

CHALLENGER



1
00:02:28,260 --> 00:02:31,449
that's right did a good job

2
00:02:38,099 --> 00:02:35,619
okay just in case of somebody these guys

3
00:02:41,250 --> 00:02:38,109
I'll introduce the crew of sts-7

4
00:02:47,640 --> 00:02:41,260
commander Bob Crippen pilot recal

5
00:02:50,050 --> 00:02:47,650
mission specialist John Fabian okay

6
00:02:53,399 --> 00:02:50,060
thank you I appreciate such a large

7
00:02:56,440 --> 00:02:53,409
group coming out today weather like this

8
00:02:58,539 --> 00:02:56,450
we're certainly ready to go on Saturday

9
00:03:00,849 --> 00:02:58,549
I think the Kennedy launch team has done

10
00:03:02,800 --> 00:03:00,859
a super job once again and proven that

11
00:03:04,659 --> 00:03:02,810
they can turn around a vehicle faster

12
00:03:06,129 --> 00:03:04,669
than we've ever done it before and we're

13
00:03:16,929 --> 00:03:06,139

looking forward to getting airborne just

14

00:03:21,849 --> 00:03:16,939

as soon as we can step up the bike or

15

00:03:23,860 --> 00:03:21,859

maybe Tim ricke said that pretty well I

16

00:03:28,869 --> 00:03:23,870

don't think I can add anything sure

17

00:03:30,520 --> 00:03:28,879

thank you all for coming out it's always

18

00:03:31,959 --> 00:03:30,530

been good to come to KSC but I think we

19

00:03:33,610 --> 00:03:31,969

have special reasons for thinking that

20

00:03:38,140 --> 00:03:33,620

this is a little bit better than normal

21

00:03:40,420 --> 00:03:38,150

thanks a lot it's good to be home in

22

00:03:41,920 --> 00:03:40,430

Florida and although I usually hate to

23

00:03:43,509 --> 00:03:41,930

leave it I guess I'll be glad to leave

24

00:03:53,830 --> 00:03:43,519

it at least on Saturday it's good to be

25

00:03:58,539 --> 00:03:56,780

this is shuttle launch control t-minus

26

00:04:02,350 --> 00:03:58,549

three hours and holding

27

00:04:06,979 --> 00:04:02,360

the astronaut flight crew of bob crippen

28

00:04:09,860 --> 00:04:06,989

rick hulk john fabian sally ride and

29

00:04:12,460 --> 00:04:09,870

norman Thaegan are presently in the room

30

00:04:17,749 --> 00:04:12,470

in the astronaut quarters ready for

31

00:04:20,180 --> 00:04:17,759

breakfast commander Bob Crippen is in

32

00:04:23,590 --> 00:04:20,190

the the center of the group all of them

33

00:04:26,510 --> 00:04:23,600

wearing striped t-shirts this morning

34

00:04:28,129 --> 00:04:26,520

Bob Crippen commander of the seventh

35

00:04:30,050 --> 00:04:28,139

flight of the space shuttle will be the

36

00:04:33,110 --> 00:04:30,060

first astronaut to have flown on the

37

00:04:36,830 --> 00:04:33,120

shuttle for the second time he was pilot

38

00:04:39,770 --> 00:04:36,840

on the first space shuttle launch just

39

00:04:42,080 --> 00:04:39,780

slightly more than two years ago one in

40

00:04:45,520 --> 00:04:42,090

Beaumont Texas he grew up a nearby

41

00:04:50,089 --> 00:04:45,530

Porter he's a captain in the u.s. Navy

42

00:04:51,980 --> 00:04:50,099

married and has three daughters Crippen

43

00:04:54,439 --> 00:04:51,990

has also been selected as a commander of

44

00:04:56,180 --> 00:04:54,449

the STS 13 crew will be which will be

45

00:04:59,060 --> 00:04:56,190

the first mission to recover an ailing

46

00:05:06,830 --> 00:04:59,070

spacecraft from orbit the solar maximum

47

00:05:10,100 --> 00:05:06,840

mission seated on his left his mission

