
NASA

1
00:00:57,110 --> 00:00:54,349
welcome to the first edition of a new TV

2
00:00:59,750 --> 00:00:57,120
series entitled the astronauts I'm Lynn

3
00:01:02,590 --> 00:00:59,760
Bondurant this first program highlights

4
00:01:04,670 --> 00:01:02,600
the u.s. Project Mercury program and

5
00:01:06,859 --> 00:01:04,680
documents the historic training

6
00:01:09,010 --> 00:01:06,869
activities the first seven astronauts

7
00:01:14,240 --> 00:01:09,020
underwent to qualify for the program

8
00:01:18,020 --> 00:01:14,250
were going back in time to 1959 this is

9
00:01:22,700 --> 00:01:18,030
a press conference april 9th 1959

10
00:01:24,919 --> 00:01:22,710
washington DC one of these seven young

11
00:01:30,410 --> 00:01:24,929
men will be the first American into

12
00:01:35,449 --> 00:01:30,420
space these are the astronauts United

13
00:01:38,300 --> 00:01:35,459

States project Hercules a substantial

14
00:01:40,999 --> 00:01:38,310
part of the imagination energy and

15
00:01:43,039 --> 00:01:41,009
genius of the United States is being

16
00:01:44,990 --> 00:01:43,049
devoted to the scientific exploration of

17
00:01:47,390 --> 00:01:45,000
our universe

18
00:01:50,000 --> 00:01:47,400
the launching pads and gantry's of the

19
00:01:51,620 --> 00:01:50,010
Atlantic Missile Range mount many of our

20
00:02:07,430 --> 00:01:51,630
experiments into the very nature of

21
00:02:39,000 --> 00:02:10,229
personnel please clear the launching

22
00:02:46,270 --> 00:02:41,380
this launch carried an earth satellite

23
00:02:49,300 --> 00:02:46,280
into orbit soon before the earth turns

24
00:02:51,370 --> 00:02:49,310
many hundred times a man will climb into

25
00:03:09,660 --> 00:02:51,380
a capsule of the Atlantic missile range

26
00:03:14,080 --> 00:03:09,670
and the world headlong into space why

27
00:03:18,180 --> 00:03:14,090
wireless ma'am go into space why does

28
00:03:24,250 --> 00:03:20,680
space with its belts of radiation

29
00:03:26,490 --> 00:03:24,260
meteorites SolarWinds unknown cosmic

30
00:03:29,430 --> 00:03:26,500
forces

31
00:03:33,990 --> 00:03:29,440
to explore his world man has always risk

32
00:03:37,890 --> 00:03:34,000
the unknown because it is unknown and

33
00:03:43,170 --> 00:03:37,900
man's nature is to know Project Mercury

34
00:03:47,220 --> 00:03:43,180
is a beginning for man in space it will

35
00:03:49,050 --> 00:03:47,230
take him 100 miles from the earth here

36
00:03:51,420 --> 00:03:49,060
we think there are no radiation belts

37
00:03:54,630 --> 00:03:51,430
solar winds are unknown cosmic forces

38
00:04:03,630 --> 00:03:54,640

but man the scientist the Explorer must

39
00:04:05,280 --> 00:04:03,640
see for himself each component of

40
00:04:07,110 --> 00:04:05,290
Project Mercury will be held up and

41
00:04:13,590 --> 00:04:07,120
measured in the unbending light of

42
00:04:24,180 --> 00:04:13,600
scientific truth will it work what does

43
00:04:28,360 --> 00:04:26,680
the problem of selecting pilots who

44
00:04:30,240 --> 00:04:28,370
represent the United States and space

45
00:04:33,760 --> 00:04:30,250
was approached from the same

46
00:04:35,470 --> 00:04:33,770
uncompromising direction from all of the

47
00:04:38,010 --> 00:04:35,480
active duty pilots in the Navy Marines

48
00:04:42,120 --> 00:04:38,020
and Air Force the service records are

49
00:04:46,270 --> 00:04:42,130
473 test pilots were selected for review

50
00:04:49,540 --> 00:04:46,280
110 met the basic qualifications each

51
00:04:53,080 --> 00:04:49,550
must be a graduate of a navy or Air

52
00:04:57,370 --> 00:04:53,090
