



1
00:00:05,990 --> 00:00:03,510
and the time has arrived the induction

2
00:00:07,909 --> 00:00:06,000
of the 10th class of space shuttle

3
00:00:09,669 --> 00:00:07,919
astronauts into the united states

4
00:00:12,070 --> 00:00:09,679
astronaut hall of fame

5
00:00:14,390 --> 00:00:12,080
they will be introduced in the order in

6
00:00:17,109 --> 00:00:14,400
which they flew into space

7
00:00:23,189 --> 00:00:17,119
our first inductee is

8
00:00:28,390 --> 00:00:25,750
during his 19 years in the astronaut

9
00:00:30,630 --> 00:00:28,400
program colonel bobco flew on three

10
00:00:33,750 --> 00:00:30,640
space shuttle missions and logged more

11
00:00:35,830 --> 00:00:33,760
than 386 hours in space

12
00:00:37,910 --> 00:00:35,840
beau served as pilot during the first

13
00:00:40,310 --> 00:00:37,920

voyage of space shuttle challenger

14

00:00:42,310 --> 00:00:40,320

aboard sts-6 during which the crew

15

00:00:45,990 --> 00:00:42,320

conducted the first space shuttle

16

00:00:49,190 --> 00:00:46,000

spacewalks in april 1985 bose served as

17

00:00:51,189 --> 00:00:49,200

the commander of sts-51d

18

00:00:53,029 --> 00:00:51,199

after seven days in space he

19

00:00:56,709 --> 00:00:53,039

successfully landed space shuttle

20

00:00:58,470 --> 00:00:56,719

discovery in spite of a blown main

21

00:01:02,709 --> 00:00:58,480

landing gear tire

22

00:01:05,350 --> 00:01:02,719

in october 85 he flew on sts-51j

23

00:01:07,429 --> 00:01:05,360

the first flight of the shuttle atlantis

24

00:01:10,070 --> 00:01:07,439

and the second department of defense

25

00:01:11,750 --> 00:01:10,080

mission for the space shuttle program

26

00:01:14,630 --> 00:01:11,760

beau retired from nasa and the united

27

00:01:17,109 --> 00:01:14,640

states air force in 1988. currently he

28

00:01:19,510 --> 00:01:17,119

serves as president of the united states

29

00:01:20,789 --> 00:01:19,520

chapter of the association of space

30

00:01:23,429 --> 00:01:20,799

explorers

31

00:01:32,149 --> 00:01:23,439

now let's take a look at a few video

32

00:01:38,469 --> 00:01:34,630

launch commit we have a lift off all

33

00:01:42,069 --> 00:01:40,550

it's been a very rewarding experience

34

00:01:44,149 --> 00:01:42,079

roger

35

00:01:46,310 --> 00:01:44,159

turn to ask the questions that have been

36

00:02:19,750 --> 00:01:46,320

proposed by the press there

37

00:02:19,760 --> 00:02:32,470

so

38

00:03:02,149 --> 00:02:34,309

made up and

39

00:03:06,470 --> 00:03:04,149

a new orbiter joins the shuttle fleet

40

00:03:15,910 --> 00:03:06,480

and it has cleared the tower

41

00:03:15,920 --> 00:03:39,190

ladies and gentlemen astronaut beau bob

42

00:03:43,270 --> 00:03:41,190

and now to present bo bobco for

43

00:03:45,750 --> 00:03:43,280

induction into the united states hall of

44

00:03:51,350 --> 00:03:45,760

fame please welcome hall of fame

45

00:03:55,589 --> 00:03:53,350

well i am absolutely delighted and

46

00:03:58,149 --> 00:03:55,599

honored to be able to introduce my first

47

00:04:02,789 --> 00:03:58,159

mission commander and my good friend

48

00:04:04,630 --> 00:04:02,799

carol j bobco or as we all know him beau

49

00:04:07,270 --> 00:04:04,640

now you'll hear him talk in a little

50

00:04:09,350 --> 00:04:07,280

while and you may not be able to tell it

51
00:04:11,990 --> 00:04:09,360
from his accent but beau was actually

52
00:04:15,350 --> 00:04:12,000
born in new york city and so like myself

53
00:04:17,030 --> 00:04:15,360
he is a genuine apple astronaut

54
00:04:18,789 --> 00:04:17,040
i did a little research into his

55
00:04:22,390 --> 00:04:18,799
childhood in preparation for these

56
00:04:25,110 --> 00:04:22,400
remarks and i found an amazing fact

57
00:04:27,590 --> 00:04:25,120
during all of his youth his mother never

58
00:04:29,430 --> 00:04:27,600
once called him bo

59
00:04:31,510 --> 00:04:29,440
she called him carol which is a good

60
00:04:33,350 --> 00:04:31,520
polish name and

61
00:04:35,749 --> 00:04:33,360
i actually will jump ahead in time a

62
00:04:38,870 --> 00:04:35,759
little bit to tell another story about

63
00:04:40,550 --> 00:04:38,880

carol joseph bobco's polish heritage

64

00:04:43,590 --> 00:04:40,560

this was actually the first time that i

65

00:04:45,749 --> 00:04:43,600

specifically became aware of beau as a

66

00:04:49,590 --> 00:04:45,759

distinct personality in the astronaut

67

00:04:52,710 --> 00:04:49,600

office it was in october 1978

68

00:04:54,150 --> 00:04:52,720

right after carol joseph voit was

69

00:04:57,430 --> 00:04:54,160

elected pope

70

00:05:00,070 --> 00:04:57,440

and a sign appeared on bo's office door

71

00:05:01,270 --> 00:05:00,080

proclaim proclaiming in very large

72

00:05:03,430 --> 00:05:01,280

letters

73

00:05:05,670 --> 00:05:03,440

that from hencefor henceforth it would

74

00:05:07,990 --> 00:05:05,680

be considered a mortal sin to tell

75

00:05:10,070 --> 00:05:08,000

polish jokes

76

00:05:12,790 --> 00:05:10,080

and i hope that this story i've just

77

00:05:15,029 --> 00:05:12,800

told doesn't count as a polish joke

78

00:05:17,270 --> 00:05:15,039

um and i never heard any polish jokes

79

00:05:19,270 --> 00:05:17,280

after that in the astronaut office

