



1
00:00:13,670 --> 00:00:09,590

why did you want to be a

2
00:00:17,450 --> 00:00:13,680

Bernard Young's casual attire was a very

3
00:00:20,870 --> 00:00:17,460

complex issue uh yeah and you got you

4
00:00:22,519 --> 00:00:20,880

I'd say that as a kid I didn't want to

5
00:00:23,870 --> 00:00:22,529

become a cross feel on my own there's

6
00:00:27,080 --> 00:00:23,880

nothing as far as i remember I've always

7
00:00:29,390 --> 00:00:27,090

wanted to be a pilot I think there was

8
00:00:31,550 --> 00:00:29,400

an event that's prob'ly strengthened my

9
00:00:34,660 --> 00:00:31,560

desire to become a pilot in knots adlib

10
00:00:39,049 --> 00:00:34,670

that's when I was 12 years old about 12

11
00:00:41,600 --> 00:00:39,059

I never jumped with a parachute for the

12
00:00:43,729 --> 00:00:41,610

first time or your time actually I

13
00:00:46,910 --> 00:00:43,739

wasn't 12 at the moment it is not yet

14

00:00:49,430 --> 00:00:46,920

and let off the booboo pony joke London

15

00:00:53,240 --> 00:00:49,440

and what was interesting was that I had

16

00:00:55,969 --> 00:00:53,250

to weigh no less than 50 kilos about my

17

00:00:58,340 --> 00:00:55,979

mom because the parachute system which

18

00:01:02,030 --> 00:00:58,350

was an aberration at that time for a

19

00:01:05,960 --> 00:01:02,040

bottle or a threat to perform the weight

20

00:01:10,700 --> 00:01:05,970

is the name of the individual had to be

21

00:01:15,410 --> 00:01:10,710

no less than 50 kilogram i dint where 50

22

00:01:17,330 --> 00:01:15,420

kilos back then tortilla and will be

23

00:01:19,940 --> 00:01:17,340

physically but probably found that I

24

00:01:22,760 --> 00:01:19,950

lies more physics and mathematics sister

25

00:01:26,899 --> 00:01:22,770

played its part in abuse tonight disco

26

00:01:30,020 --> 00:01:26,909

what i did i added sand to my pockets to

27

00:01:32,840 --> 00:01:30,030

my boots and so I didn't come to weigh

28

00:01:34,819 --> 00:01:32,850

50 kilos so I went ahead and I general

29

00:01:37,310 --> 00:01:34,829

tidiness go on the photonic my aunt of

30

00:01:40,160 --> 00:01:37,320

dim bolio so this probably 10 player is

31

00:01:42,319 --> 00:01:40,170

it major may be the only charging points

32

00:01:44,510 --> 00:01:42,329

we will the minion a toast oh yeah pop

33

00:01:47,870 --> 00:01:44,520

off center concato and there you should

34

00:01:51,080 --> 00:01:47,880

do the other actually I came to Bruce

35

00:01:53,480 --> 00:01:51,090

Lee a member of legislation of the

36

00:01:55,609 --> 00:01:53,490

Gagarin cosmonaut community a little

37

00:01:57,289 --> 00:01:55,619

money before they came a cosmonaut I was

38

00:02:00,529 --> 00:01:57,299

instructed for some time reporter should

39

00:02:03,679 --> 00:02:00,539

knock brush cook some of the IE I was an

40

00:02:05,450 --> 00:02:03,689

emulsion a parachute jumper and cuple

41

00:02:09,559 --> 00:02:05,460

de right decision I'd say I'd say ever

42

00:02:13,220 --> 00:02:09,569

have around 1500 uh ever instructor on

43

00:02:15,890 --> 00:02:13,230

parachute jumps on my record so I was

44

00:02:18,170 --> 00:02:15,900

instructor and I was dealing with all

45

00:02:21,530 --> 00:02:18,180

these Earthmen off extreme activities

46

00:02:22,740 --> 00:02:21,540

and she was specifically profession

47

00:02:29,010 --> 00:02:22,750

activities

48

00:02:31,530 --> 00:02:29,020

survival lights Denise jumps hydro G

49

00:02:34,290 --> 00:02:31,540

microgravity environment those two yeah

50

00:02:37,350 --> 00:02:34,300

partial so there's something I had been

51
00:02:39,900 --> 00:02:37,360
dealing with oh just over there becoming

52
00:02:44,640 --> 00:02:39,910
part of the cosmonaut Corps is a very

53
00:02:47,580 --> 00:02:44,650
logical item in this chain of events my

54
00:02:50,190 --> 00:02:47,590
professional activity I thought I was

55
00:02:52,500 --> 00:02:50,200
ready I felt prepared I thought had to

56
00:02:55,979 --> 00:02:52,510
his knowledge and I thought that maybe

57
00:03:00,300 --> 00:02:55,989
I'll be of more make no contribution as

58
00:03:02,400 --> 00:03:00,310
part of the cosmonaut Corps wanna know

59
00:03:05,910 --> 00:03:02,410
if I might wanna put you a partial and

60
00:03:07,560 --> 00:03:05,920
I'd have adventure so far as to say that

61
00:03:10,979 --> 00:03:07,570
this is probably men think why it became

62
00:03:14,640 --> 00:03:10,989
a lot not cook the paddle reported

63
00:03:18,000 --> 00:03:14,650

cosmonaut of year besides when I was

64

00:03:21,090 --> 00:03:18,010

your car motor going to become a

65

00:03:22,830 --> 00:03:21,100

cosmonaut undersized Nehemiah boy we did

66

00:03:25,199 --> 00:03:22,840

realize that it's going to be a very

67

00:03:27,590 --> 00:03:25,209

tough job and I want that home very

68

00:03:32,039 --> 00:03:27,600

often and my family will probably be

69

00:03:34,100 --> 00:03:32,049

offended some times cos Detroit as I

70

00:03:36,630 --> 00:03:34,110

said that I believe every human being

71

00:03:39,780 --> 00:03:36,640

needs to contribute something to society

72

00:03:43,729 --> 00:03:39,790

and to the environment and I thought

73

00:03:46,140 --> 00:03:43,739

this is something i could do better in

74

00:03:49,020 --> 00:03:46,150

like to learn a little bit more about

75

00:03:51,270 --> 00:03:49,030

give jenny tarelkin a start by telling

76

00:03:53,039 --> 00:03:51,280

me about your hometown and and what it

77

00:03:55,860 --> 00:03:53,049

was like for you as you grew up

78

00:04:03,030 --> 00:03:55,870

apparently in several places in the in

79

00:04:06,840 --> 00:04:03,040

the Soviet Union yes mmm yes ah yeah

80

00:04:09,120 --> 00:04:06,850

tuck my ideas yes you're right mayura

81

00:04:11,910 --> 00:04:09,130

didn't believe I mmm you see my parents

82

00:04:13,800 --> 00:04:11,920

were in the military why are you an idea

83

00:04:15,630 --> 00:04:13,810

chick my father was a military pilot oh

84

00:04:18,690 --> 00:04:15,640

you mean music my mother was a military

85

00:04:22,020 --> 00:04:18,700

doctor toe bone she was touched to watch

86

00:04:25,320 --> 00:04:22,030

entire ride you see ya the bike alley so

87

00:04:28,560 --> 00:04:25,330

the Guru cheetah i was born in the

88

00:04:31,529 --> 00:04:28,570

Baikal region this is the sitting of

89

00:04:34,190 --> 00:04:31,539

cheetah it's not far away from lake

90

00:04:36,340 --> 00:04:34,200

baikal crazy from the far east of russia

91

00:04:39,970 --> 00:04:36,350

very beautiful

92

00:04:42,490 --> 00:04:39,980

asian tiger reaching home i was born in

93

00:04:46,570 --> 00:04:42,500

cheetah almost ready to leave man who

94

00:04:50,770 --> 00:04:46,580

switched our places of accommodation

95

00:04:53,590 --> 00:04:50,780

very muffins i used to live close to

96

00:04:58,180 --> 00:04:53,600

mongolia in Jiddah that's why my father

97

00:05:01,960 --> 00:04:58,190

was a no serving and I switched places

98

00:05:04,720 --> 00:05:01,970

many more times yes I you should tell at

99

00:05:07,510 --> 00:05:04,730

the pond Moscow say despite the fact i

100

00:05:09,580 --> 00:05:07,520

was born in cheetah I think my hometown

101
00:05:12,070 --> 00:05:09,590
is a small town in the Moscow region

102
00:05:15,100 --> 00:05:12,080
Dimitrov that's where my father was for

103
00:05:16,810 --> 00:05:15,110
eternity most of my family members live

104
00:05:18,880 --> 00:05:16,820
them I thought daughter is incredible

105
00:05:21,460 --> 00:05:18,890
gujrat let's ever a beautiful town as

106
00:05:24,100 --> 00:05:21,470
well poker and Amelia I see Jessica

107
00:05:26,890 --> 00:05:24,110
sterreich Minogue Elena what you it and

108
00:05:28,540 --> 00:05:26,900
I tried to do as much as I can hear that

109
00:05:32,140 --> 00:05:28,550
um how did is cool you can never stop

110
00:05:35,800 --> 00:05:32,150
while I try to talk to a dude school

111
00:05:38,380 --> 00:05:35,810
children as often as I can ah my ID and

112
00:05:41,370 --> 00:05:38,390
my father same thing my parents after my

113
00:05:44,410 --> 00:05:41,380

father retired from the military natham

114

00:05:48,310 --> 00:05:44,420

came to live in this town chill I been

115

00:05:51,070 --> 00:05:48,320

seein or my father is now retired but

116

00:05:55,090 --> 00:05:51,080

he's still very active small add user

117

00:05:59,290 --> 00:05:55,100

and he works very closely with the young

118

00:06:02,560 --> 00:05:59,300

