



1
00:00:10,519 --> 00:00:52,100
one liftoff of Atlantis

2
00:02:58,170 --> 00:01:58,020
welcome to introduce you to the rest of

3
00:03:00,880 --> 00:02:59,290
Lanta

4
00:03:04,210 --> 00:03:00,890
standby for a call from the Johnson

5
00:03:06,610 --> 00:03:04,220
Space Center Johnson press center go

6
00:03:08,500 --> 00:03:06,620
ahead with your call Atlantis this is a

7
00:03:12,370 --> 00:03:08,510
Johnson press Center we're ready to

8
00:03:14,710 --> 00:03:12,380
begin the press conference hi this is

9
00:03:16,660 --> 00:03:14,720
Frank bass with the Houston post I've

10
00:03:18,760 --> 00:03:16,670
got a question for dr. Musgrave can you

11
00:03:54,490 --> 00:03:18,770
give us an early assessment of how the

12
00:03:56,410 --> 00:03:54,500
bioreactor system has worked this is

13
00:03:59,470 --> 00:03:56,420

Mark kuroh at the Houston Chronicle for

14

00:04:01,630 --> 00:03:59,480

Fred Gregory and story Musgrave wonder

15

00:04:04,030 --> 00:04:01,640

if you could comment further on your

16

00:04:05,560 --> 00:04:04,040

observations of the quality of the

17

00:04:07,240 --> 00:04:05,570

Earth's atmosphere you made some

18

00:04:09,640 --> 00:04:07,250

comments earlier today if you could

19

00:04:11,320 --> 00:04:09,650

elaborate on those and sort of compare

20

00:05:51,460 --> 00:04:11,330

what you're seeing on this mission with

21

00:05:51,470 --> 00:06:42,290

frederica castel from the french agency

22

00:06:48,800 --> 00:06:45,620

this is Steven go Vayne with ktrk-tv I

23

00:06:50,480 --> 00:06:48,810

have a question for anyone I was with

24

00:06:53,809 --> 00:06:50,490

you this past summer when many of you

25

00:06:56,719 --> 00:06:53,819

went visited the Oilers camp and picked

26
00:06:59,210 --> 00:06:56,729
up Oilers jerseys with the number 44 on

27
00:07:01,850 --> 00:06:59,220
them to commemorate your trip to space I

28
00:07:02,900 --> 00:07:01,860
was wondering if you were aware that the

29
00:07:04,460 --> 00:07:02,910
orders will be going for the

30
00:07:06,350 --> 00:07:04,470
championship on Monday night and if you

31
00:07:46,390 --> 00:07:06,360
intended to celebrate that on Monday

32
00:07:51,860 --> 00:07:48,709
this is Laura Talley with The Associated

33
00:07:53,390 --> 00:07:51,870
Press and for Mario Ronco I was I want

34
00:07:55,850 --> 00:07:53,400
to ask you based on what you've seen so

35
00:08:21,939 --> 00:07:55,860
far on the military man in space can

36
00:08:27,770 --> 00:08:25,430
platform so as they as a real time

37
00:08:30,350 --> 00:08:27,780
operational asset to the military at the

38
00:08:32,870 --> 00:08:30,360

moment I would say that if our

39

00:08:34,610 --> 00:08:32,880

capabilities were marginal however that

40

00:08:36,800 --> 00:08:34,620

may not be true in the future with a

41

00:08:40,000 --> 00:08:36,810

little investment in some better

42

00:08:42,440 --> 00:08:40,010

equipment and some more training

43

00:08:44,120 --> 00:08:42,450

mr. Springfest with the post and I have

44

00:08:46,519 --> 00:08:44,130

a follow-up for commander Ronco we've

45

00:08:48,920 --> 00:08:46,529

heard quite a bit about the two m88 one

46

00:08:51,019 --> 00:08:48,930

experiments the battle view and Moses

47

00:08:53,630 --> 00:08:51,029

how his night nest been working for

48

00:09:00,410 --> 00:08:53,640

y'all had y'all had any success in

49

00:09:04,080 --> 00:09:02,640

patience have been real good when we

50

00:09:06,570 --> 00:09:04,090

have we have two modes of communication

51
00:09:08,910 --> 00:09:06,580
so one mode we call network and that's

52
00:09:12,480 --> 00:09:08,920
going through a network of satellite

53
00:09:14,070 --> 00:09:12,490
systems to a field user at the site of

54
00:09:15,810 --> 00:09:14,080
observation or close to the side of

55
00:09:17,850 --> 00:09:15,820
observation and then we have another

56
00:09:20,390 --> 00:09:17,860
method a direct method where we can go

57
00:09:22,530 --> 00:09:20,400
from the shuttle to the ground

58
00:09:24,570 --> 00:09:22,540
unfortunately on the direct method when