48

00:05:14,290 --> 00:05:10,110

specialist dr. Sally Ride who will be

49

00:05:17,000 --> 00:05:14,300

the first u.s. woman to fly into space

50

00:05:19,279 --> 00:05:17,010

dr. ride emphasizes she's a mission

51
00:05:26,060 --> 00:05:19,289
specialist and scientist who happens to

52
00:05:29,360 --> 00:05:26,070
also be a woman seated at the end of the

53
00:05:32,000 --> 00:05:29,370
table is Rick Hulk who is the pilot on

54
00:05:34,879 --> 00:05:32,010
this mission he joined the astronaut

55
00:05:38,839 --> 00:05:34,889
corps in 1978 after a distinguished

56
00:05:41,540 --> 00:05:38,849
career as a naval aviator he served in

57
00:05:49,370 --> 00:05:41,550
Vietnam and was named the outstanding

58
00:05:51,439 --> 00:05:49,380
Navy test pilot in 1972 a number of

59
00:05:55,730 --> 00:05:51,449
other people joining the astronauts for

60
00:05:57,950 --> 00:05:55,740
breakfast which has a large cake with

61
00:06:01,430 --> 00:05:57,960
the patch which was designed especially

62
00:06:03,920 --> 00:06:01,440
for the STS seven crew which is always

63
00:06:04,719 --> 00:06:03,930

baked by the the manager of the

64

00:06:06,939 --> 00:06:04,729

astronaut

65

00:06:23,180 --> 00:06:06,949

office here at the Kennedy Space Center

66

00:06:28,550 --> 00:06:26,060

this is shuttle launch control t-minus

67

00:06:31,310 --> 00:06:28,560

two hours 28 minutes 15 seconds and

68

00:06:33,980 --> 00:06:31,320

counting and our astronaut crew has just

69

00:06:36,380 --> 00:06:33,990

left their crew quarters moving into the

70

00:06:39,590 --> 00:06:36,390

elevator to come down to the first floor

71

00:06:43,220 --> 00:06:39,600

of the ONC building for their trip to

72

00:06:46,760 --> 00:06:43,230

the pad commander Bob Crippen leading

73

00:06:49,280 --> 00:06:46,770

the way and everybody crowding into the

74

00:06:50,030 --> 00:06:49,290

elevator so that they can get down to

75

00:06:54,680 --> 00:06:50,040

the bottom

76

00:06:56,480 --> 00:06:54,690

they just prior to that the NASA test

77

00:06:59,480 --> 00:06:56,490

director said that there would be

78

00:07:03,230 --> 00:06:59,490

another checkpoint he asked everybody to

79

00:07:05,900 --> 00:07:03,240

look at their criteria and it will be

80

00:07:08,090 --> 00:07:05,910

getting back to them prior to the actual

81

00:07:10,460 --> 00:07:08,100

time when the crew goes on board but at

82

00:07:13,900 --> 00:07:10,470

this point there are no constraints to

83

00:07:17,240 --> 00:07:13,910

the launch a number of employees

84

00:07:21,020 --> 00:07:17,250

flashing their cameras as the crew comes

85

00:07:24,260 --> 00:07:21,030

out led by Commander Bob Crippen John

86

00:07:25,850 --> 00:07:24,270

Fabian the tallest of the group one spy

87

00:07:30,240 --> 00:07:25,860

worried that he was just too tall to be

88

00:07:35,960 --> 00:07:33,770

document a guard bringing up

89

00:07:39,270 --> 00:07:35,970
as a distinction of being the first

90

00:07:39,280 --> 00:07:46,210
and the crew will be going out to the

91

00:07:46,220 --> 00:07:49,340
this time

92

00:07:49,350 --> 00:07:55,360
tip of the

93

00:08:00,480 --> 00:07:57,060
has been

94

00:08:03,319 --> 00:08:00,490
now the crews are getting larger and

95

00:08:04,760 --> 00:08:03,329
there's no longer

96

00:08:11,030 --> 00:08:04,770
to accommodate

97

00:08:15,640 --> 00:08:12,800