Force test pilot school 1500 hours of

53
00:05:00,280 --> 00:04:57,380
flight time qualified in jet aircraft an

54
00:05:03,490 --> 00:05:00,290
engineering background younger than 40

55
00:05:07,090 --> 00:05:03,500
at the time of selection and 5 feet 11

56
00:05:09,370 --> 00:05:07,100
or less the national aeronautics and

57
00:05:11,860 --> 00:05:09,380
space administration asked 69 Navy

58
00:05:14,020 --> 00:05:11,870
Marine and Air Force officers of the 110

59
00:05:18,670 --> 00:05:14,030
who qualified to come to Washington for

60
00:05:20,440 --> 00:05:18,680
a briefing they were interviewed tested

61
00:05:26,020 --> 00:05:20,450
and asked to volunteer for the project

62
00:05:33,450 --> 00:05:26,030
mercury mission 6 were discovered to be

63
00:05:35,740 --> 00:05:33,460

too tall 16 declined and 47 volunteered

64
00:05:37,600 --> 00:05:35,750
32 were asked to continue through a

65
00:05:39,570 --> 00:05:37,610
series of capability tests which would

66
00:05:42,370 --> 00:05:39,580
indicate not the best man in the group

67
00:06:01,320 --> 00:05:42,380
but the various degrees of qualification

68
00:06:05,740 --> 00:06:03,760
32 candidates reported to the Lovelace

69
00:06:07,090 --> 00:06:05,750
clinic in Albuquerque New Mexico for an

70
00:06:10,720 --> 00:06:07,100
exhaustive series of physical

71
00:06:12,010 --> 00:06:10,730
examinations these tests were divided

72
00:06:14,500 --> 00:06:12,020
between those given under normal

73
00:06:17,160 --> 00:06:14,510
clinical procedures and a series used

74
00:06:20,110 --> 00:06:17,170
for the first time in project mercury a

75
00:06:21,730 --> 00:06:20,120
series of dynamic tests designed to

76
00:06:29,050 --> 00:06:21,740
measure the candidates abilities during

77
00:06:32,040 --> 00:06:29,060
physical stress laboratory studies were

78
00:06:34,180 --> 00:06:32,050
made in each physiological area as

79
00:06:41,440 --> 00:06:34,190
military pilots these men had passed

80
00:06:44,020 --> 00:06:41,450
yearly flight physicals but here at the

81
00:06:45,970 --> 00:06:44,030
loveliest clinic each measurable

82
00:06:50,610 --> 00:06:45,980
reaction of body chemistry each physical

83
00:06:53,430 --> 00:06:50,620
function was measured probed diagnosed

84
00:06:57,600 --> 00:06:53,440
what is the specific gravity of his body

85
00:07:06,030 --> 00:06:57,610
what is his blood volume water volume

86
00:07:12,040 --> 00:07:09,760
we are listening to his heart when the

87
00:07:13,750 --> 00:07:12,050
astronaut is orbiting in space the

88
00:07:15,970 --> 00:07:13,760

measure of his heart's contraction and

89
00:07:22,710 --> 00:07:15,980
expansion will be telemetered to the

90
00:07:26,500 --> 00:07:24,909
after a week of examinations the

91
00:07:28,240 --> 00:07:26,510
candidates were sent on to the right air

92
00:07:38,290 --> 00:07:28,250
Development Center in Dayton for stress

93
00:07:44,630 --> 00:07:40,910
this project mercury candidate is

94
00:07:46,790 --> 00:07:44,640
preparing for stress the weight of eight

95
00:08:09,649 --> 00:07:46,800
gravities will thrust upon him as he

96
00:08:14,790 --> 00:08:13,350
his reactions are studied the results

97
00:08:16,980 --> 00:08:14,800
will indicate how he fared under

98
00:08:21,179 --> 00:08:16,990
multiple gravity forces did he show a

99
00:08:25,110 --> 00:08:21,189
tendency to pull back no was his collar

100
00:08:33,820 --> 00:08:25,120
ins level low was it high now and we

101
00:08:39,640 --> 00:08:36,160
how does this affect his pulse and blood

102
00:08:42,360 --> 00:08:39,650
pressure and what about his mental

103