80

00:05:20,310 --> 00:05:19,280

well beau was fascinated by the space

81

00:05:21,830 --> 00:05:20,320

program

82

00:05:24,629 --> 00:05:21,840

and expressed the desire to be an

83

00:05:26,230 --> 00:05:24,639

astronaut from a very early age as i did

84

00:05:28,310 --> 00:05:26,240

actually although we differed in our

85

00:05:30,230 --> 00:05:28,320

attitude towards airplanes for me

86

00:05:32,469 --> 00:05:30,240

airplanes didn't go fast enough or high

87

00:05:33,510 --> 00:05:32,479

enough i just dreamt about rockets but

88

00:05:35,510 --> 00:05:33,520

for beau

89

00:05:37,510 --> 00:05:35,520

airplanes seemed like

90

00:05:38,469 --> 00:05:37,520

the best route to space

91

00:05:41,029 --> 00:05:38,479

and so

92

00:05:43,430 --> 00:05:41,039

he enrolled in and graduated in the

93

00:05:46,710 --> 00:05:43,440

first class of the then new air force

94

00:05:49,430 --> 00:05:46,720

academy in colorado springs

95

00:05:51,990 --> 00:05:49,440

a an unexpected life-altering side

96

00:05:54,790 --> 00:05:52,000

effect of this decision was his

97

00:05:57,670 --> 00:05:54,800

proximity to denver which led to his

98

00:06:00,309 --> 00:05:57,680

meeting and eventually marrying diane

99

00:06:02,790 --> 00:06:00,319

a happy marriage which is still thriving

100

00:06:05,189 --> 00:06:02,800

full of music full of love and which has

101
00:06:07,270 --> 00:06:05,199
led to two wonderful children paul and

102
00:06:12,629 --> 00:06:07,280
michelle

103
00:06:15,590 --> 00:06:12,639
always shared his experiences with his

104
00:06:17,749 --> 00:06:15,600
whole family he wanted them to enjoy as

105
00:06:20,150 --> 00:06:17,759
much as he did some of the pleasures

106
00:06:21,749 --> 00:06:20,160
that he was having while training and

107
00:06:23,590 --> 00:06:21,759
flying

108
00:06:25,670 --> 00:06:23,600
diane knew from day one that beau

109
00:06:27,430 --> 00:06:25,680
someday wanted to fly in space and she

110
00:06:30,150 --> 00:06:27,440
supported him all the way and sure

111
00:06:32,710 --> 00:06:30,160
enough after six years of active duty in

112
00:06:35,110 --> 00:06:32,720
fighter squadrons he made his way to

113
00:06:36,950 --> 00:06:35,120

edwards and that was great timing

114

00:06:38,550 --> 00:06:36,960

because that's just when the air force

115

00:06:40,950 --> 00:06:38,560

was selecting astronauts for their

116

00:06:42,950 --> 00:06:40,960

manned orbiting laboratory program and

117

00:06:46,070 --> 00:06:42,960

beau was selected in the second group of

118

00:06:48,790 --> 00:06:46,080

mole astronauts becoming the first air

119

00:06:50,710 --> 00:06:48,800

force academy graduate to be selected as

120

00:06:53,990 --> 00:06:50,720

an astronaut but

121

00:06:57,189 --> 00:06:54,000

mol never flew never made it to orbit so

122

00:06:59,589 --> 00:06:57,199

beau and his mol cohort came to nasa at

123

00:07:01,510 --> 00:06:59,599

the peak of the apollo program

124

00:07:03,670 --> 00:07:01,520

the problem was nasa wasn't quite sure

125

00:07:05,909 --> 00:07:03,680

what to do with bo so for safe keeping

126
00:07:07,110 --> 00:07:05,919
they decided to lock him up in a tin can

127
00:07:09,189 --> 00:07:07,120
for a month

128
00:07:11,270 --> 00:07:09,199
now nasa officials

129
00:07:13,350 --> 00:07:11,280
assure us that this was not as a

130
00:07:15,510 --> 00:07:13,360
punishment for anything he had done

131
00:07:17,189 --> 00:07:15,520
rather it was to see how he bob crippen

132
00:07:21,589 --> 00:07:17,199
and bill thornton would make out in a

133
00:07:23,350 --> 00:07:21,599
simulated skylab mission known as smeat

134
00:07:25,670 --> 00:07:23,360
actually the russians are still doing

135
00:07:26,790 --> 00:07:25,680
this only they lock people up for 500

136
00:07:28,950 --> 00:07:26,800
days

137
00:07:30,710 --> 00:07:28,960
instead of just a month so i suspect

138
00:07:34,230 --> 00:07:30,720

that beau is probably happy that he was

139

00:07:35,909 --> 00:07:34,240

born in new york and not in moscow

140

00:07:38,070 --> 00:07:35,919

but it turns out that moscow was

141

00:07:40,950 --> 00:07:38,080

actually next on bo's dance card as

142

00:07:42,790 --> 00:07:40,960

support crew for apollo soyuz

143

00:07:44,790 --> 00:07:42,800

and the russians taught him a lot about

144

00:07:46,869 --> 00:07:44,800

survival tactics how to make it through

145

00:07:48,390 --> 00:07:46,879

evening after evening of vodka toasts

146

00:07:51,189 --> 00:07:48,400

and then be ready for action the

147

00:07:53,510 --> 00:07:51,199

following morning

148

00:07:55,110 --> 00:07:53,520

well he survived and finally did get

149

00:07:57,510 --> 00:07:55,120

assigned to his first space flight as

150

00:07:59,189 --> 00:07:57,520

you heard as pilot of sts-6 the maiden

151

00:08:00,950 --> 00:07:59,199

voyage of challenger

152

00:08:03,270 --> 00:08:00,960

thus becoming the first air force

153

00:08:05,670 --> 00:08:03,280

academy graduate not only to be selected

154

00:08:08,629 --> 00:08:05,680

as astronaut but actually to fly in

155

00:08:10,309 --> 00:08:08,639

space fulfilling his long-held dream

156

00:08:12,869 --> 00:08:10,319

and following that he was named as a

157

00:08:15,990 --> 00:08:12,879

