conduct science so for instance this

54
00:02:00,870 --> 00:01:58,560
week we have uh bass going on at the

55
00:02:02,950 --> 00:02:00,880
burning and suppression of solids

56
00:02:05,590 --> 00:02:02,960
that's a really fun experiment the crew

57
00:02:07,510 --> 00:02:05,600
actually gets to ignite

58
00:02:08,469 --> 00:02:07,520
spacecraft materials and then we see how

59
00:02:10,150 --> 00:02:08,479
does it

60
00:02:12,309 --> 00:02:10,160
how can we extinguish the flames because

61
00:02:13,030 --> 00:02:12,319
that's really important in space

62
00:02:16,390 --> 00:02:13,040
and

63
00:02:17,830 --> 00:02:16,400

reed really loves this experiment

64

00:02:20,630 --> 00:02:17,840

and so he one of the things that he

65

00:02:23,830 --> 00:02:20,640

likes to do is ask us hey i freed up my

66

00:02:25,510 --> 00:02:23,840

day my afternoon can i do some more bass

67

00:02:27,510 --> 00:02:25,520

so that's one of the fun problems that

68

00:02:29,510 --> 00:02:27,520

we have as a pod is getting all the

69

00:02:31,030 --> 00:02:29,520

resources we need

70

00:02:33,190 --> 00:02:31,040

to so that

71

00:02:35,830 --> 00:02:33,200

we can do more science for the the

72

00:02:37,670 --> 00:02:35,840

scientists and also you know accommodate

73

00:02:39,190 --> 00:02:37,680

the crew's request to do more

74

00:02:40,790 --> 00:02:39,200

helps to have a gung-ho crew like that

75

00:02:41,750 --> 00:02:40,800

it does and everything goes as planned

76

00:02:42,869 --> 00:02:41,760

right

77

00:02:49,110 --> 00:02:42,879

no

78

00:02:51,830 --> 00:02:49,120

scientist sees a result that is

79

00:02:53,270 --> 00:02:51,840

unexpected and that's a good thing you

80

00:02:55,750 --> 00:02:53,280

know you don't always get the result

81

00:02:58,790 --> 00:02:55,760

that you expect um in your laboratory at

82

00:03:00,630 --> 00:02:58,800

home um so

83

00:03:03,190 --> 00:03:00,640

it throws a wrench in what you guys do

84

00:03:05,509 --> 00:03:03,200

well right so it changes the course of

85

00:03:07,509 --> 00:03:05,519

the future planning that we do

86

00:03:09,750 --> 00:03:07,519

sometimes

87

00:03:12,390 --> 00:03:09,760

things just don't go as planned for

88

00:03:14,470 --> 00:03:12,400

instance we can't find the right tool or

89

00:03:16,309 --> 00:03:14,480

the mating of a qd

90

00:03:17,670 --> 00:03:16,319

quick disconnect is difficult so the

91

00:03:18,790 --> 00:03:17,680

crew has trouble we have to work them

92

00:03:21,110 --> 00:03:18,800

through that

93

00:03:22,790 --> 00:03:21,120

so we're we're always managing that

94

00:03:24,149 --> 00:03:22,800

timeline if the crew runs behind we're

95

00:03:25,990 --> 00:03:24,159

working with

96

00:03:27,190 --> 00:03:26,000

the flight directors and our partners to

97

00:03:28,229 --> 00:03:27,200

figure out

98

00:03:29,830 --> 00:03:28,239

what

99

00:03:31,830 --> 00:03:29,840

that's left in the day

100

00:03:33,110 --> 00:03:31,840

can be for instance move to another day

101
00:03:34,710 --> 00:03:33,120
so we can get this really important

102
00:03:36,309 --> 00:03:34,720
thing done right now so that's really

103
00:03:38,470 --> 00:03:36,319
when you do your best work but you say

104
00:03:39,910 --> 00:03:38,480
that we talk about planning and planning

105
00:03:41,670 --> 00:03:39,920