this is a interim

98

00:08:21,100 --> 00:08:15,650
astro van

99

00:08:24,159 --> 00:08:21,110
be replaced in the future this is the

100

00:08:26,740 --> 00:08:24,169
largest group one of the first on the

101
00:08:29,560 --> 00:08:26,750
STS seven mission is the size of the

102
00:08:32,589 --> 00:08:29,570
crew which is at five is the largest one

103
00:08:35,290 --> 00:08:32,599
to have flown so far but that number is

104
00:08:38,380 --> 00:08:35,300
going to be going up to seven and

105
00:08:41,620 --> 00:08:38,390
possibly more on future flights then

106
00:08:44,230 --> 00:08:41,630
pulling away from the Orlan C building

107
00:09:01,780 --> 00:08:44,240
where the astronaut quarters are located

108
00:09:08,139 --> 00:09:04,389
commander Bob Crippen now in the white

109
00:09:10,960 --> 00:09:08,149
room putting his Snoopy hat on and then

110
00:09:15,490 --> 00:09:10,970
he'll be putting on his launch and entry

111
00:09:19,660 --> 00:09:15,500
helmet during the first few flights of

112
00:09:23,019 --> 00:09:19,670
the the shuttle a full pressure suit was

113
00:09:23,920 --> 00:09:23,029

needed and so the helmets attached to

114

00:09:28,810 --> 00:09:23,930

that suit

115

00:09:33,189 --> 00:09:28,820

however nowadays only coveralls are used

116

00:09:38,230 --> 00:09:33,199

plus a special harness which is used for

117

00:09:40,949 --> 00:09:38,240

restrained and emergencies and commander

118

00:09:44,920 --> 00:09:40,959

Bob Crippen being brushed off with a

119

00:09:48,939 --> 00:09:44,930

whisk room and now his shoes being wiped

120

00:09:53,620 --> 00:09:48,949

off so that he doesn't track any any

121

00:09:57,400 --> 00:09:53,630

dirt into the the clean interior and he

122

00:10:00,879 --> 00:09:57,410

has just padded these suit technician on

123

00:10:04,840 --> 00:10:00,889

the back and is now entering the orbiter

124

00:10:08,160 --> 00:10:04,850

challenger pilot Rick Huck moving into

125

00:10:10,960 --> 00:10:08,170

the area shaking hands with the

126
00:10:16,050 --> 00:10:10,970
technicians up there prior to putting on

127
00:10:20,110 --> 00:10:16,060
his vest and he'll be the second one to

128
00:10:24,220 --> 00:10:20,120
to enter the orbiter for the seventh

129
00:10:27,519 --> 00:10:24,230
mission of the space shuttle the

130
00:10:30,009 --> 00:10:27,529
countdown clock at t-minus two hours

131
00:11:33,769 --> 00:10:30,019
five minutes thirty seconds and counting

132
00:11:38,970 --> 00:11:36,480
first the focus of media attention

133
00:11:42,600 --> 00:11:38,980
around the world has been on dr. Sally

134
00:11:45,090 --> 00:11:42,610
Ride who emphasizes that she's a mission

135
00:11:47,670 --> 00:11:45,100
specialist and a scientist who just also

136
00:11:49,620 --> 00:11:47,680
happens to be a woman however is the

137
00:11:52,170 --> 00:11:49,630
first woman to fly in space on board a

138
00:11:54,780 --> 00:11:52,180

u.s. spacecraft history is undoubtedly

139

00:11:57,090 --> 00:11:54,790

going to focus on that as well as her

140

00:11:59,130 --> 00:11:57,100

accomplishments to date such as a

141

00:12:02,639 --> 00:11:59,140

doctorate in physics from Stanford

142

00:12:05,940 --> 00:12:02,649

University she's married to dr. Steven a

143

00:12:09,569 --> 00:12:05,950

Holley who also is an astronaut as she

144

00:12:12,090 --> 00:12:09,579

was also selected in 1978 and served as