59
00:09:26,160 --> 00:09:24,580
we first got going with that we had a

60
00:09:28,740 --> 00:09:26,170
problem with the connector on her head

61
00:09:30,960 --> 00:09:28,750
set and the regulars are working fine

62
00:09:32,580 --> 00:09:30,970
but the means to get the information in

63
00:09:36,600 --> 00:09:32,590

and out of the radio has been a problem

64

00:09:38,670 --> 00:09:36,610

at this point Atlantis that concludes

65

00:09:40,650 --> 00:09:38,680

the JSC portion of the press conference

66

00:09:44,280 --> 00:09:40,660

stand by for a call from the Kennedy

67

00:09:45,960 --> 00:09:44,290

Press Center Atlantis this is the

68

00:09:50,130 --> 00:09:45,970

Kennedy press Center and we're ready to

69

00:09:53,340 --> 00:09:50,140

begin bill Harwood you know a person can

70

00:09:56,040 --> 00:09:53,350

you give us a we asked you before launch

71

00:09:57,480 --> 00:09:56,050

rather military man in space and human

72

00:09:59,040 --> 00:09:57,490

observers could what they could do that

73

00:10:00,390 --> 00:09:59,050

satellites can't do now that you've been

74

00:10:02,160 --> 00:10:00,400

up there firsthand and you've been able

75

00:10:05,280 --> 00:10:02,170

to look down and see these targets as

76
00:10:06,780 --> 00:10:05,290
you go by what can the human observer in

77
00:10:08,490 --> 00:10:06,790
orbit bring to tactical reconnaissance

78
00:10:32,540 --> 00:10:08,500
that you can't get just as well or

79
00:10:42,390 --> 00:10:34,650
kind of characterize how a human

80
00:10:44,460 --> 00:10:42,400
approves this particular environment we

81
00:10:54,330 --> 00:10:44,470
won't have a specific man in the loop if

82
00:11:03,570 --> 00:10:54,340
you will on orbit in that particular you

83
00:11:09,480 --> 00:11:07,580
to a military man in space might be for

84
00:11:11,520 --> 00:11:09,490
situations where the tactical field

85
00:11:14,010 --> 00:11:11,530
commander doesn't have the information

86
00:11:16,650 --> 00:11:14,020
that he needs readily something like

87
00:11:18,420 --> 00:11:16,660
where his adversary might be located in

88
00:11:20,670 --> 00:11:18,430

that case if you happen to have a space

89

00:11:23,460 --> 00:11:20,680

platform such as the shuttle or a space

90

00:11:26,880 --> 00:11:23,470

station or some other future platform in

91

00:11:28,980 --> 00:11:26,890

orbit at a time and that station is

92

00:11:30,870 --> 00:11:28,990

going overhead of the area where that

93

00:11:33,420 --> 00:11:30,880

field commander is operating in that

94

00:11:35,160 --> 00:11:33,430

case he might be able to help the field

95

00:11:36,660 --> 00:11:35,170

commander on the ground and relay the

96

00:11:41,660 --> 00:11:36,670

information and that's kind of what

97

00:11:46,530 --> 00:11:44,430

Marsha Dunn Associated Press sir

98

00:11:48,600 --> 00:11:46,540

Lieutenant Commander Renko are you able

99

00:11:50,400 --> 00:11:48,610

to see more or less detail with the m88

100

00:11:51,930 --> 00:11:50,410

cameras than you would anticipate it and

101
00:12:09,840 --> 00:11:51,940
could you give us some idea of just how

102
00:12:13,280 --> 00:12:09,850
much detail you can pick out airplanes

103
00:12:15,780 --> 00:12:13,290
that's kind of the level of detail

104
00:12:19,110 --> 00:12:15,790
whether I can identify those ships as

105
00:12:20,700 --> 00:12:19,120
particular types or airplanes I haven't

106
00:12:22,620 --> 00:12:20,710
been able to do mainly because the

107
00:12:24,210 --> 00:12:22,630
imagery I'm getting is kind of at the

108
00:12:25,860 --> 00:12:24,220
limit of its resolution and that's what

109
00:12:30,600 --> 00:12:25,870
I was getting at earlier with regard to

110
00:12:33,060 --> 00:12:30,610
a little bit better equipment that

111
00:12:35,190 --> 00:12:33,070
sticky with Reuters for Fred Gregory the

112
00:12:37,440 --> 00:12:35,200
failure launch dr. Lenoir said that the

113
00:12:39,480 --> 00:12:37,450

shuttle software would be adapted so the

114

00:12:41,460 --> 00:12:39,490

orbiter can land on autopilot the

