



1
00:00:05,110 --> 00:00:02,869
the six-person crew of endeavour is

2
00:00:06,550 --> 00:00:05,120
delivering the node three tranquility

3
00:00:09,990 --> 00:00:06,560
and the cupola modules to the

4
00:00:11,910 --> 00:00:10,000
international space station on sts-130

5
00:00:15,350 --> 00:00:11,920
in essence closing out construction of

6
00:00:19,910 --> 00:00:17,109
first time mission commander george

7
00:00:21,990 --> 00:00:19,920
zamka is making his second space flight

8
00:00:24,630 --> 00:00:22,000
the marine colonel was born in jersey

9
00:00:27,670 --> 00:00:24,640
city but has also lived in new york city

10
00:00:29,750 --> 00:00:27,680
irvington new york medellin colombia and

11
00:00:31,910 --> 00:00:29,760
rochester hills michigan

12
00:00:34,150 --> 00:00:31,920
zamka considers all of those places to

13
00:00:36,229 --> 00:00:34,160

be his hometowns and says it was a

14

00:00:38,430 --> 00:00:36,239

special feeling seeing some of them from

15

00:00:40,950 --> 00:00:38,440

orbit during his most recent mission

16

00:00:42,869 --> 00:00:40,960

sts-120 in 2007.