people you uh oh my god malad in Judea

119

00:06:05,770 --> 00:06:02,570

it's a a club tombstone a club for you

120

00:06:08,650 --> 00:06:05,780

at Licata to let's say and he's doing

121

00:06:10,450 --> 00:06:08,660

his job was trying to prove its person

122

00:06:13,930 --> 00:06:10,460

bring them to make them learn new things

123

00:06:19,060 --> 00:06:13,940

such as for a helicopter to make

124

00:06:21,310 --> 00:06:19,070

parachute jumps mood and yep okay other

125

00:06:25,210 --> 00:06:21,320

things chill adam says longer at home I

126

00:06:27,940 --> 00:06:25,220

for now live close to Star City with my

127

00:06:32,800 --> 00:06:27,950

family skipper didn't I'm married I have

128

00:06:37,540 --> 00:06:32,810

two daughters what no Dutch kidstar she

129

00:06:41,560 --> 00:06:37,550

is it what he did my elder daughter is

130

00:06:45,430 --> 00:06:41,570

10 years old of a younger one is five no

131

00:06:47,890 --> 00:06:45,440

prekrasno Doge k hideous man very good

132

00:06:49,650 --> 00:06:47,900

girls amazon oshakati left are over eben

133

00:06:52,500 --> 00:06:49,660

Kemal chica but

134

00:06:55,230 --> 00:06:52,510

there is a sheet only done by cheap one

135

00:06:59,610 --> 00:06:55,240

thing I need to say we did one with a

136

00:07:02,850 --> 00:06:59,620

boy 1 yeah as our second child but

137

00:07:05,460 --> 00:07:02,860

probably because we had wanted a boy the

138

00:07:09,090 --> 00:07:05,470

girl that I have residue it's really a

139

00:07:12,300 --> 00:07:09,100

tomboy what if poachy was starting

140

00:07:14,930 --> 00:07:12,310

princess I'm legit so the elder one is a

141

00:07:18,750 --> 00:07:14,940

princess and the younger one is a

142

00:07:22,320 --> 00:07:18,760

soldier she's really a tomboy I got

143

00:07:24,780 --> 00:07:22,330

anything but overall they're great

144

00:07:27,120 --> 00:07:24,790

daughter's very proud of them I hope

145

00:07:31,320 --> 00:07:27,130

they're proud of me no coral carven yes

146

00:07:34,650 --> 00:07:31,330

and is no se busca and my wife is from

147

00:07:37,140 --> 00:07:34,660

Novosibirsk that's in the several region

148

00:07:39,120 --> 00:07:37,150

to ride Italy yield her parents still

149

00:07:41,190 --> 00:07:39,130

live there I see chess a nice deal which

150

00:07:44,070 --> 00:07:41,200

good and currently she is right there

151
00:07:46,140 --> 00:07:44,080
together my daughter's in Novosibirsk

152
00:07:50,160 --> 00:07:46,150
bewildered apartment she's an accountant

153
00:07:56,220 --> 00:07:50,170
by education the market right now is

154
00:07:58,740 --> 00:07:56,230
share stay at home do you think that the

155
00:08:00,390 --> 00:07:58,750
fact that you grew up in a family where

156
00:08:03,150 --> 00:08:00,400
your parents were in the military and

157
00:08:04,740 --> 00:08:03,160
you move from place to place influence

158
00:08:06,630 --> 00:08:04,750
that your choice of careers you

159
00:08:11,940 --> 00:08:06,640
influenced you to to go into the

160
00:08:14,130 --> 00:08:11,950
military to know that Scotty of she'll

161
00:08:16,890 --> 00:08:14,140
probably yellow put almost a yes I think

162
00:08:20,040 --> 00:08:16,900
it really did have an impactful school

163
00:08:22,409 --> 00:08:20,050

yeah boo when I was a kid the red

164

00:08:26,220 --> 00:08:22,419

wedding from school we had a choice

165

00:08:29,640 --> 00:08:26,230

either to follow the military path or to

166

00:08:31,470 --> 00:08:29,650

become a doctor hmm could I gonna go out

167

00:08:34,020 --> 00:08:31,480

here hinges no scary if she owes me a

168

00:08:36,719 --> 00:08:34,030

boo-boo yo ho doctor I can't really say

169

00:08:39,120 --> 00:08:36,729

for sure but I have presumption I'd make

170

00:08:41,400 --> 00:08:39,130

a good doctor no reason why you better

171

00:08:44,219 --> 00:08:41,410

back then right object for the military

172

00:08:46,860 --> 00:08:44,229

I have no regrets whatsoever obedience

173

00:08:49,290 --> 00:08:46,870

loosely above Rachel me abubakar but I'm

174

00:08:52,140 --> 00:08:49,300

positive I were a doctor at their good

175

00:08:54,990 --> 00:08:52,150

one to tell me a little bit about the

176

00:08:57,210 --> 00:08:55,000

the path then for you I understand that

177

00:08:59,850 --> 00:08:57,220

by the time you graduated from high

178

00:09:01,890 --> 00:08:59,860

school you were living near Moscow but

179

00:09:03,330 --> 00:09:01,900

tell me about the the different schools

180

00:09:05,900 --> 00:09:03,340

that you went to and the

181

00:09:08,550 --> 00:09:05,910

steps in your career that led you to

182

00:09:10,800 --> 00:09:08,560

working at the Gagarin cosmonaut

183

00:09:19,200 --> 00:09:10,810

training center and then ultimately to

184

00:09:21,510 --> 00:09:19,210

become a cosmonaut good I yep amenia

185

00:09:24,240 --> 00:09:21,520

which another school yes I did switch

186

00:09:27,420 --> 00:09:24,250

lots of schools no you're not gonna go

187

00:09:29,580 --> 00:09:27,430

kid I'd say five skulls nobody in your

188

00:09:32,400 --> 00:09:29,590

palm no I don't even remember correctly

189

00:09:35,730 --> 00:09:32,410

who's yeah I thought why Soccio ascidian

190

00:09:38,640 --> 00:09:35,740

my graduation took place and the

191

00:09:41,160 --> 00:09:38,650

scallops came home I did a town that's

192

00:09:43,950 --> 00:09:41,170

close to Stassi tease that's where my

193

00:09:46,890 --> 00:09:43,960

father was finishing his years in the

194

00:09:49,140 --> 00:09:46,900

military kirkus messy one but now as I

195

00:09:52,530 --> 00:09:49,150

look back I find out this is school

196

00:09:55,380 --> 00:09:52,540

number 14 it's named after you rinse

197

00:09:57,840 --> 00:09:55,390

Gagarin and now this school is really

198

00:09:59,730 --> 00:09:57,850

proud of me no Jean Chesterton and I'm

199

00:10:03,120 --> 00:09:59,740

an often visited often guest to the

200

00:10:06,330 --> 00:10:03,130

school I tried to to help the school as

201
00:10:08,550 --> 00:10:06,340
much as I can school yeah after

202
00:10:13,770 --> 00:10:08,560
graduating I went to a military school

203
00:10:16,400 --> 00:10:13,780
ah both Leah after which I went to the

204
00:10:19,650 --> 00:10:16,410
military academy at least one enough

205
00:10:22,920 --> 00:10:19,660
well then enjoy the crust of the region

206
00:10:26,820 --> 00:10:22,930
to the yeas aviation school it's on now

207
00:10:30,480 --> 00:10:26,830
tradition history treasure for fighter

208
00:10:33,000 --> 00:10:30,490
pilots a motor and body pilots morning

209
00:10:35,910 --> 00:10:33,010
then again back to the airport the

210
00:10:37,710 --> 00:10:35,920
guarantees military pilots academies so

211
00:10:41,130 --> 00:10:37,720
we see whatever why do you work center

212
00:10:43,110 --> 00:10:41,140
somehow I kept going closer to the

213
00:10:46,560 --> 00:10:43,120

Gagarin cosmic radiance enter just by

214

00:10:48,570 --> 00:10:46,570

the names of the entities and education

215

00:10:50,790 --> 00:10:48,580

units assorted cosmonaut of and after

216

00:10:55,140 --> 00:10:50,800

gradient from there I became instructor

217

00:11:01,860 --> 00:10:55,150

and the Gagarin center what he put on

218

00:11:03,990 --> 00:11:01,870

and then in 2003 topple after perform

219

00:11:09,260 --> 00:11:04,000

passing the exams and stuff I became a

220

00:11:14,940 --> 00:11:09,270

cosmonaut Oh Letitia I piata mogudu in

221

00:11:16,199 --> 00:11:14,950

2005 I became without the quantity test

222

00:11:18,389 --> 00:11:16,209

cosmonaut

223

00:11:23,509 --> 00:11:18,399

sweat I mean to say that I finished the

224

00:11:27,150 --> 00:11:23,519

general cosmic preparation classes yes

225

00:11:30,359 --> 00:11:27,160

and now again the finishing touch as am

226

00:11:34,769 --> 00:11:30,369

I the common ready for the flight so

227

00:11:37,169 --> 00:11:34,779

that's the summary so do I understand

228

00:11:39,720 --> 00:11:37,179

then that the course of the several

229

00:11:43,679 --> 00:11:39,730

different schools and academies that you

230

00:11:46,559 --> 00:11:43,689

went to that you went directly into as

231

00:11:49,049 --> 00:11:46,569

an instructor of cosmonauts rather than

232

00:11:57,509 --> 00:11:49,059

into an operational role in the Air

233

00:11:59,999 --> 00:11:57,519

Force sea-chest suggests yeah pues

234

00:12:02,819 --> 00:12:00,009

little cocky apparently yes Annelle

235

00:12:06,540 --> 00:12:02,829

