



1
00:01:50,640 --> 00:01:47,670
good morning Atlantis and we sure wish

2
00:01:53,790 --> 00:01:50,650
Mike Godspeed as the newest crew member

3
00:02:00,120 --> 00:01:53,800
of mirror and send him off with a

4
00:02:02,460 --> 00:02:00,130
tribute to his homeland well thank you

5
00:02:03,930 --> 00:02:02,470
Bill we'll have to pass that over to

6
00:02:05,249 --> 00:02:03,940
them as soon as we see them I guess

7
00:02:07,890 --> 00:02:05,259
they're gonna wake up a lot of a half

8
00:02:10,380 --> 00:02:07,900
hour after us but appreciate the woods

9
00:02:13,740 --> 00:02:10,390
and we're off to a good start here this

10
00:02:34,990 --> 00:02:13,750
morning ready to go start and lope

11
00:02:56,570 --> 00:02:37,610
Lana smear Houston were now alive with

12
00:02:56,580 --> 00:03:12,370
you

13
00:04:10,750 --> 00:03:14,810

nightmare houston weather quest for the

14

00:04:16,719 --> 00:04:12,850

okay yeah i hit look through the flight

15

00:04:19,830 --> 00:04:16,729

data file and understand a 1001 so one

16

00:04:28,450 --> 00:04:19,840

of the two the kids that you say will

17

00:04:55,270 --> 00:04:28,460

return as it right charlie all five kits

18

00:04:55,280 --> 00:05:21,759

the latest recipe below

19

00:05:21,769 --> 00:06:18,129

Houston Atlantis how copy

20

00:06:22,510 --> 00:06:20,439

one more question for commander sibling

21

00:06:24,520 --> 00:06:22,520

police the recent problems you've had

22

00:06:26,110 --> 00:06:24,530

with mirrors life-support systems have

23

00:06:28,390 --> 00:06:26,120

caused quite a bit of concern in the

24

00:06:30,309 --> 00:06:28,400

United States how serious were those

25

00:06:32,200 --> 00:06:30,319

problems in your opinion and how would

26

00:06:34,480 --> 00:06:32,210

you assess the station's overall health

27

00:06:35,800 --> 00:06:34,490

at present given the repairs that you've

28

00:06:38,820 --> 00:06:35,810

made and now that you have a new

29

00:06:41,980 --> 00:06:38,830

electronic surgeon generator on board no

30

00:06:44,519 --> 00:06:41,990

concession a as leading somebody certain

31

00:06:47,379 --> 00:06:44,529

systemic problem seemed nervous Puccini

32

00:06:50,679 --> 00:06:47,389

migliore escalate sustained stunts in

33

00:06:52,959 --> 00:06:50,689

the soonest Nadine Hickock nishat it was

34

00:06:59,080 --> 00:06:52,969

saying Stan supposedly antibody montegut

35

00:07:02,469 --> 00:06:59,090

over she didn't see I'm alive and

36

00:07:04,330 --> 00:07:02,479

healthy fully smiling so the condition

37

00:07:07,330 --> 00:07:04,340

of the station is just as the same way

38

00:07:10,059 --> 00:07:07,340

of course we've got now quite a bit of

39

00:07:12,339 --> 00:07:10,069

cargo and equipment that's old and

40

00:07:14,950 --> 00:07:12,349

outdated and we've either got to throw

41

00:07:18,969 --> 00:07:14,960

it away for take it away from the

42

00:07:21,189 --> 00:07:18,979

station the kind of stuff here but

43

00:07:23,640 --> 00:07:21,199

otherwise the station is ballico is

44

00:07:26,140 --> 00:07:23,650

normal everything is very reliable

45

00:07:28,300 --> 00:07:26,150

though the problems that we had with the

46

00:07:30,459 --> 00:07:28,310

thermal control system was fully

47

00:07:33,159 --> 00:07:30,469

completely repaired so everything's

48

00:07:35,070 --> 00:07:33,169

working working fine its present back up

49

00:07:37,600 --> 00:07:35,080

now so we practically have no problems

50

00:07:39,249 --> 00:07:37,610

well just one more on those lines for

51
00:07:40,899 --> 00:07:39,259