and planning

106
00:03:42,789 --> 00:03:41,680
tell us today if we were planning for

107
00:03:44,390 --> 00:03:42,799
the science today when would we be

108
00:03:47,030 --> 00:03:44,400
planning for that so we actually started

109
00:03:49,910 --> 00:03:47,040
planning for today a year ago wow so a

110
00:03:52,390 --> 00:03:49,920
lot of work went in from a year ago to

111
00:03:54,949 --> 00:03:52,400
actually what we're doing today so we've

112
00:03:55,830 --> 00:03:54,959
got bass today we have some ultrasounds

113
00:03:57,910 --> 00:03:55,840

later

114

00:04:00,789 --> 00:03:57,920

ocular health experiment

115

00:04:03,030 --> 00:04:00,799

that looks at changing changes in the

116

00:04:05,429 --> 00:04:03,040

eyes of the astronauts because that's

117

00:04:06,550 --> 00:04:05,439

really a risk to long duration space

118

00:04:08,789 --> 00:04:06,560

flight

119

00:04:10,070 --> 00:04:08,799

we're doing a colloid experiment all

120

00:04:11,990 --> 00:04:10,080

kinds of stuff that we're doing today we

121

00:04:13,910 --> 00:04:12,000

started planning a year ago and some

122

00:04:16,789 --> 00:04:13,920

planning going on right now here at

123

00:04:19,990 --> 00:04:16,799

marshall right yes actually we have

124

00:04:22,629 --> 00:04:20,000

over 200 scientists engineers flight

125

00:04:24,150 --> 00:04:22,639

controllers from around the world here

126
00:04:25,670 --> 00:04:24,160
in huntsville at marshall space flight

127
00:04:27,749 --> 00:04:25,680
center this week

128
00:04:30,390 --> 00:04:27,759
we have a twice yearly

129
00:04:33,189 --> 00:04:30,400
meeting we all get together and we

130
00:04:35,590 --> 00:04:33,199
plan for the coming expeditions

131
00:04:37,990 --> 00:04:35,600
so we're specifically targeting the one

132
00:04:40,150 --> 00:04:38,000
that starts in september later this year

133
00:04:43,749 --> 00:04:40,160
but also looking at a year out and and

134
00:04:46,550 --> 00:04:43,759
how can we um define the collaboration

135
00:04:48,070 --> 00:04:46,560
now so that the operations go smoother

136
00:04:49,590 --> 00:04:48,080
when we actually get to the day that we

137
00:04:51,909 --> 00:04:49,600
execute it so these are folks that will

138
00:04:54,150 --> 00:04:51,919

have their payloads flying in the fall

139

00:04:55,510 --> 00:04:54,160

yes all right and you tell them your

140

00:04:56,870 --> 00:04:55,520

processes too they have to learn all of

141

00:04:59,510 --> 00:04:56,880

that right

142

00:05:03,189 --> 00:04:59,520

and we just uh hit a milestone

143

00:05:04,550 --> 00:05:03,199

5000 days right yeah so that's busy work

144

00:05:06,469 --> 00:05:04,560

5 000

145

00:05:09,029 --> 00:05:06,479

continuous

146

00:05:11,270 --> 00:05:09,039

human presence on the iss

147

00:05:13,029 --> 00:05:11,280

on july 12th so that's a that's a big

148

00:05:15,670 --> 00:05:13,039

deal that's a long time and we've been

149

00:05:18,230 --> 00:05:15,680

here 24 7 even on christmas

150

00:05:19,990 --> 00:05:18,240

ever since and still will be stephanie

151

00:05:22,230 --> 00:05:20,000

thank you for joining us uh stephanie

152

00:05:25,350 --> 00:05:22,240

actually shared what it's life like

153

00:05:27,830 --> 00:05:25,360

life is like as a pod on a lavalof blog

154

00:05:31,110 --> 00:05:27,840

so you can check that out online and