exact thought over what you mean I see

236

00:12:09,150 --> 00:12:06,550

that somehow murdered I kept turning

237

00:12:11,160 --> 00:12:09,160

towards the cause not path I know well

238

00:12:14,699 --> 00:12:11,170

it was God or fate or I don't know

239

00:12:17,040 --> 00:12:14,709

destiny I remember that I had always

240

00:12:19,290 --> 00:12:17,050

wanted to be a pilot what do you mean

241

00:12:21,900 --> 00:12:19,300

exam how open your mind i found myself

242

00:12:26,039 --> 00:12:21,910

in the cosmetic or and i'm a cosmonaut

243

00:12:28,350 --> 00:12:26,049

Here I am when you were an instructor at

244

00:12:31,590 --> 00:12:28,360

the cosmonaut training center what were

245

00:12:33,509 --> 00:12:31,600

you teaching what what what disciplines

246

00:12:35,160 --> 00:12:33,519

are or what subjects were you an

247

00:12:37,249 --> 00:12:35,170

instructor was now no matter Billy

248

00:12:40,439 --> 00:12:37,259

practice ski disciplining mostly

249

00:12:42,119 --> 00:12:40,449

practical activities for Assad number of

250

00:12:44,249 --> 00:12:42,129

course I'd preparation for parachuting

251
00:12:46,619 --> 00:12:44,259
twist instructor proportional to the

252
00:12:51,809 --> 00:12:46,629
torch and structure to the fish is Lily

253
00:12:53,519 --> 00:12:51,819
my own are not native to ripon got off

254
00:12:56,160 --> 00:12:53,529
kara Cisco cuz mama you probably know

255
00:12:59,669 --> 00:12:56,170
when a Russian cosmonaut says it's being

256
00:13:03,600 --> 00:12:59,679
prepared he or she goes through the

257
00:13:05,699 --> 00:13:03,610
Magna tree for a shooting exercises so

258
00:13:08,249 --> 00:13:05,709
it's not really to make her do it cuz

259
00:13:11,249 --> 00:13:08,259
mom a parachute a trooper out of a

260
00:13:13,859 --> 00:13:11,259
cosmonaut are miserable it's more in

261
00:13:16,949 --> 00:13:13,869
order to prepare than cosmonaut returns

262
00:13:19,319 --> 00:13:16,959
to be ready to perform the task set

263
00:13:22,079 --> 00:13:19,329

modern under stressful conditions nacho

264

00:13:24,659 --> 00:13:22,089

Robo Knight or dignity toxicology just

265

00:13:26,759 --> 00:13:24,669

get this door but for the purpose of the

266

00:13:29,199 --> 00:13:26,769

cosmonaut being able to do all those

267

00:13:32,590 --> 00:13:29,209

tests during the

268

00:13:35,949 --> 00:13:32,600

determine free fourth period he or she

269

00:13:38,470 --> 00:13:35,959

needs to know how to work with the

270

00:13:42,699 --> 00:13:38,480

parachute what to do in case of an

271

00:13:46,960 --> 00:13:42,709

optimal situation to how to set up the

272

00:13:50,850 --> 00:13:46,970

backup Luther shoot Jordan is almost and

273

00:13:54,519 --> 00:13:50,860

in addition yeah is there a chief lights

274

00:13:57,759 --> 00:13:54,529

I-39 this is an aircraft flights

275

00:13:59,889 --> 00:13:57,769

Kirkland's to purple would ruin him I

276

00:14:02,710 --> 00:13:59,899

participated there as part of their

277

00:14:04,660 --> 00:14:02,720

survival instructor great this is the

278

00:14:10,379 --> 00:14:04,670

ball just English again all costs must

279

00:14:17,439 --> 00:14:14,710

survival in desert martyr was away near

280

00:14:19,600 --> 00:14:17,449

no more to see survival also to the door

281

00:14:22,809 --> 00:14:19,610

at the other yeah Fatima's animals this

282

00:14:26,049 --> 00:14:22,819

is something i was busy with prior to

283

00:14:28,389 --> 00:14:26,059

becoming part of the cosmocorps I was

284

00:14:30,669 --> 00:14:28,399

the one who had recourse manures and

285

00:14:32,799 --> 00:14:30,679

astronauts who came to the Gagarin

286

00:14:36,539 --> 00:14:32,809

training center in order to prepare for

287

00:14:39,759 --> 00:14:36,549

their flights do you think that it was

288

00:14:42,309 --> 00:14:39,769

your proximity to cosmonauts and

289

00:14:45,309 --> 00:14:42,319

astronauts in instructing them in these

290

00:14:49,749 --> 00:14:45,319

things that finally made you think I

291

00:14:54,939 --> 00:14:49,759

could be a cosmonaut myself no you're

292

00:14:57,280 --> 00:14:54,949

not probably yes yeah bucho kahuta you

293

00:15:00,910 --> 00:14:57,290

do as i was teaching somebody I could

294

00:15:04,539 --> 00:15:00,920

see that I was nervous I could do all of

295

00:15:06,939 --> 00:15:04,549

that myself na boo boo diva it had nice

296

00:15:09,730 --> 00:15:06,949

pretty so I could say yes that was

297

00:15:13,239 --> 00:15:09,740

probably one of the reasons behind my

298

00:15:15,100 --> 00:15:13,249

applying for becoming a cosmonaut so

299

00:15:19,780 --> 00:15:15,110

that's why I went instead down and all

300

00:15:22,269 --> 00:15:19,790

that application to fly in space as a

301

00:15:24,609 --> 00:15:22,279

cosmonaut is to take on a job that

302

00:15:28,299 --> 00:15:24,619

carries some risks that most people

303

00:15:31,660 --> 00:15:28,309

don't have in their jobs but most people

304

00:15:34,929 --> 00:15:31,670

would wonder why so let me ask you what

305

00:15:37,539 --> 00:15:34,939

is it that you believe that people get

306

00:15:40,449 --> 00:15:37,549

or what do we learn as a result of

307

00:15:42,020 --> 00:15:40,459

flying people in space that makes it

308

00:15:49,100 --> 00:15:42,030

worth taking the risk

309

00:15:52,070 --> 00:15:49,110

to do so no cookie or go I do a problem

310

00:15:54,710 --> 00:15:52,080

as I said before he's kill the

311

00:15:58,040 --> 00:15:54,720

justification of this risks prob'ly lies

312

00:16:00,920 --> 00:15:58,050

in their intention of human time to go

313

00:16:03,130 --> 00:16:00,930

forward Detroit oh no you're not and

314

00:16:07,550 --> 00:16:03,140

probably one of the major steps now is

315

00:16:10,520 --> 00:16:07,560

exploring new planets in order to

316

00:16:14,660 --> 00:16:10,530

explore this new planet hostile to

317

00:16:17,960 --> 00:16:14,670

people cheesecake it's understand how to

318

00:16:19,910 --> 00:16:17,970

do things we need to require to quad

319

00:16:22,370 --> 00:16:19,920

nest of knowledge than their earth

320

00:16:26,780 --> 00:16:22,380

bullets were polluted so what knowledge

321

00:16:30,260 --> 00:16:26,790

can get here from our safeway once to

322

00:16:31,610 --> 00:16:30,270

experiment 1 we wanted to fly to Mars we

323

00:16:34,130 --> 00:16:31,620

had should perform a number of

324

00:16:36,650 --> 00:16:34,140

experiments in their lair of orbitals

325

00:16:39,920 --> 00:16:36,660

the work in order to understand how this

326

00:16:41,360 --> 00:16:39,930

is life support systems operate their

327

00:16:43,630 --> 00:16:41,370

crazy mobile over and in order to

328

00:16:47,570 --> 00:16:43,640

understand how it works we need a time

329

00:16:50,330 --> 00:16:47,580

dozens of years party system a little

330

00:16:54,160 --> 00:16:50,340

fine-tune their systems to make them

331

00:16:57,410 --> 00:16:54,170

good work Bo noise you're the police' no

332

00:16:59,240 --> 00:16:57,420

de force we want imperfections because

333

00:17:03,890 --> 00:16:59,250

there are so many devices that operate

334

00:17:06,710 --> 00:17:03,900

in space even if we try to simulate

335

00:17:09,290 --> 00:17:06,720

center for these operations on the

336

00:17:11,000 --> 00:17:09,300

ground just incredible if we set the

337

00:17:13,550 --> 00:17:11,010

conditions high temperatures low

338

00:17:16,490 --> 00:17:13,560

temperatures normal as far as I know

339

00:17:18,200 --> 00:17:16,500

after these items are flown to the

340

00:17:20,930 --> 00:17:18,210

station they behave in their network

341

00:17:24,710 --> 00:17:20,940

total different ways your master so this

342

00:17:27,710 --> 00:17:24,720

low Earth orbit stage is really

343

00:17:31,400 --> 00:17:27,720

necessary but we need to look forward

344

00:17:34,400 --> 00:17:31,410

and modern data to think about flying

345

00:17:38,060 --> 00:17:34,410

two stars to other planets may they meet

346

00:17:44,930 --> 00:17:38,070

our alien brothers there who knows

347

00:17:48,110 --> 00:17:46,610

you're getting ready to launch to the

348

00:17:51,620 --> 00:17:48,120

International Space Station for

349

00:17:53,930 --> 00:17:51,630

expeditions 33 and 34 you've Getty what

350

00:17:55,940 --> 00:17:53,940

are the goals of your flight and what

351

00:18:02,510 --> 00:17:55,950

jobs will you be doing during this

352

00:18:06,760 --> 00:18:02,520