commander of a flight which originally

158

00:08:17,990 --> 00:08:16,000

was supposed to go in june of 1984

159

00:08:20,150 --> 00:08:18,000

leading a team of four rookies don

160

00:08:21,830 --> 00:08:20,160

williams dave griggs ray sudden and

161

00:08:24,469 --> 00:08:21,840

myself

162

00:08:27,029 --> 00:08:24,479

and i'm really sure that the hardest

163

00:08:29,749 --> 00:08:27,039

part of this command for beau was being

164

00:08:32,310 --> 00:08:29,759
outnumbered by two navy pilots

165

00:08:33,829 --> 00:08:32,320
who early in training presented him with

166

00:08:36,149 --> 00:08:33,839
a book of naval traditions and

167

00:08:38,149 --> 00:08:36,159
regulations and regularly quizzed him on

168

00:08:41,029 --> 00:08:38,159
it to make sure that he was learning i

169

00:08:42,949 --> 00:08:41,039
have to say he was a good sport

170

00:08:45,509 --> 00:08:42,959
well those were the days of mission

171

00:08:47,509 --> 00:08:45,519
delays cancellations of crews being

172

00:08:49,350 --> 00:08:47,519
reassigned to different payloads getting

173

00:08:51,670 --> 00:08:49,360
different shuttles and we experienced

174

00:08:53,430 --> 00:08:51,680
this in spades

175

00:08:55,190 --> 00:08:53,440
frankly the story of how our crew

176
00:08:56,870 --> 00:08:55,200
progressed through four different flight

177
00:08:59,269 --> 00:08:56,880
assignments bounced back and forth

178
00:09:01,030 --> 00:08:59,279
between two orbiters acquired three

179
00:09:02,470 --> 00:09:01,040
different payload specialists would take

180
00:09:04,150 --> 00:09:02,480
much too long

181
00:09:07,430 --> 00:09:04,160
i'll just say that by the time we

182
00:09:09,430 --> 00:09:07,440
finally launched on april 12th of 1985

183
00:09:11,670 --> 00:09:09,440
and by the way i'll remind you april

184
00:09:13,829 --> 00:09:11,680
12th is not just the anniversary of yuri

185
00:09:16,550 --> 00:09:13,839
gagarin's flight and of john young's and

186
00:09:18,630 --> 00:09:16,560
bob crippen's flight on columbia that

187
00:09:19,910 --> 00:09:18,640
was the auspicious day when beau led us

188
00:09:22,550 --> 00:09:19,920

into space

189

00:09:25,269 --> 00:09:22,560

anyway by the time we finally launched

190

00:09:27,670 --> 00:09:25,279

we had sent out 26 different letters to

191

00:09:30,070 --> 00:09:27,680

our launch guests updating them about

192

00:09:33,670 --> 00:09:30,080

when and with what orbiter and on what

193

00:09:34,630 --> 00:09:33,680

mission we might finally fly

194

00:09:36,230 --> 00:09:34,640

well

195

00:09:39,110 --> 00:09:36,240

we have an engineering leadership

196

00:09:41,110 --> 00:09:39,120

program at mit and i often use bo as an

197

00:09:43,190 --> 00:09:41,120

example of good leadership when i give

198

00:09:44,870 --> 00:09:43,200

lessons to my students

199

00:09:46,870 --> 00:09:44,880

let me give you an example

200

00:09:47,910 --> 00:09:46,880

one of the more difficult times in our

201
00:09:52,150 --> 00:09:47,920
training

202
00:09:53,829 --> 00:09:52,160
was after the pad abort of june of 1984

203
00:09:56,389 --> 00:09:53,839
and that led to the consulate

204
00:09:58,710 --> 00:09:56,399
consolidation of the june and august

205
00:10:00,150 --> 00:09:58,720
commercial satellite payloads by that

206
00:10:01,910 --> 00:10:00,160
time we had slipped

207
00:10:04,389 --> 00:10:01,920
the august flight

208
00:10:06,470 --> 00:10:04,399
but they scrubbed the spartan satellite

209
00:10:08,150 --> 00:10:06,480
which we had been planning to deploy and

210
00:10:11,030 --> 00:10:08,160
rendezvous with and retrieved and they

211
00:10:13,110 --> 00:10:11,040
scrubbed us as well reassigning us to an

212
00:10:16,230 --> 00:10:13,120
ius tdrs deployment the following

213
00:10:17,910 --> 00:10:16,240

january which was a pretty long wait and

214

00:10:20,310 --> 00:10:17,920

a big blow particularly for those of us

215

00:10:22,630 --> 00:10:20,320

who hadn't flown before and here's where

216

00:10:24,790 --> 00:10:22,640

bo's personal qualities as a leader

217

00:10:27,430 --> 00:10:24,800

really came into play because as i said

218

00:10:30,150 --> 00:10:27,440

we we were kind of demoralized at that

219

00:10:32,949 --> 00:10:30,160

point and what was beau's response hey

220

00:10:35,190 --> 00:10:32,959

guys let's party and that's typical of

221

00:10:37,110 --> 00:10:35,200

bo not that he's a party animal

222

00:10:39,750 --> 00:10:37,120

not exactly not for those of you who

223

00:10:41,990 --> 00:10:39,760

know him well no the point is beau loved

224

00:10:44,310 --> 00:10:42,000

space flight he wanted everyone working

225

00:10:47,190 --> 00:10:44,320

with him to enjoy it as much as he did

226
00:10:49,430 --> 00:10:47,200
and he knew from experience that despite

227
00:10:51,509 --> 00:10:49,440
delays a first flight is worth waiting

228
00:10:54,069 --> 00:10:51,519
for and he did everything he could to

229
00:10:55,910 --> 00:10:54,079
help our morale he enjoyed flying so

230
00:10:57,350 --> 00:10:55,920
much his family has told me they could

231
00:10:59,430 --> 00:10:57,360
actually judge

232
00:11:01,110 --> 00:10:59,440
how close he was getting to a flight

233
00:11:03,829 --> 00:11:01,120