your commanders simply as I mean given

52
00:07:42,639 --> 00:07:40,909
the age of some of the components on

53
00:07:45,249 --> 00:07:42,649
mirror how long do you think the station

54
00:07:48,670 --> 00:07:45,259
can reasonably be expected to operate in

55
00:07:50,230 --> 00:07:48,680
the future Kaku damages a pues aquí

56
00:07:52,149 --> 00:07:50,240
están session was insane you know it

57
00:07:59,230 --> 00:07:52,159
seems to know you complained about the

58
00:08:02,200 --> 00:07:59,240
usual steadily you place them more often

59
00:08:04,480 --> 00:08:02,210
the station will operate very long time

60
00:08:05,740 --> 00:08:04,490
our station was originally planned for

61
00:08:07,540 --> 00:08:05,750
three to five years and now it's here

62
00:08:10,389 --> 00:08:07,550
for 12 years so it's rather more

63
00:08:12,309 --> 00:08:10,399

reliable and originally expected

64

00:08:13,719 --> 00:08:12,319

commander Precourt this of course is

65

00:08:15,040 --> 00:08:13,729

your second visit to mirror I'm

66

00:08:16,719 --> 00:08:15,050

wondering what are your general

67

00:08:18,850 --> 00:08:16,729

impressions of the station's help as you

68

00:08:21,339 --> 00:08:18,860

float around and look at everything and

69

00:08:23,110 --> 00:08:21,349

I and as the American commander are you

70

00:08:23,950 --> 00:08:23,120

satisfied mike foale has a safe place to

71

00:08:27,580 --> 00:08:23,960

live and work for

72

00:08:30,219 --> 00:08:27,590

for a half months yes I am very

73

00:08:32,230 --> 00:08:30,229

satisfied when we went over there

74

00:08:33,730 --> 00:08:32,240

yesterday I could tell you that it it

75

00:08:35,440 --> 00:08:33,740

doesn't look a whole lot different than

76

00:08:37,060 --> 00:08:35,450

what I remember two years ago except for

77

00:08:39,130 --> 00:08:37,070

the fact its larger now as two

78

00:08:41,649 --> 00:08:39,140

additional modules the parotta and the

79

00:08:44,860 --> 00:08:41,659

docking module we're not here when we

80

00:08:46,540 --> 00:08:44,870

docked on that's just 71 but in addition

81

00:08:48,940 --> 00:08:46,550

they've had a lot more equipment

82

00:08:51,699 --> 00:08:48,950

delivered so there's not really that

83

00:08:53,829 --> 00:08:51,709

much more free space and has Vasily

84

00:08:57,210 --> 00:08:53,839

hinted earlier one of the problems they

85

00:08:59,920 --> 00:08:57,220

have is trying to find space to work and

86

00:09:02,889 --> 00:08:59,930

the equipment that is no longer used on

87

00:09:06,160 --> 00:09:02,899

station is somewhat of a bother and if

88

00:09:07,900 --> 00:09:06,170

we could find a way to unload that as we

89

00:09:11,050 --> 00:09:07,910

go on it'll help them be a lot more

90

00:09:12,730 --> 00:09:11,060

efficient well commander getting back to

91

00:09:14,800 --> 00:09:12,740

the current mission where if you can

92

00:09:16,960 --> 00:09:14,810

maybe give us a sense of how Jerry

93

00:09:18,790 --> 00:09:16,970

Linenger is feeling how eager he is to

94

00:09:20,170 --> 00:09:18,800

get home to see his family what he might

95

00:09:25,329 --> 00:09:20,180

have said to use and so you've had a

96

00:09:27,760 --> 00:09:25,339

chance to chat Jerry's ecstatic he's had

97

00:09:29,370 --> 00:09:27,770

a really good mission and I think he's

98

00:09:32,500 --> 00:09:29,380

feeling a real sense of accomplishment

99

00:09:34,210 --> 00:09:32,510

especially now that Mike is here he's

100

00:09:37,630 --> 00:09:34,220

really directly applying the lessons

101
00:09:40,990 --> 00:09:37,640
that he has gathered in his stay to