115

00:13:18,840 --> 00:12:41,470

question is would you be happy to let

116

00:13:23,410 --> 00:13:21,460

this is Irene Brown of Florida today I

117

00:13:25,660 --> 00:13:23,420

also have a landing question for Fred

118

00:13:28,210 --> 00:13:25,670

Gregory I was wondering if you and Tom

119

00:13:30,400 --> 00:13:28,220

Henrik have subscribed to the mike

120

00:13:32,410 --> 00:13:30,410

coates brian o'connor shuttle landing

121

00:13:34,360 --> 00:13:32,420

video club to help you keep help keep

122

00:13:46,540 --> 00:13:34,370

you prepared for landing after 10 days

123

00:13:48,790 --> 00:13:46,550

in space sure is daunting with the

124

00:13:50,650 --> 00:13:48,800

Orlando Sentinel I guess for Jim Voss a

125

00:13:52,480 --> 00:13:50,660

couple of you got like four hour stints

126
00:14:41,380 --> 00:13:52,490
coming up in the elbe I'm just wondering

127
00:14:45,520 --> 00:14:41,390
what you plan to do to me come

128
00:14:48,130 --> 00:14:45,530
Aviation Week for Tom Henin are there

129
00:14:51,610 --> 00:14:48,140
any observational qualities that

130
00:15:04,990 --> 00:14:51,620
surprised you from space as opposed to

131
00:15:06,370 --> 00:15:05,000
the work you had done before I think one

132
00:15:09,690 --> 00:15:06,380
of the biggest things that helps the

133
00:15:12,310 --> 00:15:09,700
observation even with the naked eye

134
00:15:13,840 --> 00:15:12,320
before going any further that we're not

135
00:15:15,640 --> 00:15:13,850
trying to compete with any existing

136
00:15:18,700 --> 00:15:15,650
equipment that's out there with then

137
00:15:19,990 --> 00:15:18,710
we've run on or we're just going to

138
00:15:21,970 --> 00:15:20,000

characterize a variety of different

139

00:15:22,870 --> 00:15:21,980

observation techniques skills and ways

140

00:15:24,490 --> 00:15:22,880

of doing business

141

00:15:30,370 --> 00:15:24,500

they probably the biggest thing that has

142

00:15:40,210 --> 00:15:35,040

the tonal qualities that you get with

143

00:15:41,890 --> 00:15:40,220

return fill based or electro-optical or

144

00:15:43,300 --> 00:15:41,900

digital type of product it just don't

145

00:15:45,820 --> 00:15:43,310

seem to have the same kind of color

146

00:15:47,470 --> 00:15:45,830

properties as you have here with your

147

00:15:48,880 --> 00:15:47,480

naked eye right out the shuttle window

148

00:15:50,140 --> 00:15:48,890

so probably color is probably the

149

00:15:55,930 --> 00:15:50,150

biggest factor that I really hadn't

150

00:15:59,170 --> 00:15:55,940

anticipated dan billow here at W esht V

151

00:16:01,480 --> 00:15:59,180

for story story you and some of your

152

00:16:02,950 --> 00:16:01,490

crewmates have shown that that you're

153

00:16:05,320 --> 00:16:02,960

not really afraid to show people you

154

00:16:45,010 --> 00:16:05,330

have a sense of humor with that in mind

155

00:16:47,440 --> 00:16:45,020

I'd like to hear how you describe lost

156

00:16:49,870 --> 00:16:47,450

cabin with WFTV you know Orlando this

157

00:16:51,700 --> 00:16:49,880

especially for the for first-timers up

158

00:16:53,890 --> 00:16:51,710

there this mission like a couple of the

159

00:16:56,110 --> 00:16:53,900

recent missions is studying the effects

160

00:16:57,850 --> 00:16:56,120

of weightlessness on the human body what

161

00:17:00,430 --> 00:16:57,860

effects have you noticed immediately

162

00:17:02,260 --> 00:17:00,440

upon going into orbit and since you've

163

00:17:03,400 --> 00:17:02,270

been up there what's been happening to

164

00:17:18,579 --> 00:17:03,410

your bodies what have you noticed that

165

00:17:20,410 --> 00:17:18,589

perhaps has been unexpected although we

166

00:17:22,750 --> 00:17:20,420

don't want to get light and you wouldn't

167

00:17:25,600 --> 00:17:22,760

expect us to see much on the front

168

00:17:28,120 --> 00:17:25,610

window about six minutes six minutes and

169

00:17:30,940 --> 00:17:28,130

a descent we were climbing directly

170

00:17:32,680 --> 00:17:30,950