because the smile on his face kept

234
00:11:06,710 --> 00:11:03,839
getting bigger and bigger and bigger

235
00:11:09,670 --> 00:11:06,720
so anyway in april of 1985 we were

236
00:11:11,430 --> 00:11:09,680
finally ready to go on sts-51d and it

237
00:11:14,310 --> 00:11:11,440
turned out to be a pretty exciting

238
00:11:15,990 --> 00:11:14,320

flight with many unexpected events and i

239

00:11:17,670 --> 00:11:16,000

just want to describe two of them which

240

00:11:19,670 --> 00:11:17,680

will allow me to tell you a little bit

241

00:11:21,190 --> 00:11:19,680

about what it was like working with beau

242

00:11:24,150 --> 00:11:21,200

as a commander

243

00:11:26,389 --> 00:11:24,160

beau is cool under pressure and i saw

244

00:11:29,430 --> 00:11:26,399

this on numerous occasions the first of

245

00:11:31,590 --> 00:11:29,440

which was right after main engine cutoff

246

00:11:33,590 --> 00:11:31,600

we had been asked to try a new way of

247

00:11:35,509 --> 00:11:33,600

dumping the residual hydrogen through

248

00:11:37,990 --> 00:11:35,519

the fill and drain valve which could

249

00:11:39,990 --> 00:11:38,000

potentially do a dump faster than using

250

00:11:42,230 --> 00:11:40,000

the normal techniques and for any of the

251

00:11:44,470 --> 00:11:42,240

plts here i hope i got that right main

252

00:11:47,590 --> 00:11:44,480

engines were never my specialty but i

253

00:11:49,750 --> 00:11:47,600

try anyway right after et separation don

254

00:11:51,670 --> 00:11:49,760

williams opened the valves which caused

255

00:11:53,990 --> 00:11:51,680

a huge raw moment because the dump

256

00:11:56,150 --> 00:11:54,000

didn't go through the cg

257

00:11:58,629 --> 00:11:56,160

through discovery about 90 degrees out

258

00:12:01,110 --> 00:11:58,639

of attitude led to almost constant

259

00:12:02,710 --> 00:12:01,120

firing of our attitude control jets and

260

00:12:04,949 --> 00:12:02,720

people who have experienced these know

261

00:12:06,550 --> 00:12:04,959

how loud they are i mean i was a rookie

262

00:12:08,389 --> 00:12:06,560

down on the mid deck and i thought i was

263

00:12:11,350 --> 00:12:08,399

in the middle of an artillery barrage

264

00:12:13,110 --> 00:12:11,360

down there don's voice from up on the

265

00:12:15,430 --> 00:12:13,120

flight deck seemed about an octave

266

00:12:17,269 --> 00:12:15,440

higher as he asked bo quickly should we

267

00:12:20,069 --> 00:12:17,279

shut the valves

268

00:12:22,310 --> 00:12:20,079

bo just said perfectly calmly no let's

269

00:12:24,389 --> 00:12:22,320

leave them open and see what happens

270

00:12:26,230 --> 00:12:24,399

well of course we we survived and and i

271

00:12:28,150 --> 00:12:26,240

think we succeeded in demonstrating that

272

00:12:30,629 --> 00:12:28,160

this was maybe not an optimum technique

273

00:12:32,949 --> 00:12:30,639

for dumping the hydrogen

274

00:12:34,470 --> 00:12:32,959

now our mission as planned was pretty

275

00:12:36,389 --> 00:12:34,480

simple we were going to deploy two

276

00:12:39,190 --> 00:12:36,399

satellites do a few medical experiments

277

00:12:41,829 --> 00:12:39,200

and come home after four days

278

00:12:44,310 --> 00:12:41,839

i don't know bo you may have some

279

00:12:46,550 --> 00:12:44,320

special karma about satellites i mean

280

00:12:48,790 --> 00:12:46,560

the first ius tdrs which you guys

281

00:12:50,550 --> 00:12:48,800

deployed on your first flight didn't get

282

00:12:52,790 --> 00:12:50,560

to the proper orbit

283

00:12:53,829 --> 00:12:52,800

the second tdrs that was going to be

284

00:12:55,750 --> 00:12:53,839

launched

285

00:12:58,069 --> 00:12:55,760

which would have been the third of our

286

00:13:00,470 --> 00:12:58,079

assigned flights the previous january

287

00:13:02,389 --> 00:13:00,480

had a problem it was still on the ground

288

00:13:04,629 --> 00:13:02,399

and now even though our first satellite

289

00:13:07,030 --> 00:13:04,639

worked okay we deployed the second

290

00:13:09,190 --> 00:13:07,040

satellite and it never turned on

291

00:13:11,110 --> 00:13:09,200

so i don't know but it sure turned out

292

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

to be a lot of fun

293

00:13:14,710 --> 00:13:13,120

because mission control came up with a

294

00:13:16,629 --> 00:13:14,720

really neat plan by which we would

295

00:13:18,870 --> 00:13:16,639

manufacture some special tools

296

00:13:21,269 --> 00:13:18,880

resembling fly swatters after which beau

297

00:13:23,269 --> 00:13:21,279

became known as the leader of nasa's

298

00:13:25,590 --> 00:13:23,279

swat team

299

00:13:27,829 --> 00:13:25,600

then we would do an eva a spacewalk to

300

00:13:30,069 --> 00:13:27,839

attach them to the remote manipulator

301
00:13:32,710 --> 00:13:30,079
arm and then finally rendezvous with the

302
00:13:35,190 --> 00:13:32,720
simcom satellite to flick a possibly

303
00:13:37,509 --> 00:13:35,200
malfunctioning switch on this

304
00:13:39,509 --> 00:13:37,519
spinning satellite now the problem was

305
00:13:41,670 --> 00:13:39,519
that nasa had never before done a

306
00:13:43,750 --> 00:13:41,680
completely unplanned eva

307
00:13:45,509 --> 00:13:43,760
the arm had never been used for anything