mission my ass not Wow my primary task

353

00:18:12,920 --> 00:18:09,410

and there are lots of girls lots of

354

00:18:17,330 --> 00:18:12,930

objectives that's not only it's a later

355

00:18:19,460 --> 00:18:17,340

the main ones from the tasks set as a

356

00:18:22,580 --> 00:18:19,470

duchess estates tombstone and all the

357

00:18:26,750 --> 00:18:22,590

task is to maintain the space station in

358

00:18:29,330 --> 00:18:26,760

do condition debussy pre-board blue so

359

00:18:32,960 --> 00:18:29,340

that all the units and all the app right

360

00:18:35,290 --> 00:18:32,970

I the form as a shooting future stalker

361

00:18:41,090 --> 00:18:35,300

quite a stir and should any of those

362

00:18:43,010 --> 00:18:41,100

break down to be able to fix it no star

363

00:18:45,380 --> 00:18:43,020

I'd say now however there is a second

364

00:18:48,050 --> 00:18:45,390

objective and I'd say that's conducting

365

00:18:50,720 --> 00:18:48,060

experiments Scientifics parents nice

366

00:18:55,520 --> 00:18:50,730

expedite our expedition will see around

367

00:18:57,860 --> 00:18:55,530

50 experiments what see it experiment of

368

00:19:01,280 --> 00:18:57,870

principle we've studied we have remote

369

00:19:02,990 --> 00:19:01,290

prepared for this experiments what's not

370

00:19:05,420 --> 00:19:03,000

much I'd say for the major part these

371

00:19:08,510 --> 00:19:05,430

are sent of experiments magnitude and

372

00:19:12,020 --> 00:19:08,520

gum like monitoring their earth's

373

00:19:13,280 --> 00:19:12,030

surface ah yes Doug the experiment is

374

00:19:18,680 --> 00:19:13,290

yes there are just certain experiments

375

00:19:20,960 --> 00:19:18,690

in the education area aimed at children

376

00:19:23,000 --> 00:19:20,970

you wasn't it no matter whether they

377

00:19:24,770 --> 00:19:23,010

have regression children who are less

378

00:19:28,130 --> 00:19:24,780

children's do kakita boat ride to

379

00:19:29,990 --> 00:19:28,140

conduct certain education programs young

380

00:19:31,580 --> 00:19:30,000

ideas at the booty to help these are

381

00:19:34,310 --> 00:19:31,590

going to be a real exciting what

382

00:19:35,930 --> 00:19:34,320

candidates for the children muster but

383

00:19:37,970 --> 00:19:35,940

you move it out nice my illness and

384

00:19:39,770 --> 00:19:37,980

examine your voice well I say it's my

385

00:19:42,080 --> 00:19:39,780

little one of my primary tasks is

386

00:19:45,080 --> 00:19:42,090

because I have two kids two daughters

387

00:19:47,740 --> 00:19:45,090

hit the moon no you're not yeah and

388

00:19:50,510 --> 00:19:47,750

that's right i hope i'll do a good job

389

00:19:53,810 --> 00:19:50,520

what they deal with experiment the most

390

00:19:57,350 --> 00:19:53,820

of Prince pai that's Ashley I would say

391

00:19:58,340 --> 00:19:57,360

that I know how to conduct myself one

392

00:20:02,480 --> 00:19:58,350

around kids

393

00:20:05,180 --> 00:20:02,490

and I'll do my best on the subject of

394

00:20:07,190 --> 00:20:05,190

excitement this is your first space

395

00:20:09,049 --> 00:20:07,200

flight so I'm guessing that there's a

396

00:20:11,510 --> 00:20:09,059

certain level of excitement for you

397

00:20:16,299 --> 00:20:11,520

about finally getting to to make that

398

00:20:19,070 --> 00:20:16,309

trip to space yes okay here's my

399

00:20:22,730 --> 00:20:19,080

suddenly which decision I bilocate

400

00:20:24,289 --> 00:20:22,740

forward to it for the past ten years put

401
00:20:27,650 --> 00:20:24,299
the money in this flight is it Lucas

402
00:20:31,070 --> 00:20:27,660
I've been on there russian cosmonaut

403
00:20:34,070 --> 00:20:31,080
Corps for ten years now Bucci what I'm

404
00:20:36,940 --> 00:20:34,080
looking forward to worcester yowza I'd

405
00:20:40,130 --> 00:20:36,950
say it's the accomplishment of my dream

406
00:20:42,080 --> 00:20:40,140
but in superior virion and I'm feel

407
00:20:44,390 --> 00:20:42,090
really confident I feel really well

408
00:20:47,750 --> 00:20:44,400
prepared for this flight oh yeah better

409
00:20:49,850 --> 00:20:47,760
watch it sir and of course we're looking

410
00:20:53,120 --> 00:20:49,860
forward to making my own contribution to

411
00:20:55,580 --> 00:20:53,130
this expedition to this mission aah ko

412
00:20:58,159 --> 00:20:55,590
ko ko ko' idea years my high school I'll

413
00:20:59,990 --> 00:20:58,169

do my best not to break something but

414

00:21:01,940 --> 00:21:00,000

rather to contribute some things you can

415

00:21:05,779 --> 00:21:01,950

imagine as opposed and I hope I'll be

416

00:21:08,630 --> 00:21:05,789

able to are you excited about being part

417

00:21:12,140 --> 00:21:08,640

of this project in the sense that it's

418

00:21:13,940 --> 00:21:12,150

also using the assets and the expertise

419

00:21:19,549 --> 00:21:13,950

of so many people from all around the

420

00:21:21,560 --> 00:21:19,559

world ah no can use me yeah oh yes of

421

00:21:24,649 --> 00:21:21,570

course I'm really happy about this long

422

00:21:27,169 --> 00:21:24,659

in yet okay I won't say that I'm nervous

423

00:21:29,899 --> 00:21:27,179

or anxious how could you ever go I do as

424

00:21:35,240 --> 00:21:29,909

I mentioned earlier I feel really well

425

00:21:39,560 --> 00:21:35,250

prepared I feel confident oh dear I feel

426
00:21:42,649 --> 00:21:39,570
assured and I think that I know what I'm

427
00:21:45,649 --> 00:21:42,659
going to do and I can navigate through

428
00:21:49,789 --> 00:21:45,659
all the machines in a parrot I yes i'm

429
00:21:51,080 --> 00:21:49,799
headed but I'm not nervous you know what

430
00:21:52,970 --> 00:21:51,090
there is on the International Space

431
00:21:54,560 --> 00:21:52,980
Station I want you to make sure that the

432
00:21:57,620 --> 00:21:54,570
rest of us do too could you give us a

433
00:22:00,070 --> 00:21:57,630
little verbal tour of the different

434
00:22:02,690 --> 00:22:00,080
modules and the facilities that are

435
00:22:08,060 --> 00:22:02,700
present currently at the what is soon to

436
00:22:10,159 --> 00:22:08,070
be your home in space well Japan to

437
00:22:11,970 --> 00:22:10,169
general picture have the Russian segment

438
00:22:15,730 --> 00:22:11,980

and the rest

439

00:22:18,580 --> 00:22:15,740

no tags addition he wants to have a

440

00:22:21,970 --> 00:22:18,590

Japanese module and the European model

441

00:22:24,970 --> 00:22:21,980

may be much more I think I'll start from

442

00:22:27,940 --> 00:22:24,980

scratch that's a Russian segment and all

443

00:22:30,489 --> 00:22:27,950

work through the entire station is gonna

444

00:22:32,440 --> 00:22:30,499

pour any minute so the first and they

445

00:22:35,139 --> 00:22:32,450

had say the main modern Russian segment

446

00:22:38,169 --> 00:22:35,149

is the service module they assemble

447

00:22:40,330 --> 00:22:38,179

promotional model Deanna who did six

448

00:22:43,419 --> 00:22:40,340

years now Nia this is the module at

449

00:22:46,889 --> 00:22:43,429

houses all the major units and a brat I

450

00:22:51,940 --> 00:22:46,899

that provide for the crew environment

451
00:22:55,090 --> 00:22:51,950
life support call with the ground scent

452
00:22:58,210 --> 00:22:55,100
of experiments etc besides it houses

453
00:23:00,279 --> 00:22:58,220
crook waters boy I see scarcely enough

454
00:23:02,830 --> 00:23:00,289
with dupatta for cheer Russian crew

455
00:23:04,840 --> 00:23:02,840
members tags in the who you somewhere

456
00:23:06,940 --> 00:23:04,850
it's also food there which is the most

457
00:23:09,810 --> 00:23:06,950
important thing I'd say because one of

458
00:23:13,539 --> 00:23:09,820
no one can survive without food or water

459
00:23:16,509 --> 00:23:13,549
would dance for me the whole night run

460
00:23:18,759 --> 00:23:16,519
times as i mentioned i'm painting a bit

461
00:23:22,029 --> 00:23:18,769
of trouble Letran so we moved to el djem

462
00:23:25,560 --> 00:23:22,039
a model fitness 19 yeah runyon this is a

463
00:23:28,690 --> 00:23:25,570

storage facility so to speak no matter

464

00:23:31,629 --> 00:23:28,700

what suited you later I think that I

465

00:23:35,139 --> 00:23:31,639

wouldn't say it's a garage but I can see

466

00:23:39,249 --> 00:23:35,149

it's a it's a storage area like a

467

00:23:41,710 --> 00:23:39,259

warehouse I thought the rhodium and

468

00:23:45,639 --> 00:23:41,720

lettera we find ourselves on the u.s.