102
00:09:44,410 --> 00:09:41,000
preparing Mike for the next part of his

103
00:09:46,449 --> 00:09:44,420
mission and specifically with a transfer

104
00:09:48,519 --> 00:09:46,459
Jerry and Michael working real hard

105
00:09:51,100 --> 00:09:48,529
right now to get the equipment for the

106
00:09:53,019 --> 00:09:51,110
science stowed where it's easily

107
00:09:55,150 --> 00:09:53,029
accessible for Mike so he can be more

108
00:09:58,000 --> 00:09:55,160
efficient than Jerry was and Jerry was

109
00:10:00,370 --> 00:09:58,010
pretty darn efficient so he's got a real

110
00:10:02,079 --> 00:10:00,380
sense of accomplishment and got a lot to

111
00:10:05,740 --> 00:10:02,089
be proud of and he's real happy to be

112
00:10:07,180 --> 00:10:05,750
coming home of us a question for

113
00:10:09,130 --> 00:10:07,190

commander Sibley of along those lines

114

00:10:10,870 --> 00:10:09,140

sir you spent three months with jerry

115

00:10:12,370 --> 00:10:10,880

linenger four months i should say with

116

00:10:14,769 --> 00:10:12,380

jerry linenger aboard mir and of course

117

00:10:15,819 --> 00:10:14,779

you already knew mike foale what are

118

00:10:18,100 --> 00:10:15,829

your thoughts about working with

119

00:10:19,690 --> 00:10:18,110

Americans on the station how well do

120

00:10:21,910 --> 00:10:19,700

they fit in and do they have enough

121

00:10:23,590 --> 00:10:21,920

training to help you and your flight

122

00:10:26,230 --> 00:10:23,600

engineer with station maintenance or

123

00:10:27,670 --> 00:10:26,240

emergencies Papa says nice when you

124

00:10:29,769 --> 00:10:27,680

divorced of a privilege city limits on

125

00:10:32,680 --> 00:10:29,779

over to mrs. jerry linenger replied the

126

00:10:34,150 --> 00:10:32,690

veneto prostitute Kakui achieved

127

00:10:36,220 --> 00:10:34,160

national turner of kami reckons expand

128

00:10:37,460 --> 00:10:36,230

after kochanie porque todo lo que tengo

129

00:10:41,030 --> 00:10:37,470

casi me

130

00:10:48,740 --> 00:10:41,040

it is especially probably won't like

131

00:10:50,600 --> 00:10:48,750

that it it's always easier for me to

132

00:10:53,600 --> 00:10:50,610

deal with American astronauts because

133

00:10:55,460 --> 00:10:53,610

everyone knows their tasks we don't

134

00:10:57,530 --> 00:10:55,470

interfere with each other and we have to

135

00:11:00,050 --> 00:10:57,540

help one another we don't never have any

136

00:11:01,520 --> 00:11:00,060

problems so we say something like hey

137

00:11:03,560 --> 00:11:01,530

Jerry helped us out with this and he'll

138

00:11:04,820 --> 00:11:03,570

say okay where he'll come with to me and

139

00:11:06,770 --> 00:11:04,830

he'll say I've got a problem and will

140

00:11:09,290 --> 00:11:06,780

help him so we work together in this

141

00:11:11,300 --> 00:11:09,300

fashion and it's very interesting would

142

00:11:12,680 --> 00:11:11,310

you miss it but a major point is not to

143

00:11:14,090 --> 00:11:12,690

interfere with one another because

144

00:11:15,650 --> 00:11:14,100

everyone's got to know their own task

145

00:11:19,910 --> 00:11:15,660

everyone's got to do their work

146

00:11:24,290 --> 00:11:19,920

correctly so this professionalism is

147

00:11:25,790 --> 00:11:24,300

what saves us a key party so come on get

148

00:11:28,400 --> 00:11:25,800

a key part already missed a cookie have

149

00:11:30,760 --> 00:11:28,410

to meet up with you proud yes well let

150

00:11:34,400 --> 00:11:30,770

the booster kill them but am I good for

151
00:11:35,990 --> 00:11:34,410