308
00:13:47,430 --> 00:13:45,519
remotely like this

309
00:13:49,350 --> 00:13:47,440
and most important it had been 10 months

310
00:13:50,790 --> 00:13:49,360
since we had ever done any rendezvous

311
00:13:53,430 --> 00:13:50,800
practice i mean we didn't even have a

312
00:13:55,750 --> 00:13:53,440
rendezvous checklist on board and so

313
00:13:57,350 --> 00:13:55,760

they had to transcribe the entire

314

00:13:59,750 --> 00:13:57,360

checklist send it up to us by

315

00:14:01,430 --> 00:13:59,760

teleprinter we ended up with a 20 foot

316

00:14:04,310 --> 00:14:01,440

long yellow

317

00:14:06,629 --> 00:14:04,320

rendezvous scroll basically which bo and

318

00:14:09,189 --> 00:14:06,639

don williams had to cut up into page

319

00:14:11,829 --> 00:14:09,199

size pieces and paste into our post

320

00:14:14,230 --> 00:14:11,839

insertion checklist and i still treasure

321

00:14:15,110 --> 00:14:14,240

the image of bo and don pasting together

322

00:14:19,189 --> 00:14:15,120

this

323

00:14:20,949 --> 00:14:19,199

cherish the memory of beau helping me

324

00:14:22,949 --> 00:14:20,959

into my spacesuit

325

00:14:25,350 --> 00:14:22,959

so it was quite an adventure

326

00:14:27,430 --> 00:14:25,360

and it was nearing the final phases of

327

00:14:29,269 --> 00:14:27,440

rendezvous when beau taught me another

328

00:14:31,509 --> 00:14:29,279

lesson in leadership

329

00:14:34,230 --> 00:14:31,519

i was helping bo and don as the

330

00:14:35,670 --> 00:14:34,240

rendezvous navigator back in those days

331

00:14:38,470 --> 00:14:35,680

things were a bit more primitive than

332

00:14:40,470 --> 00:14:38,480

they are now and one of the primary ways

333

00:14:43,030 --> 00:14:40,480

in which we determined how far away a

334

00:14:45,430 --> 00:14:43,040

satellite was was to measure the size of

335

00:14:46,790 --> 00:14:45,440

the satellite on the tv screen and that

336

00:14:49,110 --> 00:14:46,800

was my job

337

00:14:51,990 --> 00:14:49,120

but i have to admit that

338

00:14:54,629 --> 00:14:52,000

we saw this huge satellite floating

339

00:14:56,310 --> 00:14:54,639

motionless outside the shuttle i mean i

340

00:14:58,629 --> 00:14:56,320

had never imagined anything like this

341

00:15:01,509 --> 00:14:58,639

and and i got sort of lost in a state of

342

00:15:02,870 --> 00:15:01,519

reverie when all of a sudden i heard a

343

00:15:06,069 --> 00:15:02,880

soft voice

344

00:15:08,710 --> 00:15:06,079

calmly asking i can't understand why

345

00:15:11,670 --> 00:15:08,720

nobody is giving me range calls

346

00:15:14,230 --> 00:15:11,680

i mean no shouting no panic no nasty

347

00:15:16,470 --> 00:15:14,240

language just the cool voice of

348

00:15:18,629 --> 00:15:16,480

authority that brought me back

349

00:15:20,470 --> 00:15:18,639

that's the way to lead and we all

350

00:15:22,629 --> 00:15:20,480

appreciate and that's the image of beau

351

00:15:24,389 --> 00:15:22,639

that i'll never forget because i mean

352

00:15:26,230 --> 00:15:24,399

there we were doing something we had

353

00:15:28,389 --> 00:15:26,240

never anticipated

354

00:15:31,110 --> 00:15:28,399

for which our last training was almost a

355

00:15:33,590 --> 00:15:31,120

year out of date and yet beau was calmly

356

00:15:35,030 --> 00:15:33,600

looking out the window flying discovery

357

00:15:37,189 --> 00:15:35,040

with great skill as though we had

358

00:15:40,150 --> 00:15:37,199

rehearsed this many many times and

359

00:15:42,629 --> 00:15:40,160

keeping a cool head throughout

360

00:15:44,310 --> 00:15:42,639

well beau had one more flight after 51 d

361

00:15:45,990 --> 00:15:44,320

but it was a military flight so i can't

362

00:15:47,430 --> 00:15:46,000

tell you a whole lot about it other than

363

00:15:49,189 --> 00:15:47,440

that it was the maiden voyage of

364

00:15:51,590 --> 00:15:49,199

atlantis which made it the second

365

00:15:54,870 --> 00:15:51,600

inaugural shuttle flight that beau was

366

00:15:56,629 --> 00:15:54,880

on and that was his final shuttle flight

367

00:15:58,790 --> 00:15:56,639

diane tells me that one of the saddest

368

00:16:00,710 --> 00:15:58,800

days of beau's life was when he had to

369

00:16:03,110 --> 00:16:00,720

clean out his flight locker at ellington

370

00:16:05,990 --> 00:16:03,120

because beau so loved to fly and of

371

00:16:07,590 --> 00:16:06,000

course it's hard to say goodbye

372

00:16:10,150 --> 00:16:07,600

but beau has continued to serve the

373

00:16:11,990 --> 00:16:10,160

space program both in houston and now in

374

00:16:14,389 --> 00:16:12,000

california where he's in charge of the

375

00:16:16,629 --> 00:16:14,399

simulators at nasa ames

376

00:16:19,110 --> 00:16:16,639

flying simulators may not be as exciting

377

00:16:21,269 --> 00:16:19,120

as flying airplanes or space shuttles

378

00:16:23,829 --> 00:16:21,279

but beau loves technical challenges and

379

00:16:25,509 --> 00:16:23,839

he continues to be a fine team leader

380

00:16:27,829 --> 00:16:25,519

and a fine person

381

00:16:34,949 --> 00:16:27,839

bo we are truly delighted to welcome you

382

00:17:05,029 --> 00:16:36,470

now for the congratulations

383