17

00:00:44,389 --> 00:00:42,879

when you leave your hometown you always

18

00:00:45,670 --> 00:00:44,399

i think have that sense that you're

19

00:00:47,270 --> 00:00:45,680

you're going away from it and you're

20

00:00:49,670 --> 00:00:47,280

wondering when's the next time you'll

21

00:00:51,830 --> 00:00:49,680

you'll be back

22

00:00:54,229 --> 00:00:51,840

and it was neat when i did see those

23

00:00:56,869 --> 00:00:54,239

places zamka holds a bachelor's degree

24

00:00:58,950 --> 00:00:56,879

in math from the u.s naval academy and a

25

00:01:01,349 --> 00:00:58,960

masters in engineering management from

26

00:01:04,149 --> 00:01:01,359

florida institute of technology

27

00:01:06,550 --> 00:01:04,159

his service overseas as a fighter pilot

28

00:01:11,030 --> 00:01:06,560

includes tours of duty in korea

29

00:01:13,030 --> 00:01:11,040

singapore southwest asia kuwait and iraq

30

00:01:16,149 --> 00:01:13,040

zamka who was selected as an astronaut

31

00:01:18,149 --> 00:01:16,159

in june 1998 is proud to be heading up

32

00:01:19,990 --> 00:01:18,159

the crew that is putting on the final

33

00:01:23,270 --> 00:01:20,000

touches to the international space

34

00:01:24,870 --> 00:01:23,280

station now when we attach node 3

35

00:01:27,990 --> 00:01:24,880

the appearance of the station is going

36

00:01:30,230 --> 00:01:28,000

to change forever so uh the the space

37

00:01:32,789 --> 00:01:30,240

station will become what we have wanted

38

00:01:33,830 --> 00:01:32,799

it to be a workplace for science and

39

00:01:35,910 --> 00:01:33,840

research

40

00:01:37,510 --> 00:01:35,920

with all the environmental systems that

41

00:01:39,510 --> 00:01:37,520

we need to sustain

42

00:01:42,789 --> 00:01:39,520

humans on board

43

00:01:46,870 --> 00:01:45,109

terry verts is the cruise pilot the

44

00:01:49,350 --> 00:01:46,880

maryland native who grew up in the city

45

00:01:51,749 --> 00:01:49,360

of columbia is making his first space

46

00:01:53,830 --> 00:01:51,759

flight something he's had a desire to do

47

00:01:56,149 --> 00:01:53,840

since learning about the apollo program

48

00:01:58,069 --> 00:01:56,159

in kindergarten my parents worked at the

49

00:01:59,910 --> 00:01:58,079

goddard space flight center so that

50

00:02:02,149 --> 00:01:59,920

wasn't directly involved in apollo or

51

00:02:04,550 --> 00:02:02,159

the human space flight but

52

00:02:06,709 --> 00:02:04,560

there were rockets and talk of space and

53

00:02:08,869 --> 00:02:06,719

so at a really young age

54

00:02:11,110 --> 00:02:08,879

i was interested in space and being an

55

00:02:13,110 --> 00:02:11,120

astronaut the u.s air force colonel

56

00:02:15,190 --> 00:02:13,120

holds an undergraduate degree in math

57

00:02:17,670 --> 00:02:15,200

with a minor in french from the u.s air

58

00:02:19,510 --> 00:02:17,680

force academy and an advanced degree in

59

00:02:21,990 --> 00:02:19,520

aeronautics from embry rental

60

00:02:25,110 --> 00:02:22,000

aeronautical university he has flown

61

00:02:27,270 --> 00:02:25,120

fighter jets in the us france korea and

62

00:02:30,070 --> 00:02:27,280

germany since being selected as an

63

00:02:32,390 --> 00:02:30,080

astronaut in july 2000 verts has been a

64

00:02:34,390 --> 00:02:32,400

capsule communicator or capcom on

65

00:02:36,229 --> 00:02:34,400

several missions which has given him a

66

00:02:38,630 --> 00:02:36,239

true appreciation for the work that

67

00:02:40,070 --> 00:02:38,640

happens behind the scenes flying space

68

00:02:42,869 --> 00:02:40,080

shuttles is

69

00:02:44,470 --> 00:02:42,879

a complicated thing it's it requires a

70

00:02:46,070 --> 00:02:44,480

lot of very smart and talented people

71

00:02:47,589 --> 00:02:46,080

from the people who do the manufacturing

72

00:02:48,710 --> 00:02:47,599

to the engineers managers who make

73

00:02:50,790 --> 00:02:48,720

decisions

74

00:02:54,750 --> 00:02:50,800

and it's the people here that make it

75

00:03:00,470 --> 00:02:57,509

sts-130 is the second space flight for

76
00:03:02,710 --> 00:03:00,480
kay heyer a captain in the navy reserve

77
00:03:07,589 --> 00:03:02,720
the native of mobile alabama flew on the

78
00:03:09,110 --> 00:03:07,599
16-day sts-90 neurolab mission in 1998.

79
00:03:11,509 --> 00:03:09,120
one of the things she's looking forward

80
00:03:13,190 --> 00:03:11,519
to on this mission is getting up close

81
00:03:15,589 --> 00:03:13,200
and personal with the international

82
00:03:17,430 --> 00:03:15,599
space station to see it in

83
00:03:19,830 --> 00:03:17,440
real life if you will

84
00:03:21,830 --> 00:03:19,840
with our own eyes it's just going to be

85
00:03:23,830 --> 00:03:21,840
very exciting and we're going to

86
00:03:25,830 --> 00:03:23,840
certainly have a lot of cameras out and

87
00:03:27,589 --> 00:03:25,840
and getting pictures as we

88
00:03:29,910 --> 00:03:27,599

as we approach the international space

89

00:03:31,750 --> 00:03:29,920

station as well as when we undock from

90

00:03:33,350 --> 00:03:31,760

the international space station heyer

91

00:03:35,350 --> 00:03:33,360

earned a bachelor's in engineering

92

00:03:37,430 --> 00:03:35,360

resources management from the u.s naval

93

00:03:39,670 --> 00:03:37,440

academy and a master's in space

94

00:03:40,869 --> 00:03:39,680

technology from florida institute of

95

00:03:44,070 --> 00:03:40,879

technology

96

00:03:46,470 --> 00:03:44,080

in 1993 she became the first female in

97

00:03:48,869 --> 00:03:46,480

the military assigned to a combat air

98

00:03:50,149 --> 00:03:48,879

crew flying patrols in the atlantic and

99

00:03:52,070 --> 00:03:50,159

the caribbean

100

00:03:54,550 --> 00:03:52,080

she didn't initially consider the navy

101
00:03:56,149 --> 00:03:54,560
or becoming an astronaut because at one

102
00:03:58,229 --> 00:03:56,159
time there were no women in those

103
00:03:59,750 --> 00:03:58,239
careers however

104
00:04:01,429 --> 00:03:59,760
when those opportunities became

105
00:04:03,270 --> 00:04:01,439
available to me that's when i started

106
00:04:05,670 --> 00:04:03,280
realizing wow this is something that i

107
00:04:06,550 --> 00:04:05,680
could do and i could apply for

108
00:04:12,309 --> 00:04:06,560
and

109
00:04:16,349 --> 00:04:14,710
dr steve robinson is a veteran of three

110
00:04:22,110 --> 00:04:16,359
space shuttle missions

111
00:04:24,550 --> 00:04:22,120
sts-85 in 1997 sts-95 in 1998 and the

112
00:04:26,150 --> 00:04:24,560
sts-114 return to flight mission in

113
00:04:28,310 --> 00:04:26,160

2005.