469

00:23:49,570 --> 00:23:45,649

segment oh no it's a node 1 node adium

470

00:23:54,700 --> 00:23:49,580

torah know what's now known probably no

471

00:23:57,009 --> 00:23:54,710

one is mainly for food intake ah Polly

472

00:24:01,210 --> 00:23:57,019

who stole your left we'll see no three

473

00:24:04,119 --> 00:24:01,220

uh avenues new chest you do you see at

474

00:24:06,369 --> 00:24:04,129

the bottom I mean the nature you want

475

00:24:09,430 --> 00:24:06,379

will have the team and modules bro a

476

00:24:11,799 --> 00:24:09,440

variety of see the airlock that since

477

00:24:15,129 --> 00:24:11,809

lady and as you move forward to tomorrow

478

00:24:17,529 --> 00:24:15,139

we find ourselves in a lab one hectare

479

00:24:19,419 --> 00:24:17,539

my your nerdiness large nation that's

480

00:24:21,700 --> 00:24:19,429

probably the most important modules

481

00:24:23,710 --> 00:24:21,710

comes in monday last segment kamusta

482

00:24:26,330 --> 00:24:23,720

dairy provisioning

483

00:24:28,700 --> 00:24:26,340

why do you agree and I say this because

484

00:24:31,399 --> 00:24:28,710

even going to have emergency simulation

485

00:24:34,430 --> 00:24:31,409

solutions night I know for sure at the

486

00:24:37,129 --> 00:24:34,440

model year this is the module where

487

00:24:40,909 --> 00:24:37,139

electricity is powered down at the very

488

00:24:44,509 --> 00:24:40,919

last stage would that's my pity holdem

489

00:24:48,139 --> 00:24:44,519

know later on we move to know too good

490

00:24:52,159 --> 00:24:48,149

afternoon after the note1 boom this is

491

00:24:53,720 --> 00:24:52,169

also home have for croup waters there do

492

00:24:57,049 --> 00:24:53,730

you see what ya budu Tommy and most

493

00:25:00,560 --> 00:24:57,059

likely I'll be one of those who have

494

00:25:03,289 --> 00:25:00,570

their group waters there dawn I do I

495

00:25:07,159 --> 00:25:03,299

hope this home is a very cozy and

496

00:25:09,739 --> 00:25:07,169

convened one no that's a cut pro and

497

00:25:12,080 --> 00:25:09,749

then pass notes you still left you'll

498

00:25:16,399 --> 00:25:12,090

see the Japanese module to the right

499

00:25:19,399 --> 00:25:16,409

there rpn mode puzzle attack Petrovna

500

00:25:22,970 --> 00:25:19,409

more so I've been your guide to the ISIS

501
00:25:25,279 --> 00:25:22,980
just now yep I can you boo I haven't

502
00:25:28,099 --> 00:25:25,289
been there yet so this is only theory in

503
00:25:32,840 --> 00:25:28,109
theory was that I sliced I get back but

504
00:25:35,149 --> 00:25:32,850
not be more specific there are many

505
00:25:38,119 --> 00:25:35,159
modules that are devoted to science

506
00:25:40,310 --> 00:25:38,129
research which is the main task for a

507
00:25:42,889 --> 00:25:40,320
crew on the space station these days and

508
00:25:45,950 --> 00:25:42,899
you explain to us how what some of those

509
00:25:48,889 --> 00:25:45,960
modules are how do you explain to people

510
00:25:52,159 --> 00:25:48,899
the potential for learning new things

511
00:25:54,619 --> 00:25:52,169
that the space station offers and and

512
00:25:59,409 --> 00:25:54,629
the value that that knowledge may have

513
00:26:06,859 --> 00:26:03,590

Novus no naam lena yesterday a business

514

00:26:10,489 --> 00:26:06,869

I for one will try to say the phone when

515

00:26:14,950 --> 00:26:10,499

asked questions on science I'm trying to

516

00:26:19,430 --> 00:26:14,960

be as simple as possible but almost

517

00:26:22,039 --> 00:26:19,440

principe te mini a cosmin after cuz

518

00:26:24,139 --> 00:26:22,049

as a cosmonaut report I don't go into

519

00:26:26,180 --> 00:26:24,149

Luzon when your mind at work she put in

520

00:26:27,769 --> 00:26:26,190

separate ever got an experiment I need

521

00:26:29,720 --> 00:26:27,779

to understand the general principle of

522

00:26:33,049 --> 00:26:29,730

functioning people and they're able to

523

00:26:35,899 --> 00:26:33,059

settle fuken and that you everything

524

00:26:36,649 --> 00:26:35,909

folder to carry out certain tasks myself

525

00:26:39,680 --> 00:26:36,659

over

526
00:26:41,539 --> 00:26:39,690
manually the rest about experiments I'm

527
00:26:44,960 --> 00:26:41,549
trying to be as short and sweet and

528
00:26:46,879 --> 00:26:44,970
concise and brief as possible she turns

529
00:26:48,680 --> 00:26:46,889
to see experimental Couture ypres

530
00:26:52,430 --> 00:26:48,690
audience I consider all the experiments

531
00:26:54,619 --> 00:26:52,440
being carried out on the ISIS problem as

532
00:26:58,759 --> 00:26:54,629
experiments that look forward into the

533
00:27:01,849 --> 00:26:58,769
future was none she experimented test or

534
00:27:03,680 --> 00:27:01,859
those me any probably etcetera and I'd

535
00:27:08,060 --> 00:27:03,690
say with all of these experiments are

536
00:27:10,549 --> 00:27:08,070
for the benefit of humankind help

537
00:27:14,839 --> 00:27:10,559
research physicist key experimental

538
00:27:17,960 --> 00:27:14,849

Kapoor Ashima support experiments in the

539

00:27:20,029 --> 00:27:17,970

field of physics that will contribute to

540

00:27:23,239 --> 00:27:20,039

the development of science on earth

541

00:27:25,580 --> 00:27:23,249

workers but without these experiments in

542

00:27:28,999 --> 00:27:25,590

space he won't be able to do certain

543

00:27:31,580 --> 00:27:29,009

experiments on the ground the booster me

544

00:27:33,859 --> 00:27:31,590

is the cool experiment at say example

545

00:27:37,489 --> 00:27:33,869

crystal crystal is that's it I work

546

00:27:40,279 --> 00:27:37,499

whether crystal sku I experimental food

547

00:27:42,139 --> 00:27:40,289

is couturier pakka this is something

548

00:27:44,799 --> 00:27:42,149

that can be done only in this space

549

00:27:48,499 --> 00:27:44,809

environment useful not on the ground

550

00:27:51,109 --> 00:27:48,509

knock three experimental pacino prabhu

551
00:27:54,560 --> 00:27:51,119
yet so some of the experiments are done

552
00:27:57,589 --> 00:27:54,570
in space I mean cursor in their gear

553
00:28:01,219 --> 00:27:57,599
much less energy is used in space

554
00:28:04,249 --> 00:28:01,229
because of micro zero-g gravity by

555
00:28:06,560 --> 00:28:04,259
tomorrow mistreating what they do so in

556
00:28:09,469 --> 00:28:06,570
theater and over to his experiments as a

557
00:28:12,430 --> 00:28:09,479
very significant and it won't possible

558
00:28:15,529 --> 00:28:12,440
for sands development and for the future

559
00:28:20,089 --> 00:28:15,539
yeah that's to Yale Hsu then we're glad

560
00:28:22,609 --> 00:28:20,099
to be part of this project you mentioned

561
00:28:25,430 --> 00:28:22,619
one of the main areas of the science

562
00:28:28,219 --> 00:28:25,440
research is the the health of the

563
00:28:30,789 --> 00:28:28,229

cosmonauts to find out how living in

564

00:28:33,200 --> 00:28:30,799

that environment affects the human body

565

00:28:35,599 --> 00:28:33,210

could you give me an example or two

566

00:28:37,310 --> 00:28:35,609