00:17:11,029 --> 00:17:06,789

thank you jeff

384

00:17:15,029 --> 00:17:12,949

the 50th anniversary of human space

385

00:17:17,590 --> 00:17:15,039

flight has caused me to look back on my

386

00:17:20,549 --> 00:17:17,600

own career in aerospace

387

00:17:22,069 --> 00:17:20,559

it's been about 50 years

388

00:17:24,710 --> 00:17:22,079

when the first satellite was launched i

389

00:17:26,949 --> 00:17:24,720

was a cadet at the air force academy

390

00:17:29,029 --> 00:17:26,959

and my instructor said it's not going to

391

00:17:30,789 --> 00:17:29,039

be very long before people start to fly

392

00:17:32,950 --> 00:17:30,799

in space

393

00:17:34,390 --> 00:17:32,960

it was at that time that i decided i

394

00:17:36,950 --> 00:17:34,400

wanted to be one of those space

395

00:17:38,630 --> 00:17:36,960

explorers

396

00:17:40,950 --> 00:17:38,640

when the first man did fly i was

397

00:17:42,789 --> 00:17:40,960

finishing my training and just entering

398

00:17:44,310 --> 00:17:42,799

the operational air force as a fighter

399

00:17:47,110 --> 00:17:44,320

pilot

400

00:17:49,190 --> 00:17:47,120

my wife says that whenever i had a

401
00:17:52,230 --> 00:17:49,200
chance i selected the path towards

402
00:17:56,070 --> 00:17:54,150
in those days the air force was anxious

403
00:17:57,590 --> 00:17:56,080
to get people in space

404
00:17:59,590 --> 00:17:57,600
they've been called the test pilot

405
00:18:00,789 --> 00:17:59,600
school the aerospace research pilot

406
00:18:03,350 --> 00:18:00,799
school

407
00:18:05,830 --> 00:18:03,360
it was not long before the air force had

408
00:18:08,310 --> 00:18:05,840
hopes of flying dinosaur and then the

409
00:18:10,630 --> 00:18:08,320
manned orbiting laboratory as jeff has

410
00:18:12,710 --> 00:18:10,640
already spoken to you about

411
00:18:14,390 --> 00:18:12,720
i was selected as one of those mol crew

412
00:18:17,669 --> 00:18:14,400
members

413
00:18:19,590 --> 00:18:17,679

until the program was cancelled

414

00:18:22,230 --> 00:18:19,600

fortunately

415

00:18:25,270 --> 00:18:22,240

seven of us mol people were picked up by

416

00:18:28,310 --> 00:18:25,280

nasa as astronauts

417

00:18:29,909 --> 00:18:28,320

of course there were times i didn't it

418

00:18:31,190 --> 00:18:29,919

didn't seem that joining nasa was

419

00:18:32,789 --> 00:18:31,200

fortunate

420

00:18:33,909 --> 00:18:32,799

because they were canceling apollo

421

00:18:35,669 --> 00:18:33,919

program

422

00:18:37,909 --> 00:18:35,679

flights they were cancelling skylab

423

00:18:39,909 --> 00:18:37,919

flights and the shuttle kept moving to

424

00:18:41,669 --> 00:18:39,919

the right

425

00:18:43,350 --> 00:18:41,679

the closest i got to flight in those

426

00:18:45,590 --> 00:18:43,360

early days with the skylab medical

427

00:18:47,830 --> 00:18:45,600

experiment which you've already

428

00:18:51,430 --> 00:18:47,840

heard about the only difference is it

429

00:18:52,549 --> 00:18:51,440

was two months not just one month

430

00:18:54,230 --> 00:18:52,559

i can

431

00:18:57,029 --> 00:18:54,240

remember

432

00:18:58,310 --> 00:18:57,039

bill thornton who was a medical doctor

433

00:19:00,390 --> 00:18:58,320

calling out our

434

00:19:02,470 --> 00:19:00,400

out to our flight surgeon who was

435

00:19:05,190 --> 00:19:02,480

outside and telling him how he was

436

00:19:07,110 --> 00:19:05,200

noting strange behavior

437

00:19:08,630 --> 00:19:07,120

bill taked off a list of items you could

438

00:19:09,350 --> 00:19:08,640

and you could hear the flight surgeon

439

00:19:11,430 --> 00:19:09,360

get

440

00:19:13,350 --> 00:19:11,440

more and more excited

441

00:19:14,150 --> 00:19:13,360

finally the flight surgeon couldn't ask

442

00:19:16,230 --> 00:19:14,160

that

443

00:19:17,909 --> 00:19:16,240

standard anymore and asked bill

444

00:19:19,830 --> 00:19:17,919

okay tell me which one of the crew is

445

00:19:23,029 --> 00:19:19,840

having the problems

446

00:19:24,630 --> 00:19:23,039

the answer was it wasn't inside smeat it

447

00:19:28,950 --> 00:19:24,640

was the management committee on the

448

00:19:33,909 --> 00:19:31,510

i also worked with the russians as as

449

00:19:35,669 --> 00:19:33,919

jeff mentioned

450

00:19:37,590 --> 00:19:35,679

i remember this was at the height of the

451
00:19:40,070 --> 00:19:37,600
cold war

452
00:19:42,870 --> 00:19:40,080
i can remember walking across red square

453
00:19:44,150 --> 00:19:42,880
one night when uh with bob overmeyer and

454
00:19:45,510 --> 00:19:44,160
he said

455
00:19:48,070 --> 00:19:45,520
you know bo

456
00:19:50,150 --> 00:19:48,080
i never doubted i'd be here

457
00:19:53,669 --> 00:19:50,160
i just thought it would be at 200 feet

458
00:19:58,390 --> 00:19:55,750
the job that did require some flying was

459
00:20:00,789 --> 00:19:58,400
the shuttle approach and landing tests

460
00:20:04,390 --> 00:20:00,799
bob obermeyer and i alternated between

461
00:20:06,149 --> 00:20:04,400
being capcom and the prime shuttle chase

462
00:20:08,549 --> 00:20:06,159
being next to the shuttle as it flew off

463
00:20:11,510 --> 00:20:08,559

at the top of the 747

464

00:20:13,350 --> 00:20:11,520

really was quite a sight

465