114

00:04:30,070 --> 00:04:28,320

the northern california native was also

115

00:04:32,870 --> 00:04:30,080

a backup member of the international

116

00:04:34,710 --> 00:04:32,880

space station's expedition 4 crew

117

00:04:37,030 --> 00:04:34,720

robinson has plenty of space flight

118

00:04:39,189 --> 00:04:37,040

memories but one of his most defining

119

00:04:41,510 --> 00:04:39,199

experiences was seeing his first shuttle

120

00:04:43,990 --> 00:04:41,520

launch in person which was after he

121

00:04:45,990 --> 00:04:44,000

became an astronaut i'll never forget

122

00:04:47,830 --> 00:04:46,000

hearing and feeling and feeling the

123

00:04:49,510 --> 00:04:47,840

crack

124

00:04:50,629 --> 00:04:49,520

the sound is almost too big for the air

125

00:04:52,870 --> 00:04:50,639

to handle

126
00:04:55,110 --> 00:04:52,880
and uh and the light is almost too

127
00:04:57,270 --> 00:04:55,120
bright for your eyes to comprehend and

128
00:04:59,110 --> 00:04:57,280
you see this 20 story building size

129
00:05:01,189 --> 00:04:59,120
thing leap off the ground and go

130
00:05:02,150 --> 00:05:01,199
shooting off into the into the sky it's

131
00:05:04,390 --> 00:05:02,160
just

132
00:05:05,350 --> 00:05:04,400
something you i didn't really expect i

133
00:05:07,830 --> 00:05:05,360
guess

134
00:05:10,310 --> 00:05:07,840
robinson says aviation has always been a

135
00:05:11,909 --> 00:05:10,320
big part of his life he completed a

136
00:05:14,950 --> 00:05:11,919
double major in mechanical and

137
00:05:17,270 --> 00:05:14,960
aeronautical engineering at uc davis and

138
00:05:19,749 --> 00:05:17,280

a master's and a phd in mechanical

139

00:05:21,830 --> 00:05:19,759

engineering at stanford he was working

140

00:05:25,029 --> 00:05:21,840

as a nasa scientist when he was selected

141

00:05:26,790 --> 00:05:25,039

as an astronaut in december 1994.

142

00:05:29,590 --> 00:05:26,800

robinson who has also worked as a

143

00:05:31,830 --> 00:05:29,600

graphic artist a surveyor and a radio

144

00:05:34,390 --> 00:05:31,840

disc jockey says what he likes about

145

00:05:36,469 --> 00:05:34,400

this crew is its versatility you know

146

00:05:38,710 --> 00:05:36,479

this person has a skill that maybe i

147

00:05:40,390 --> 00:05:38,720

don't have and vice versa and so the

148

00:05:42,870 --> 00:05:40,400

complementary skills going together in

149

00:05:44,950 --> 00:05:42,880

this crew has come

150

00:05:46,710 --> 00:05:44,960

come together to bond us into a team

151

00:05:50,469 --> 00:05:46,720

that you know we feel like we're really

152

00:05:54,950 --> 00:05:52,870

nicholas patrick a doctor of philosophy

153

00:05:56,790 --> 00:05:54,960

and mechanical engineering is one of the

154

00:05:59,189 --> 00:05:56,800

space walkers on the crew

155

00:06:02,629 --> 00:05:59,199

this is patrick's second space flight he

156

00:06:04,870 --> 00:06:02,639

flew on sts-116 in 2006.