145

00:12:16,350 --> 00:12:12,100

capsule communicator for the STS 2 and

146

00:12:18,449 --> 00:12:16,360

STS 3 missions during this mission she's

147

00:12:20,430 --> 00:12:18,459

going to have a number of vital tasks to

148

00:12:23,430 --> 00:12:20,440

perform such as launching the palapa

149

00:12:26,579 --> 00:12:23,440

satellite and deployment and recovery of

150

00:12:27,990 --> 00:12:26,589

the spa's one spacecraft honors that

151
00:12:34,949 --> 00:12:28,000
she'll share with fellow mission

152
00:12:37,040 --> 00:12:34,959
specialist John Fabian dr. Thakur has

153
00:12:40,650 --> 00:12:37,050
the distinction of being the first

154
00:12:44,400 --> 00:12:40,660
medical doctor to fly and he will be

155
00:12:48,870 --> 00:12:44,410
taking a close first-hand look at the

156
00:12:56,130 --> 00:12:48,880
effects of motion on the on human in

157
00:12:59,610 --> 00:12:56,140
space higher do become starting his

158
00:13:01,470 --> 00:12:59,620
medical studies he had been a naval I've

159
00:13:06,060 --> 00:13:01,480
been a captain in the Marine Corps in a

160
00:13:10,230 --> 00:13:06,070
naval aviator flying 163 combat missions

161
00:13:12,420 --> 00:13:10,240
in Vietnam he then came back to the the

162
00:13:14,519 --> 00:13:12,430
States and took his Doctor of Medicine

163
00:13:18,689 --> 00:13:14,529

degree from Texas Southwestern Medical

164

00:13:20,819 --> 00:13:18,699

School in 1977 and was an intern when he

165

00:13:23,329 --> 00:13:20,829

learned of the call for new astronauts

166

00:13:59,940 --> 00:13:23,339

and was selected for that program in

167

00:14:05,200 --> 00:14:03,160

t-minus 25 seconds and counting the

168

00:14:09,720 --> 00:14:05,210

sequencer on board now controlling the

169

00:14:12,790 --> 00:14:09,730

final seconds t-minus 17 seconds and

170

00:14:14,100 --> 00:14:12,800

counting the body flap and speed breaker

171

00:16:11,710 --> 00:14:14,110

in launch position

172

00:16:21,259 --> 00:16:14,360

now coming into the last traces the

173

00:16:23,439 --> 00:16:21,269

Earth's atmosphere Challenger 19 to 155

174

00:16:35,829 --> 00:16:23,449

second challenger 21 nautical miles to

175

00:16:40,220 --> 00:16:39,199

12 12 second confirm good solid rocket

176

00:16:45,620 --> 00:16:40,230

booster separation

177

00:16:48,110 --> 00:16:45,630

the blue is falling away now - that's 20

178

00:16:54,019 --> 00:16:48,120

second challenger has been your first

179

00:16:55,240 --> 00:16:54,029

stage performance was nominal bridges

180

00:16:57,410 --> 00:16:55,250

advise in first stage performance

181

00:16:59,329 --> 00:16:57,420

onboard guidance is converging our

182

00:17:01,100 --> 00:16:59,339

program challengers now appearing for

183

00:17:05,870 --> 00:17:01,110

precise window and space for main engine

184

00:17:07,030 --> 00:17:05,880

shutdown two minutes 40 seconds

185

00:17:08,890 --> 00:17:07,040

challenger 35

186

00:17:18,189 --> 00:17:08,900

nautical miles altitude standing by the

187

00:17:18,199 --> 00:17:24,090

dr. Houston have directional capability

188

00:17:28,779 --> 00:17:27,100

mark three minutes I call my captain boy

189

00:17:30,250 --> 00:17:28,789

Bridget says the Challenger now has

190

00:17:34,870 --> 00:17:30,260

landing people to look at the car

191

00:17:36,310 --> 00:17:34,880

therefore should one engine go out mark