00:20:14,870 --> 00:20:13,360

and being with angle and truly as they

466

00:20:15,990 --> 00:20:14,880

prepared for a flight was quite an

467

00:20:18,149 --> 00:20:16,000

experience

468

00:20:19,510 --> 00:20:18,159

as an example they had china and

469

00:20:22,070 --> 00:20:19,520

candelabra

470

00:20:26,070 --> 00:20:22,080

not paper plates and plastic forks on

471

00:20:30,710 --> 00:20:28,789

between these various tasks i have

472

00:20:32,070 --> 00:20:30,720

described i worked on space shuttle

473

00:20:34,230 --> 00:20:32,080

development

474

00:20:36,630 --> 00:20:34,240

especially on approaching landing

475

00:20:38,789 --> 00:20:36,640

rollout and auto land

476
00:20:41,669 --> 00:20:38,799
that auto land development experience

477
00:20:43,990 --> 00:20:41,679
probably was partially responsible

478
00:20:45,270 --> 00:20:44,000
for our crew getting the detailed test

479
00:20:47,590 --> 00:20:45,280
objective of

480
00:20:49,110 --> 00:20:47,600
of uh flying the auto land

481
00:20:52,230 --> 00:20:49,120
our motto was

482
00:20:57,909 --> 00:20:52,240
spectre mater nullis manus which means

483
00:21:00,710 --> 00:20:59,350
i don't know whether it was fortunate or

484
00:21:02,950 --> 00:21:00,720
not but that

485
00:21:05,029 --> 00:21:02,960
dto was canceled and so we never did the

486
00:21:07,430 --> 00:21:05,039
auto land

487
00:21:09,990 --> 00:21:07,440
one day john young came to my office and

488
00:21:12,149 --> 00:21:10,000

he pulled on my sleeve and said

489

00:21:14,310 --> 00:21:12,159

he would like me to take a small group

490

00:21:17,029 --> 00:21:14,320

of folks and go to ksc to help them get

491

00:21:18,870 --> 00:21:17,039

colombia ready for flight

492

00:21:19,830 --> 00:21:18,880

we would work with the countdown working

493

00:21:21,350 --> 00:21:19,840

group

494

00:21:22,630 --> 00:21:21,360

help decide what testing should be

495

00:21:24,789 --> 00:21:22,640

performed

496

00:21:26,789 --> 00:21:24,799

and then participate in the testing

497

00:21:28,710 --> 00:21:26,799

serve as a liaison between the astronaut

498

00:21:30,789 --> 00:21:28,720

office and the shuttle activities that

499

00:21:32,789 --> 00:21:30,799

were taking place at the cape and do

500

00:21:34,230 --> 00:21:32,799

whatever was necessary to be done down

501
00:21:38,710 --> 00:21:34,240
there

502
00:21:40,549 --> 00:21:38,720
a bit of travel for a couple of months

503
00:21:42,789 --> 00:21:40,559
actually there was quite a bit of travel

504
00:21:44,230 --> 00:21:42,799
for a couple of years

505
00:21:46,149 --> 00:21:44,240
when they were trying to get colombia

506
00:21:48,710 --> 00:21:46,159
ready to flight

507
00:21:50,870 --> 00:21:48,720
when colombia flew from palmdale to ksc

508
00:21:52,630 --> 00:21:50,880
quite a few of the tiles came off

509
00:21:55,669 --> 00:21:52,640
that meant all the tiles were

510
00:21:58,149 --> 00:21:55,679
questionable and needed to be tested

511
00:22:00,390 --> 00:21:58,159
it was a year before they were pasting

512
00:22:01,830 --> 00:22:00,400
more tiles back on the shuttle before

513
00:22:04,070 --> 00:22:01,840

they were taking tiles off of the

514

00:22:06,230 --> 00:22:04,080

shuttle

515

00:22:08,390 --> 00:22:06,240

but it wasn't only the tiles

516

00:22:10,470 --> 00:22:08,400

the first time columbia was powered up i

517

00:22:13,430 --> 00:22:10,480

gave dick scoby the honor

518

00:22:15,270 --> 00:22:13,440

of being in the cockpit for the power up

519

00:22:16,710 --> 00:22:15,280

dick was there for the call to stations

520

00:22:19,110 --> 00:22:16,720

at 8 a.m

521

00:22:21,430 --> 00:22:19,120

the test started a little later

522

00:22:24,710 --> 00:22:21,440

and he was still there when i came to

523

00:22:26,789 --> 00:22:24,720

relieve him the next morning at 6 am

524

00:22:29,110 --> 00:22:26,799

the problem was i couldn't get dick out

525

00:22:32,630 --> 00:22:29,120

of the cockpit until he had thrown at

526

00:22:34,630 --> 00:22:32,640

least one switch

527

00:22:35,830 --> 00:22:34,640

we had a lot to learn a lot to learn in

528

00:22:38,149 --> 00:22:35,840

those days

529

00:22:41,350 --> 00:22:38,159

the tiles were were just the item that

530

00:22:42,870 --> 00:22:41,360

was taking the blame i made a graph

531

00:22:43,909 --> 00:22:42,880

which showed how long it would be to

532

00:22:45,909 --> 00:22:43,919

launch

533

00:22:48,950 --> 00:22:45,919

and as we progressed through time the

534

00:22:49,830 --> 00:22:48,960

time to launch kept getting longer

535

00:22:51,590 --> 00:22:49,840

and

536

00:22:53,830 --> 00:22:51,600

you know i couldn't i could hardly

537

00:22:56,470 --> 00:22:53,840

understand it i thought i was a cosine

538

00:22:58,230 --> 00:22:56,480

wave in a sine wave world

539

00:23:00,549 --> 00:22:58,240

just out of phase with everything that

540

00:23:02,870 --> 00:23:00,559

was going on

541

00:23:05,350 --> 00:23:02,880

finally after 13 years

542

00:23:07,510 --> 00:23:05,360

there were my three flights

543

00:23:08,789 --> 00:23:07,520

i won't try to describe space flight to

544

00:23:11,029 --> 00:23:08,799

this group

545

00:23:12,710 --> 00:23:11,039

since you are one of the few groups and

546