examples of different things that you're

567

00:28:43,620 --> 00:28:37,320

going to be doing during your mission

568

00:28:52,350 --> 00:28:48,270

ah no NOS colca yes well as far as I

569

00:28:56,370 --> 00:28:52,360

know watching Minogue expiry right quite

570

00:29:00,690 --> 00:28:56,380

a few experiments nah but I carried out

571

00:29:04,110 --> 00:29:00,700

and directed as aiding people with a

572

00:29:06,750 --> 00:29:04,120

limited physical ability to do little

573

00:29:09,870 --> 00:29:06,760

normal so they can be reintegrated into

574

00:29:11,400 --> 00:29:09,880

a regular normal life doge of him and

575

00:29:14,700 --> 00:29:11,410

their people one year before your

576

00:29:18,300 --> 00:29:14,710

long-term existence under the conditions

577

00:29:21,360 --> 00:29:18,310

of zero-g establish feel it he lives its

578

00:29:23,850 --> 00:29:21,370

trace even on a healthy person such as a

579

00:29:26,850 --> 00:29:23,860

cosmonaut G buy at the mall which and

580

00:29:30,030 --> 00:29:26,860

was not across so I just really fighter

581

00:29:33,060 --> 00:29:30,040

on you muse do to find that launch are

582

00:29:35,630 --> 00:29:33,070

you coming fine path between being a

583

00:29:39,210 --> 00:29:35,640

really healthy persons the same time

584

00:29:42,270 --> 00:29:39,220

someone has been adapted to the zero-g

585

00:29:44,520 --> 00:29:42,280

environment in shock rasa Ypres who

586

00:29:46,650 --> 00:29:44,530

attacked a kogda and one of the

587

00:29:50,330 --> 00:29:46,660

important steps on this path is when a

588

00:29:55,470 --> 00:29:50,340

cosmonaut gets back to f-bomb store

589

00:29:58,550 --> 00:29:55,480

across the importance of the step is a

590

00:30:02,150 --> 00:29:58,560

solution in the activities that Adama

591

00:30:04,760 --> 00:30:02,160

started one month prior to landing a

592

00:30:08,310 --> 00:30:04,770

cosmonaut starts training really hard

593

00:30:10,740 --> 00:30:08,320

Marshall what your name muriva Russian

594

00:30:15,090 --> 00:30:10,750

scientists have developed to the voice

595

00:30:18,630 --> 00:30:15,100

of certain devices on the station that

596

00:30:20,220 --> 00:30:18,640

aid in this summer someone's not the

597

00:30:22,730 --> 00:30:20,230

kindness in the physics cube I'd say the

598

00:30:26,690 --> 00:30:22,740

basic part is the physical exercises

599

00:30:30,780 --> 00:30:26,700

besides there are certain mechanisms and

600

00:30:34,110 --> 00:30:30,790

promoted or devices mental health is de

601
00:30:37,440 --> 00:30:34,120
cotorra pomegranate luhya so this is

602
00:30:40,200 --> 00:30:37,450
something that has a huge potential to

603
00:30:43,800 --> 00:30:40,210
do in aiding Grand Prix PDO people with

604
00:30:45,750 --> 00:30:43,810
limited physical abilities three ponga

605
00:30:49,260 --> 00:30:45,760
to kita this is a very important stage

606
00:30:53,780 --> 00:30:49,270
of helping a cosmonaut getting prepared

607
00:30:56,649 --> 00:30:53,790
to return to the ground he tugs watching

608
00:30:59,739 --> 00:30:56,659
live here Nadia no he was not

609
00:31:02,919 --> 00:30:59,749
but amo esta pues Leah Marilla I'm

610
00:31:05,609 --> 00:31:02,929
thinking that what is also important is

611
00:31:08,259 --> 00:31:05,619
that women get back to the ground their

612
00:31:11,139 --> 00:31:08,269
circulation the world of circulation

613
00:31:15,190 --> 00:31:11,149

blood circulation human body changes to

614

00:31:17,139 --> 00:31:15,200

just be okay mostly money got up in

615

00:31:18,759 --> 00:31:17,149

space your blood is concentrated in the

616

00:31:21,879 --> 00:31:18,769

upper body are you doing all the

617

00:31:26,289 --> 00:31:21,889

difference but these experiments on how

618

00:31:28,570 --> 00:31:26,299

address behave how blog behaves how they

619

00:31:31,810 --> 00:31:28,580

miss tubular apparatus behaves how the

620

00:31:33,940 --> 00:31:31,820

brain the hips during of dunya the

621

00:31:36,430 --> 00:31:33,950

expedition's went on board the station

622

00:31:41,080 --> 00:31:36,440

and after landing is also very important

623

00:31:43,119 --> 00:31:41,090

part you mentioned several different

624

00:31:46,509 --> 00:31:43,129

experiments there and earlier you talked

625

00:31:48,789 --> 00:31:46,519

about physics experiments and plasma

626

00:31:50,979 --> 00:31:48,799

crystals and and whatnot in many of

627

00:31:55,779 --> 00:31:50,989

these cases you are going to be working

628

00:31:57,549 --> 00:31:55,789

with researchers who have who came up

629

00:31:59,440 --> 00:31:57,559

with these ideas with these experiments

630

00:32:01,779 --> 00:31:59,450

people who are from all over the world

631

00:32:08,649 --> 00:32:01,789

that must be an interesting aspect of

632

00:32:12,700 --> 00:32:08,659

the mission for you as well canoes

633

00:32:16,659 --> 00:32:12,710

nah-ah certain ly going to work in close

634

00:32:20,200 --> 00:32:16,669

cooperation of the developers yes with

635

00:32:23,710 --> 00:32:20,210

me kotori whether those people who stand

636

00:32:25,899 --> 00:32:23,720

behind his experiments develop them but

637

00:32:28,389 --> 00:32:25,909

a most of the booms lucci lemonade

638

00:32:31,419 --> 00:32:28,399

legion of my voice yes sir in any case

639

00:32:33,820 --> 00:32:31,429

party Mr Palmer's I and my crew members

640

00:32:36,159 --> 00:32:33,830

will need the help on the part of the

641

00:32:39,639 --> 00:32:36,169

specialist okay yeah I'm a military

642

00:32:44,139 --> 00:32:39,649

passionate joeric you know with you and

643

00:32:46,629 --> 00:32:44,149

I don't have any direct relationship

644

00:32:49,180 --> 00:32:46,639

picture science what are you Python so

645

00:32:53,229 --> 00:32:49,190

boo much I'd say that's two parts I'd

646

00:32:57,330 --> 00:32:53,239

guarantee that I'll need help nope

647

00:33:02,310 --> 00:32:57,340

acronym area to Tony Academy minimum

648

00:33:04,310 --> 00:33:02,320

kotori yes very little amount of

649

00:33:07,070 --> 00:33:04,320

knowledge and

650

00:33:08,389 --> 00:33:07,080

of practice that I need in order to

651
00:33:12,799 --> 00:33:08,399
conduct these experiments that's

652
00:33:14,810 --> 00:33:12,809
something I have you mentioned a few

653
00:33:17,749 --> 00:33:14,820
minutes ago that a large part of your

654
00:33:20,810 --> 00:33:17,759
job is taking care of the station give

655
00:33:22,970 --> 00:33:20,820
us a sense of what a regular day on the

656
00:33:24,649 --> 00:33:22,980
space station is like for a flight

657
00:33:26,539 --> 00:33:24,659
engineer what sort of things will you be

658
00:33:34,220 --> 00:33:26,549
doing that are not directly related to

659
00:33:37,100 --> 00:33:34,230
science experiments no I wish Nadine's

660
00:33:40,009 --> 00:33:37,110
Principia I usual day on board the

661
00:33:45,340 --> 00:33:40,019
station a normal day again that's in

662
00:33:48,590 --> 00:33:45,350
theory for now no shoe store casaya

663
00:33:52,090 --> 00:33:48,600

which no idea is Justin but this is

664