192

00:17:38,169 --> 00:17:36,320

three minutes ten seconds

193

00:17:40,659 --> 00:17:38,179

challengers three main engines continue

194

00:17:42,370 --> 00:17:40,669

to run smoothly challenger five person

195

00:17:49,720 --> 00:17:42,380

crew really moving out they're lost you

196

00:17:53,320 --> 00:17:49,730

know reading 7,200 feet per second three

197

00:17:55,779 --> 00:17:53,330

minutes 25 seconds challenger 45

198

00:17:57,340 --> 00:17:55,789

nautical miles altitude return status

199

00:18:01,299 --> 00:17:57,350

check emission control by flight

200

00:18:02,740 --> 00:18:01,309

director Jay green 35 seconds crew

201

00:18:06,430 --> 00:18:02,750

aboard challenger giving it goes to

202

00:18:08,830 --> 00:18:06,440

continue 3 minutes 40 seconds challenge

203

00:18:14,080 --> 00:18:08,840

or 48 nautical miles altitude 105

204

00:18:16,419 --> 00:18:14,090

nautical miles downrange standing by now

205

00:18:22,960 --> 00:18:16,429

for negative return call up by Capcom

206

00:18:24,730 --> 00:18:22,970

boy breaker challenger 3 minutes 57

207

00:18:27,009 --> 00:18:24,740

seconds with that come up tripping house

208

00:18:35,560 --> 00:18:27,019

right baby and say guard committed to

209

00:18:37,899 --> 00:18:35,570

space travel Roger that 4 minutes 10

210

00:18:39,639 --> 00:18:37,909

seconds the flash evaporator has been

211

00:18:45,850 --> 00:18:39,649

activated to provide cooling for

212

00:18:48,659 --> 00:18:45,860

challenger mark 4 minutes 20 seconds

213

00:18:51,009 --> 00:18:48,669

challenger now 54 doner kebab altitude

214

00:18:58,590 --> 00:18:51,019

155 nautical miles downrange

215

00:19:04,389 --> 00:19:01,570

mark 1 minute 35 seconds challenger

216

00:19:06,100 --> 00:19:04,399

fifty five nautical mile titude 174

217

00:19:14,100 --> 00:19:06,110

nautical miles downrange velocity now

218

00:19:18,910 --> 00:19:16,420

four minutes 15 seconds

219

00:19:24,430 --> 00:19:18,920

challenger 56 nautical miles altitude to

220

00:19:26,500 --> 00:19:24,440

our 196 nautical miles downrange what

221

00:19:34,080 --> 00:19:26,510

five minutes standing by the on purpose

222

00:19:43,710 --> 00:19:36,520

five minutes ten seconds press to Mecos

223

00:19:46,960 --> 00:19:43,720

call from Capcom that sounds great grip

224

00:19:49,570 --> 00:19:46,970

the fact amigo calls challenger

225

00:19:51,070 --> 00:19:49,580

lose one engine that song he played for

226
00:19:52,810 --> 00:19:51,080
were challengers engines have enough

227
00:19:56,140 --> 00:19:52,820
energy to achieve normal altitude

228
00:19:58,140 --> 00:19:56,150
velocity cutoff tribalist 30 seconds

229
00:20:01,450 --> 00:19:58,150
challenger 58 nautical miles altitude

230
00:20:06,280 --> 00:20:01,460
260 nautical military velocity now

231
00:20:09,430 --> 00:20:06,290
reading at 13,000 feet per second five

232
00:20:28,879 --> 00:20:09,440
minute 42 seconds standing by now for

233
00:20:34,859 --> 00:20:32,639
shuttle control just end up at 11

234
00:20:37,739 --> 00:20:34,869
minutes 25 seconds special elapsed time

235
00:20:40,589 --> 00:20:37,749
I'll also signal now with challenger

236
00:20:42,719 --> 00:20:40,599
through Bermuda we will elect required

237
00:20:47,519 --> 00:20:42,729
challenger through the car in about six

238
00:20:51,779 --> 00:20:47,529

minutes as as we approach the indirect