toward Orion and I was absolutely

171

00:17:36,160 --> 00:17:32,690

spectacular from my point of view once

172

00:17:39,340 --> 00:17:36,170

we had a engine cutoff the floating

173

00:17:41,500 --> 00:17:39,350

sensation wasn't as strong as I expected

174

00:17:46,080 --> 00:17:41,510

but I did make sure that went through

175

00:17:46,090 --> 00:19:11,730

shortly after that nothing was the human

176

00:19:16,390 --> 00:19:14,170

ABS UPI radio network

177

00:19:18,520 --> 00:19:16,400

well the commander bred you served as

178

00:19:20,830 --> 00:19:18,530

NASA's operational space flight safety

179

00:19:22,540 --> 00:19:20,840

chief after the Challenger accident more

180

00:19:25,300 --> 00:19:22,550

than three years after return to flight

181

00:19:27,280 --> 00:19:25,310

how do you view agency wide attention to

182

00:19:28,900 --> 00:19:27,290

safety and can it be maintained in

183

00:19:31,150 --> 00:19:28,910

future years with a heavier flight

184

00:19:33,070 --> 00:19:31,160

schedule and four orbiters coupled with

185

00:20:37,890 --> 00:19:33,080

diminished resources and personnel to

186

00:20:43,450 --> 00:20:41,110

this is dick uliana the ap radio network

187

00:20:45,850 --> 00:20:43,460

for commander Fred Gregory you've landed

188

00:20:48,100 --> 00:20:45,860

twice at edwards are you looking forward

189

00:20:50,200 --> 00:20:48,110

to adding kennedy to your resume and if

190

00:20:52,270 --> 00:20:50,210

you do land here what differences do you

191

00:21:28,930 --> 00:20:52,280

expect to edwards and you think the

192

00:21:31,240 --> 00:21:28,940

painful experience last time this is jim

193

00:21:34,510 --> 00:21:31,250

Bankia Florida today I have a Star Trek

194

00:21:37,150 --> 00:21:34,520

question for Mario the show it's famous

195

00:21:39,970 --> 00:21:37,160

for its special effects drama and

196

00:21:42,130 --> 00:21:39,980

optimistic vision of the future how does

197

00:21:44,680 --> 00:21:42,140

the show compare with the real thing and

198

00:21:47,650 --> 00:21:44,690

how has your spaceflight experience

199

00:21:59,650 --> 00:21:47,660

affected your vision of what this nation

200

00:22:01,740 --> 00:21:59,660

should do in the future in space toward

201
00:22:04,870 --> 00:22:01,750
goals that are common to all mankind

202
00:22:10,289 --> 00:22:04,880
toward where we can work together and

203
00:22:14,669 --> 00:22:12,259
beings in all creatures whether they be

204
00:22:16,769 --> 00:22:14,679
the animals on the face of the earth our

205
00:22:18,779 --> 00:22:16,779
environment or otherwise and I think

206
00:22:22,409 --> 00:22:18,789
working up here and seeing the

207
00:22:25,229 --> 00:22:22,419
perspective this is a soft start in that

208
00:22:27,239 --> 00:22:25,239
direction we're trying to achieve that

209
00:22:28,919 --> 00:22:27,249
when you're up here looking at the earth

210
00:22:38,219 --> 00:22:28,929
you get a global perspective you see

211
00:22:40,409 --> 00:22:38,229
past orders doujin earth news story

212
00:22:41,609 --> 00:22:40,419
Musgrave eight years ago on challengers

213
00:22:44,940 --> 00:22:41,619

maiden flight you helped launch the

214

00:23:26,310 --> 00:22:44,950

first I us from the shuttle was launched

215

00:23:28,709 --> 00:23:26,320

in the commander Gregory Marshburn at

216

00:23:30,180 --> 00:23:28,719

the AP again you became the second crew

217

00:24:13,259 --> 00:23:30,190

in less than three months forced to

218

00:24:23,680 --> 00:24:13,269

dodge space junk is an increase in all

219

00:24:39,789 --> 00:24:26,320

after had recovered in the Atlantic

220

00:24:41,889 --> 00:24:39,799

Ocean that's picky with murders for a

221

00:24:43,629 --> 00:24:41,899

story this is your fourth flight after

222

00:24:45,570 --> 00:24:43,639

this flight you will have more hours in

223

00:25:44,289 --> 00:24:45,580

orbit than any other Shuttle astronaut

224

00:25:46,119 --> 00:25:44,299

this particular experience manifested

225

00:25:47,860 --> 00:25:46,129

Kennedy presenter that concludes our