00:33:55,850 --> 00:33:52,100

something that starts after we wake up

665

00:34:01,159 --> 00:33:55,860

toilet hygiene procedures breakfast off

666

00:34:04,430 --> 00:34:01,169

work ah bottom I was daily planning

667

00:34:10,750 --> 00:34:04,440

conference so-called DBC would mostly

668

00:34:14,089 --> 00:34:10,760

get away after that our workday starts

669

00:34:17,659 --> 00:34:14,099

Roberts against the state I cook he also

670

00:34:20,409 --> 00:34:17,669

going as I said before a workday urania

671

00:34:25,250 --> 00:34:20,419

consists of butrum sister union of

672

00:34:27,379 --> 00:34:25,260

stances maintaining station una reunión

673

00:34:29,119 --> 00:34:27,389

experience into you operational

674

00:34:32,960 --> 00:34:29,129

condition boy future exacting

675

00:34:35,030 --> 00:34:32,970

experiments no piranha myriad watching

676
00:34:37,879 --> 00:34:35,040
no go green and a large part of the day

677
00:34:41,960 --> 00:34:37,889
is devoted to perform and physical

678
00:34:43,669 --> 00:34:41,970
exercises would know dogs are nothing

679
00:34:48,609 --> 00:34:43,679
usable IT pros also shouldn't forget

680
00:34:54,500 --> 00:34:48,619
about arrest we shall not have meals

681
00:34:57,950 --> 00:34:54,510
lunchy opinio talking to family junk

682
00:34:59,720 --> 00:34:57,960
into specialist to me poor these

683
00:35:02,059 --> 00:34:59,730
experiments I've talked about the

684
00:35:04,550 --> 00:35:02,069
filters we were all any blockage so this

685
00:35:08,420 --> 00:35:04,560
is a somewhat of our psychological

686
00:35:11,480 --> 00:35:08,430
accession ah no you attack with

687
00:35:16,990 --> 00:35:11,490
partially cockaboose that said sir usual

688
00:35:20,110 --> 00:35:17,000

rockin day he mostly Munna

689

00:35:22,960 --> 00:35:20,120

and after dinner a free time with more

690

00:35:26,290 --> 00:35:22,970

booze but can always watch news movies

691

00:35:30,550 --> 00:35:26,300

Bob shot sir jee enemy talk to each

692

00:35:34,870 --> 00:35:30,560

other it's not too different from life

693

00:35:41,350 --> 00:35:34,880

on earth except for the the isolation oh

694

00:35:43,090 --> 00:35:41,360

yes no yes no no Crockett and navy or

695

00:35:45,250 --> 00:35:43,100

nah look i'll find a problem for

696

00:35:47,140 --> 00:35:45,260

somebody hit these idea as you mentioned

697

00:35:51,370 --> 00:35:47,150

it so yeah one thing that you are

698

00:35:54,370 --> 00:35:51,380

isolated baccarat any media that's cool

699

00:35:56,590 --> 00:35:54,380

too however as far as I imagine that why

700

00:35:59,640 --> 00:35:56,600

you know it's a lie okay for somebody

701
00:36:01,750 --> 00:35:59,650
from the military it's not a big deal

702
00:36:07,690 --> 00:36:01,760
nikka group I don't see any problem with

703
00:36:10,180 --> 00:36:07,700
that at all urusei show toast o pock rai

704
00:36:12,250 --> 00:36:10,190
ameerin addition to that the new sheiks

705
00:36:14,380 --> 00:36:12,260
people talk about our crew and the

706
00:36:17,650 --> 00:36:14,390
previous a congruent and a subsequent

707
00:36:20,680 --> 00:36:17,660
increment the folks are just great poker

708
00:36:23,320 --> 00:36:20,690
in the media yes eat ass to mouth blue

709
00:36:25,900 --> 00:36:23,330
and I'm open I'm really positive we'll

710
00:36:30,700 --> 00:36:25,910
have excellent understanding and

711
00:36:33,280 --> 00:36:30,710
cooperation I was no no subsea Moses

712
00:36:35,260 --> 00:36:33,290
Nicole my dad a door and in fact we've

713
00:36:36,910 --> 00:36:35,270

been acquainted with each other even we

714

00:36:40,180 --> 00:36:36,920

had been acquainted even before we

715

00:36:42,460 --> 00:36:40,190

became part of these specific crews see

716

00:36:44,290 --> 00:36:42,470

you little burger right here silly

717

00:36:46,960 --> 00:36:44,300

enough we keep our sales I'd say that

718

00:36:52,690 --> 00:36:46,970

I've known each of my crewmates for five

719

00:36:55,840 --> 00:36:52,700

years at least now almost in the very

720

00:36:57,460 --> 00:36:55,850

middle of the your trip to space will

721

00:36:59,410 --> 00:36:57,470

come the Christmas and New Year's

722

00:37:02,560 --> 00:36:59,420

holidays what are your thoughts about

723

00:37:09,640 --> 00:37:02,570

spending those occasions on board the

724

00:37:14,830 --> 00:37:09,650

space station house in a very cheerful

725

00:37:18,690 --> 00:37:14,840

way was no no video standard metal it

726

00:37:23,200 --> 00:37:18,700

again I think it's going to be rather

727

00:37:27,630 --> 00:37:23,210

nominal posmotrim instance watch some

728

00:37:29,660 --> 00:37:27,640

Christmas movie budet scary or

729

00:37:33,500 --> 00:37:29,670

registering ski

730

00:37:35,839 --> 00:37:33,510

ah I think you've ever likely to have a

731

00:37:39,440 --> 00:37:35,849

Christmas dinner medic Christmas for

732

00:37:45,020 --> 00:37:39,450

lunch she's got ears your presence I

733

00:37:50,480 --> 00:37:45,030

presume what no yeah do me and I think

734

00:37:52,130 --> 00:37:50,490

we'll have to do a bit of work too no no

735

00:37:53,150 --> 00:37:52,140

that's quickly up on your mind I think

736

00:37:54,890 --> 00:37:53,160

there shouldn't be anything

737

00:38:00,680 --> 00:37:54,900

extraordinary just the way it is on

738

00:38:03,230 --> 00:38:00,690

earth the plan for your increment or any

739

00:38:06,109 --> 00:38:03,240

other mission on board the space station

740

00:38:08,359 --> 00:38:06,119

has to have some flexibility in it to

741

00:38:10,430 --> 00:38:08,369

deal with changing circumstances and

742

00:38:13,190 --> 00:38:10,440

that could even include the possibility

743

00:38:15,700 --> 00:38:13,200

that you are some of your crewmates

744

00:38:19,220 --> 00:38:15,710

might have to go outside to do some work

745

00:38:21,470 --> 00:38:19,230

as we talk today what is the plan for

746

00:38:23,480 --> 00:38:21,480

spacewalks for your increment do you

747

00:38:30,049 --> 00:38:23,490

know who would go outside or or what

748

00:38:32,750 --> 00:38:30,059

jobs are on the agenda for them no

749

00:38:34,970 --> 00:38:32,760

potential poaching I cannot say for sure

750

00:38:37,789 --> 00:38:34,980

right now why they're there will be a

751

00:38:42,410 --> 00:38:37,799

Russian extra vehicle activity russian

752

00:38:45,770 --> 00:38:42,420

spacewalk during our implement risotto

753

00:38:50,510 --> 00:38:45,780

there was a plan to have an AV a that's

754

00:38:53,809 --> 00:38:50,520

a spacewalk during which roman romanenko

755

00:38:56,329 --> 00:38:53,819

and other supposed to participate food

756

00:38:57,980 --> 00:38:56,339

but right now I cannot say for sure

757

00:39:00,829 --> 00:38:57,990

whether we are going to have a space

758

00:39:04,549 --> 00:39:00,839

walkable not we'll probably find this

759

00:39:07,720 --> 00:39:04,559

out after gennady padalka and yuri

760

00:39:11,120 --> 00:39:07,730

malenchenko have completed this before

761

00:39:14,750 --> 00:39:11,130

school care it depends on how many tasks