00:23:15,430 --> 00:23:12,720

in the world who really understand what

547

00:23:20,149 --> 00:23:18,310

my first flight was exciting for me

548

00:23:22,310 --> 00:23:20,159

since space was a new environment and

549

00:23:23,990 --> 00:23:22,320

there were so many new items to see and

550

00:23:25,830 --> 00:23:24,000

do

551
00:23:27,350 --> 00:23:25,840
the second flight was challenging since

552
00:23:28,390 --> 00:23:27,360
we were asked to perform an unplanned

553
00:23:30,630 --> 00:23:28,400
dva

554
00:23:32,710 --> 00:23:30,640
rendezvous and activities with the robot

555
00:23:34,549 --> 00:23:32,720
arm which jeff has already told you

556
00:23:36,789 --> 00:23:34,559
about

557
00:23:38,710 --> 00:23:36,799
my third flight was enjoyable

558
00:23:40,149 --> 00:23:38,720
since by then i was familiar with flying

559
00:23:41,510 --> 00:23:40,159
the shuttle and was an experienced

560
00:23:43,269 --> 00:23:41,520
commander

561
00:23:45,110 --> 00:23:43,279
i could tell you more about exactly what

562
00:23:46,710 --> 00:23:45,120
happened on that flight

563
00:23:49,430 --> 00:23:46,720

but then i'd have to shoot just since it

564

00:23:52,390 --> 00:23:49,440

was a military flight

565

00:23:56,070 --> 00:23:52,400

and of course all space flight

566

00:23:57,830 --> 00:23:56,080

is beautiful and inspiring

567

00:23:59,190 --> 00:23:57,840

it all didn't end with my last space

568

00:24:01,190 --> 00:23:59,200

flight

569

00:24:03,269 --> 00:24:01,200

i was in my office one day when pj

570

00:24:05,510 --> 00:24:03,279

white's the commander of my first call

571

00:24:06,950 --> 00:24:05,520

my first flight called me on the phone

572

00:24:09,990 --> 00:24:06,960

and said

573

00:24:12,390 --> 00:24:10,000

bo we are going to open a new tal site

574

00:24:17,110 --> 00:24:12,400

which is transatlantic a board site

575

00:24:19,269 --> 00:24:17,120

for the coming mission i said to him pj

576
00:24:20,789 --> 00:24:19,279
tell me who's going

577
00:24:23,269 --> 00:24:20,799
when is he going

578
00:24:26,310 --> 00:24:23,279
and how long will he stay

579
00:24:29,350 --> 00:24:26,320
his answer was you tomorrow and i don't

580
00:24:33,590 --> 00:24:31,190
that started

581
00:24:34,630 --> 00:24:33,600
me looking at emergency sites over

582
00:24:36,149 --> 00:24:34,640
africa

583
00:24:39,110 --> 00:24:36,159
and equipping all the shuttle landing

584
00:24:40,870 --> 00:24:39,120
sites with the right equipment

585
00:24:43,269 --> 00:24:40,880
after i left nasa in the air force and

586
00:24:44,630 --> 00:24:43,279
joined the aerospace industry

587
00:24:47,830 --> 00:24:44,640
i have been working with the shuttle and

588
00:24:50,310 --> 00:24:47,840

station programs for quite a few years

589

00:24:52,870 --> 00:24:50,320

i still have an enjoyable job

590

00:24:54,710 --> 00:24:52,880

again as jeff mentioned i am the program

591

00:24:56,950 --> 00:24:54,720

manager for the contract which maintains

592

00:25:00,230 --> 00:24:56,960

and operates the research simulators at

593

00:25:02,549 --> 00:25:00,240

the name nasa ames research center we

594

00:25:05,350 --> 00:25:02,559

have had simulations of rendezvous and

595

00:25:06,789 --> 00:25:05,360

docking lunar landing and entry in the

596

00:25:08,470 --> 00:25:06,799

space arena

597

00:25:11,590 --> 00:25:08,480

and lots of aircraft and air traffic

598

00:25:15,269 --> 00:25:13,269

when i was recalling the things that i

599

00:25:17,590 --> 00:25:15,279

have done i also recalled

600

00:25:19,590 --> 00:25:17,600

the people i worked with

601
00:25:21,269 --> 00:25:19,600
the people who had helped me

602
00:25:24,149 --> 00:25:21,279
along the way

603
00:25:25,909 --> 00:25:24,159
and the people i looked up to

604
00:25:29,430 --> 00:25:25,919
with me that started with an eighth

605
00:25:33,110 --> 00:25:31,190
who helped me get into a good technical

606
00:25:34,870 --> 00:25:33,120
high school

607
00:25:36,950 --> 00:25:34,880
she and her husband offered to let me

608
00:25:39,750 --> 00:25:36,960
live with them so that i would be in the

609
00:25:42,549 --> 00:25:39,760
proper school district

610
00:25:44,310 --> 00:25:42,559
but that was just the start many of the

611
00:25:45,990 --> 00:25:44,320
people in this audience helped me along

612
00:25:47,830 --> 00:25:46,000
the way

613
00:25:49,590 --> 00:25:47,840

your help and encouragement

614

00:25:52,149 --> 00:25:49,600

have been instrumental in my standing

615

00:25:56,230 --> 00:25:52,159

here today to receive the honor of being

616

00:25:58,149 --> 00:25:56,240

inducted into the astronaut hall of fame

617

00:26:02,149 --> 00:25:58,159

i decided i wouldn't read off a long

618

00:26:17,590 --> 00:26:05,269

and that's my wife diana 50 years

619

00:26:22,830 --> 00:26:19,830

she has followed me and supported me

620

00:26:25,190 --> 00:26:22,840

through all this even before we were

621

00:26:27,669 --> 00:26:25,200

married so

622

00:26:29,750 --> 00:26:27,679

i humbly accept this honor as i

623

00:26:31,669 --> 00:26:29,760

recognize all the people

624

00:26:33,110 --> 00:26:31,679

who are also a part of this great

625

00:26:36,789 --> 00:26:33,120

adventure

626

00:26:44,470 --> 00:26:39,110

congratulations