157

00:06:07,110 --> 00:06:04,880

patrick a citizen of both the u.s and

158

00:06:09,830 --> 00:06:07,120

the united kingdom was born in the

159

00:06:12,550 --> 00:06:09,840

yorkshire moors near the home of james

160

00:06:14,870 --> 00:06:12,560

cook the captain of the famed 18th

161

00:06:17,590 --> 00:06:14,880

century sailing vessel endeavour we

162

00:06:19,029 --> 00:06:17,600

would go walking in the yorkshire moors

163

00:06:21,430 --> 00:06:19,039

and go and see the monument that was

164

00:06:23,909 --> 00:06:21,440

erected to him and that's one of the one

165

00:06:25,670 --> 00:06:23,919

of my earliest memories actually of

166

00:06:28,070 --> 00:06:25,680

wanting to be an explorer

167

00:06:30,390 --> 00:06:28,080

he began with sailing an interest that

168

00:06:31,990 --> 00:06:30,400

was eventually replaced by a fascination

169

00:06:33,749 --> 00:06:32,000

with aviation

170

00:06:35,430 --> 00:06:33,759

patrick learned to fly as a member of

171

00:06:37,830 --> 00:06:35,440

the royal air force's cambridge

172

00:06:40,230 --> 00:06:37,840

university squadron he holds three

173

00:06:42,070 --> 00:06:40,240

degrees in addition to his phd a

174

00:06:44,150 --> 00:06:42,080

bachelor's and a master's in engineering

175

00:06:46,710 --> 00:06:44,160

from cambridge and a masters from

176

00:06:48,710 --> 00:06:46,720

massachusetts institute of technology

177

00:06:51,189 --> 00:06:48,720

patrick who designed jet engines and

178

00:06:54,309 --> 00:06:51,199

cockpits before coming to nasa in august

179

00:06:57,350 --> 00:06:54,319

1998 says that all of his years of study

180

00:06:59,430 --> 00:06:57,360

were worth it i obviously was at school

181

00:07:01,830 --> 00:06:59,440

and into my 30s getting a phd in

182

00:07:03,189 --> 00:07:01,840

mechanical engineering so education has

183

00:07:04,950 --> 00:07:03,199

played a very important role in my

184

00:07:06,790 --> 00:07:04,960

becoming an astronaut and my continuing

185

00:07:08,150 --> 00:07:06,800

to be an astronaut and i think it would

186

00:07:11,270 --> 00:07:08,160

have played an important role whatever i

187

00:07:15,589 --> 00:07:13,189

united states air force lieutenant

188

00:07:17,749 --> 00:07:15,599

colonel bob bankin the lead space walker

189

00:07:22,230 --> 00:07:17,759

on the crew is making his second space

190

00:07:24,390 --> 00:07:22,240

flight he flew on sts-123 in 2008

191

00:07:26,230 --> 00:07:24,400

banking grew up in saint anne missouri

192

00:07:28,469 --> 00:07:26,240

and says doing construction work there

193

00:07:29,749 --> 00:07:28,479

for several summers taught him the value

194

00:07:31,990 --> 00:07:29,759

of hard work

195

00:07:33,830 --> 00:07:32,000

but it also taught him something else

196

00:07:36,230 --> 00:07:33,840

i saw the benefit to an engineering

197

00:07:37,589 --> 00:07:36,240

education and how i could be the guy who

198

00:07:39,189 --> 00:07:37,599

was designing how things were going to

199

00:07:40,629 --> 00:07:39,199

be done versus the guy who just

200

00:07:42,469 --> 00:07:40,639

implemented him after somebody else

201
00:07:44,390 --> 00:07:42,479
worked out the details he applied the

202
00:07:46,869 --> 00:07:44,400
work ethic he learned to pursuing that

203
00:07:48,950 --> 00:07:46,879
education earning two bachelor's degrees

204
00:07:51,350 --> 00:07:48,960
one in mechanical engineering and one in

205
00:07:53,510 --> 00:07:51,360
physics from washington university and a

206
00:07:55,270 --> 00:07:53,520
master's and a ph.d from california

207
00:07:57,029 --> 00:07:55,280
institute of technology

208
00:07:59,270 --> 00:07:57,039
bank and joined the air force as a

209
00:08:01,270 --> 00:07:59,280
developmental engineer designing and

210
00:08:03,110 --> 00:08:01,280
testing new weapon systems

211
00:08:05,110 --> 00:08:03,120
he was working at the air force test

212
00:08:08,950 --> 00:08:05,120
pilot school when nasa selected him as

213
00:08:11,029 --> 00:08:08,960

an astronaut in july 2000

214

00:08:13,510 --> 00:08:11,039

for more details on the crew of endeavor