762

00:39:17,809 --> 00:39:14,760

they will have accomplished don't listen

763

00:39:21,200 --> 00:39:17,819

if there is something left for us then

764

00:39:24,230 --> 00:39:21,210

Rome and I will probably finish it this

765

00:39:26,240 --> 00:39:24,240

is Joanna groans oh there is a big wish

766

00:39:29,170 --> 00:39:26,250

but are now hard will turn out in the

767

00:39:32,390 --> 00:39:29,180

end yeah an idea stone how will have one

768

00:39:35,440 --> 00:39:32,400

it did look like you you were very eager

769

00:39:37,640 --> 00:39:35,450

for that opportunity to go outside yes

770

00:39:39,789 --> 00:39:37,650

fortune seemed very much very much

771

00:39:42,440 --> 00:39:39,799

indeed

772

00:39:44,779 --> 00:39:42,450

the International Space Station is

773

00:39:49,940 --> 00:39:44,789

getting supplies delivered to it these

774

00:39:52,009 --> 00:39:49,950

days by a fleet of uncrewed cargo ships

775

00:39:54,079 --> 00:39:52,019

there are about a half a dozen of them

776

00:39:55,880 --> 00:39:54,089

that should be arriving or departing

777

00:39:58,279 --> 00:39:55,890

during the time that you're going to be

778

00:40:00,400 --> 00:39:58,289

up there could you describe for me what

779

00:40:03,109 --> 00:40:00,410

these different cargo ships are

780

00:40:05,420 --> 00:40:03,119

including some of the new commercial

781

00:40:10,789 --> 00:40:05,430

cargo ships that are coming from the

782

00:40:14,120 --> 00:40:10,799

United States no that's not known as

783

00:40:16,970 --> 00:40:14,130

always I'd say for the major parts the

784

00:40:22,190 --> 00:40:16,980

cargo vehicles it's the russian progress

785

00:40:25,370 --> 00:40:22,200

vehicle ah but amata menu which upon

786

00:40:29,450 --> 00:40:25,380

arrival sir paul a rhythm what I really

787

00:40:32,509 --> 00:40:29,460

liked judging by the size as the dragon

788

00:40:35,079 --> 00:40:32,519

vehicle okay gonna go idea and there to

789

00:40:42,410 --> 00:40:35,089

tell the truth I was really impressed

790

00:40:46,370 --> 00:40:42,420

would no horizon it suppose I don't see

791

00:40:50,829 --> 00:40:46,380

a big difference between Russian cargo

792

00:40:55,400 --> 00:40:50,839

vehicles and certain commercial craft ah

793

00:40:59,690 --> 00:40:55,410

Martha mosca poor grows upon probably

794

00:41:02,599 --> 00:40:59,700

there is a difference in terms over I'm

795

00:41:08,029 --> 00:41:02,609

it's kickin up sighs boy come over and

796

00:41:11,630 --> 00:41:08,039

how much payload they can take and bring

797

00:41:15,559 --> 00:41:11,640

to the station via the motorized Nets a

798

00:41:16,789 --> 00:41:15,569

polka spoon I think the only difference

799

00:41:19,009 --> 00:41:16,799

is basically where they were

800

00:41:23,079 --> 00:41:19,019

manufactured what the country of origin

801
00:41:29,450 --> 00:41:27,230
with spaceships now coming from as you

802
00:41:31,999 --> 00:41:29,460
say from a number of different countries

803
00:41:34,970 --> 00:41:32,009
as well as starting now to come from

804
00:41:37,249 --> 00:41:34,980
commercial companies we see private

805
00:41:39,319 --> 00:41:37,259
industry and and sovereign nations all

806
00:41:41,930 --> 00:41:39,329
working together in space rather than

807
00:41:43,490 --> 00:41:41,940
competing against one another is that

808
00:41:49,289 --> 00:41:43,500
the way that you think things will

809
00:41:58,109 --> 00:41:53,319
yawn idea is to have 12 oh but almost of

810
00:42:02,319 --> 00:41:58,119
Prince appear yes it has to show nowhere

811
00:42:05,109 --> 00:42:02,329
which I think that everything you it's a

812
00:42:08,319 --> 00:42:05,119
can use not good and useful for the

813
00:42:11,229 --> 00:42:08,329

space industry story of course it's it's

814

00:42:15,099 --> 00:42:11,239

great that will have the circle of cargo

815

00:42:17,469 --> 00:42:15,109

vehicles that been flying for another 20

816

00:42:19,960 --> 00:42:17,479

for dozens of years but we need to

817

00:42:23,469 --> 00:42:19,970

improve the niche of modernized update

818

00:42:26,019 --> 00:42:23,479

cuz something new is not always bad the

819

00:42:29,469 --> 00:42:26,029

ID in this alone of principle yes of

820

00:42:33,069 --> 00:42:29,479

course one of the basic principles in

821

00:42:35,259 --> 00:42:33,079

aviation and space industry is that

822

00:42:37,120 --> 00:42:35,269

children but something is fine don't

823

00:42:40,210 --> 00:42:37,130

touch it it's good enough to fly so

824

00:42:44,549 --> 00:42:40,220

let's continue fly teachers know cause

825

00:42:47,739 --> 00:42:44,559

my guess is that right now science has

826

00:42:52,569 --> 00:42:47,749

achieved lots of new things I should

827

00:42:55,269 --> 00:42:52,579

toast Oh kakuta stuff and if sale have a

828

00:42:58,450 --> 00:42:55,279

new unit and the way to the overall

829

00:43:01,630 --> 00:42:58,460

weight of the vehicle whooshes produces

830

00:43:04,870 --> 00:43:01,640

and their square food thus reduces true

831

00:43:07,779 --> 00:43:04,880

that means that the space that can be

832

00:43:09,450 --> 00:43:07,789

allocated for payload increases what you

833

00:43:12,519 --> 00:43:09,460

don't know Columbia and if we talk about

834

00:43:16,989 --> 00:43:12,529

bras because mama man piloted vehicles

835

00:43:19,690 --> 00:43:16,999

this means the square footage for the

836

00:43:21,609 --> 00:43:19,700

room for humans increases to fight i

837

00:43:23,979 --> 00:43:21,619

have no rules let's go two more

838

00:43:25,749 --> 00:43:23,989

comfortable amused or communities give

839

00:43:28,499 --> 00:43:25,759

me a quickie metal so if you ask me I

840

00:43:31,930 --> 00:43:28,509

think that cooperation between

841

00:43:34,109 --> 00:43:31,940

commercial companies and government

842

00:43:38,950 --> 00:43:34,119

companies is a very positive thing I

843

00:43:41,559 --> 00:43:38,960

think so drunk as you look ahead into

844

00:43:44,529 --> 00:43:41,569

the future with all of those involved

845

00:43:46,509 --> 00:43:44,539

how is it that we see that the works is

846

00:43:48,459 --> 00:43:46,519

being done now on the International

847

00:43:51,160 --> 00:43:48,469

Space Station is going to help prepare

848

00:43:52,660 --> 00:43:51,170

all those different entities for the

849

00:44:00,340 --> 00:43:52,670

exploration that is going to take place

850

00:44:06,920 --> 00:44:04,670

the quraían ago area yeah why did you

851
00:44:10,190 --> 00:44:06,930
get Ricky speaking I'm not a politician

852
00:44:14,900 --> 00:44:10,200
I cannot believe the tax anything don't

853
00:44:17,470 --> 00:44:14,910
store but the advantage I see is that

854
00:44:21,410 --> 00:44:17,480
cooperation between different peoples is

855
00:44:24,320 --> 00:44:21,420
going to strengthen and increase the

856
00:44:26,900 --> 00:44:24,330
shutter host or budget bullship Genia

857
00:44:33,250 --> 00:44:26,910
rasta they should choose niches

858
00:44:35,420 --> 00:44:33,260
corporation because of closer ties and