you so preparing for space is not

152
00:11:38,270 --> 00:11:36,000
something that takes one or two days but

153
00:11:41,000 --> 00:11:38,280
it takes years another person I prefer

154
00:11:43,610 --> 00:11:41,010
and it's the idea that you just have to

155
00:11:47,150 --> 00:11:43,620
answer for your actions or that you have

156
00:11:49,760 --> 00:11:47,160
to know how to work with people thank

157
00:11:51,110 --> 00:11:49,770
you and for commander Precourt changing

158
00:11:52,640 --> 00:11:51,120
topics a little bit here this is the

159
00:11:55,370 --> 00:11:52,650
sixth in a series of course of nine

160
00:11:56,960 --> 00:11:55,380
shuttle Mir docking mission aside from

161
00:11:59,210 --> 00:11:56,970
helping the Russians to keep the station

162
00:12:01,040 --> 00:11:59,220
supplied what does NASA still have to

163
00:12:05,450 --> 00:12:01,050

learn from this program now that you've

164

00:12:07,940 --> 00:12:05,460

done six of these every time I come up

165

00:12:09,860 --> 00:12:07,950

here we learn something new and really

166

00:12:12,890 --> 00:12:09,870

our efficiency is growing immensely I

167

00:12:14,600 --> 00:12:12,900

can remember just this just 79 and 81

168

00:12:17,000 --> 00:12:14,610

listening the debriefings about the

169

00:12:19,220 --> 00:12:17,010

level of difficulty doing the transfers

170

00:12:20,660 --> 00:12:19,230

to coordinate the equipment that needed

171

00:12:23,330 --> 00:12:20,670

to go across the hatch we have yet

172

00:12:25,160 --> 00:12:23,340

another thousand pounds of equipment you

173

00:12:27,380 --> 00:12:25,170

know efficiency i think is higher based

174

00:12:30,440 --> 00:12:27,390

on the lessons from those previous

175

00:12:32,110 --> 00:12:30,450

flights there's some incremental lessons

176

00:12:34,820 --> 00:12:32,120

being learned here there's also some

177

00:12:38,690 --> 00:12:34,830

conceptual things about rendezvous for

178

00:12:40,130 --> 00:12:38,700

example some fairly large conceptual

179

00:12:41,810 --> 00:12:40,140

changes in the way we are going to

180

00:12:43,760 --> 00:12:41,820

approach the International Space Station

181

00:12:45,320 --> 00:12:43,770

are being developed using flight test

182

00:12:47,210 --> 00:12:45,330

from the flights that we're doing here

183

00:12:48,770 --> 00:12:47,220

if you just compare a flight test

184

00:12:50,050 --> 00:12:48,780

program for an airplane where you can

185

00:12:54,070 --> 00:12:50,060

take

186

00:12:56,200 --> 00:12:54,080

a flight a day and try to gain as much

187

00:12:58,360 --> 00:12:56,210

information with a flight every four

188

00:13:00,730 --> 00:12:58,370

months you can see the difficulty in

189

00:13:02,350 --> 00:13:00,740

carrying those lessons forward so you

190

00:13:04,600 --> 00:13:02,360

know 69 flights is not a tremendous

191

00:13:06,610 --> 00:13:04,610

amount of flying when you get as complex

192

00:13:08,680 --> 00:13:06,620

emission is what we're trying to do so

193

00:13:10,480 --> 00:13:08,690

every flight that we get is going to

194

00:13:12,340 --> 00:13:10,490

have immense benefit for our efficiency

195

00:13:14,230 --> 00:13:12,350

on the space station that we're building

196

00:13:16,900 --> 00:13:14,240

and that's really the key here is how we

197

00:13:18,640 --> 00:13:16,910

can double or triple our efficiency over

198

00:13:19,810 --> 00:13:18,650

the coming years with the International

199

00:13:22,300 --> 00:13:19,820

Space Station it's going to be four

200

00:13:24,310 --> 00:13:22,310

times as large four times the volume and