239

00:20:53,879 --> 00:20:51,789

pass we had a have had a momentary drop

240

00:20:59,039 --> 00:20:53,889

out in telemetry in the Mission Control

241

00:42:07,500 --> 00:20:59,049

Capcom voyages advise the crew this is

242

00:42:22,609 --> 00:42:09,960

and so that completes of troubleshooting

243

00:42:26,580 --> 00:42:22,619

and thank you beautiful

244

00:42:31,950 --> 00:42:26,590

John you copy of that we had a good read

245

00:42:33,720 --> 00:42:31,960

our number two yes sir we copied that go

246

00:42:36,840 --> 00:42:33,730

off I want to do it here at the dark

247

00:42:40,200 --> 00:42:36,850

picked up some of the valuation that God

248

00:42:54,349 --> 00:42:40,210

could not if the stars like that didn't

249

00:42:54,359 --> 00:43:00,500

that's beautiful

250

00:43:12,859 --> 00:43:06,950

another space first I think loosening

251
00:43:12,869 --> 00:43:59,280
that's a beautiful shot we see that

252
00:43:59,290 --> 00:45:06,220
it is comforting in this

253
00:45:10,580 --> 00:45:08,450
so he's in there again you see

254
00:45:18,290 --> 00:45:10,590
challenger with its tail pointed toward

255
00:45:22,310 --> 00:45:18,300
the earth at the top of the screen

256
00:47:06,690 --> 00:45:22,320
there's some glare as the planet for the

257
00:47:06,700 --> 00:47:13,029
45,000 feet

258
00:47:13,039 --> 00:47:32,300
range 23 miles

259
00:47:44,500 --> 00:47:34,730
the wind at Dryden directly from the

260
00:47:56,720 --> 00:47:49,599
challengers airspeed 255 knots altitude

261
00:48:08,030 --> 00:47:56,730
34,000 feet touching the hack now 18

262
00:48:08,040 --> 00:48:17,890
out of 30 thousand feet at 257 knots

263
00:48:31,760 --> 00:48:20,420

beginning the wide sweeping left turn

264

00:48:31,770 --> 00:48:57,420

25,000 feet 260 knots

265

00:48:57,430 --> 00:49:09,460

20,000 feet 258 knots

266

00:49:17,839 --> 00:49:14,779

Challenger turning final now right on

267

00:49:26,930 --> 00:49:17,849

the nominal track flight dynamics option

268

00:49:40,480 --> 00:49:29,390

on glide slope and turning guard to

269

00:49:44,510 --> 00:49:40,490

centerline 14,000 feet 280 192 knots on

270

00:49:53,370 --> 00:49:44,520

energy looks good surface wind 1 8 0 at

271

00:50:14,730 --> 00:49:59,440

10,000 feet at 282 knots on glide slope

272

00:50:14,740 --> 00:50:35,590

6500 feet 281 knots

273

00:50:35,600 --> 00:50:55,140

2,900 feet 287 months

274

00:50:55,150 --> 00:51:33,770

years coming

275

00:51:33,780 --> 00:51:41,250

and challengers back home back there

276
00:51:48,030 --> 00:51:44,880
the unofficial touchdown time in mission

277
00:51:51,960 --> 00:51:48,040
elapsed time six days two hours 24

278
00:52:25,930 --> 00:51:51,970
minutes 10 seconds that time is

279
00:52:31,450 --> 00:52:28,690
Roger we see that congratulations a

280
00:52:34,570 --> 00:52:31,460
great looking landing and from the entry

281
00:52:37,480 --> 00:52:34,580
team got some good news good news is the

282
00:52:42,490 --> 00:52:37,490
beer is very very cold this morning bad

283
00:52:44,470 --> 00:52:42,500
news is it's 3,000 miles away and I'll

284
00:52:45,790 --> 00:52:44,480
hand you over to the good guy Gardner

285
00:53:24,240 --> 00:52:45,800
here and he'll talk to you about your

286
00:53:33,190 --> 00:53:27,010
all five crewmen Daniel walk-around

287
00:53:49,180 --> 00:53:33,200
inspection of Challenger all five crew