00:08:44,560 --> 00:08:42,370
balance his imagination his personality

104
00:08:46,330 --> 00:08:44,570
motivation

105
00:08:47,540 --> 00:08:46,340
how does he see the different problems

106
00:08:49,370 --> 00:08:47,550
of living

107
00:08:59,120 --> 00:08:49,380
and how his life affected in as an

108
00:09:06,680 --> 00:08:59,130
individual test his memory comprehension

109
00:09:07,910 --> 00:09:06,690
perception visualization asked him to

110
00:09:13,019 --> 00:09:07,920
describe himself in a hundred different

111
00:09:31,300 --> 00:09:16,689
now take him up to 65,000 feet for one

112
00:09:40,509 --> 00:09:31,310
hour in a pressure chamber now have him

113
00:09:43,059 --> 00:09:40,519

do this for five minutes they'll ask him

114
00:09:44,680 --> 00:09:43,069
to take a walk walk until his heart

115
00:09:47,769 --> 00:09:44,690
beats a hundred and eighty times a

116
00:09:53,139 --> 00:09:47,779
minute elevate the incline one degree

117
00:10:00,879 --> 00:09:53,149
every minute these tests continued until

118
00:10:02,800 --> 00:10:00,889
all 32 men had been evaluated seven men

119
00:10:08,530 --> 00:10:02,810
emerged from this competitive purgatory

120
00:10:10,449 --> 00:10:08,540
as the project mercury astronauts at

121
00:10:11,949 --> 00:10:10,459
mcdonald aircraft they saw a model of

122
00:10:14,740 --> 00:10:11,959
the space capsule they would ride into

123
00:10:16,180 --> 00:10:14,750
orbit they sat in the cockpit for the

124
00:10:19,500 --> 00:10:16,190
first time

125
00:10:22,060 --> 00:10:19,510
this is the beginning for each of them

126
00:10:27,890 --> 00:10:22,070
captain Donald case late united states

127
00:10:32,840 --> 00:10:29,690
Lieutenant Commander Alan B Shepard

128
00:10:37,790 --> 00:10:32,850
United States Navy age 35 from East

129
00:10:40,190 --> 00:10:37,800
Derry New Hampshire Lieutenant Commander

130
00:10:45,770 --> 00:10:40,200
Walter M shiraj jr. United States Navy

131
00:10:47,630 --> 00:10:45,780
age 36 from Wardell New Jersey captain

132
00:10:54,170 --> 00:10:47,640
Virgil I Grissom United States Air Force

133
00:10:56,090 --> 00:10:54,180
age 33 from Mitchell Indiana Lieutenant

134
00:10:58,400 --> 00:10:56,100
Colonel John h.glenn united states

135
00:11:04,040 --> 00:10:58,410
marine corps age 38 from New Concord

136
00:11:06,410 --> 00:11:04,050
Ohio captain Leroy G Cooper jr. United

137
00:11:11,690 --> 00:11:06,420
States Air Force age 32 from Carbondale

138
00:11:15,260 --> 00:11:11,700

Colorado lieutenant Malcolm scott

139
00:11:19,760 --> 00:11:15,270
Carpenter United States Navy age 33 from

140
00:11:21,560 --> 00:11:19,770
Boulder Colorado these officers were

141
00:11:26,030 --> 00:11:21,570
detailed by their services to report to

142
00:11:27,260 --> 00:11:26,040
the na sa at Langley field Virginia here

143
00:11:29,270 --> 00:11:27,270
the National Aeronautics and Space

144
00:11:30,680 --> 00:11:29,280
Administration space task group under

145
00:11:32,330 --> 00:11:30,690
the direction of robert gill Ruth had

146
00:11:35,150 --> 00:11:32,340
organized a training program for the

147
00:11:36,590 --> 00:11:35,160
astronauts they were excellent students

148
00:11:39,410 --> 00:11:36,600
and they had a realistic and tough

149
00:11:42,020 --> 00:11:39,420
minded approach to Project Mercury they

150
00:11:44,810 --> 00:11:42,030
had to know all the answers here they

151
00:11:46,370 --> 00:11:44,820
discussed the flight tests in the flight

152
00:11:49,400 --> 00:11:46,380
program they would ride both the red

153
00:11:51,470 --> 00:11:49,410
stone and the Atlas boosters but a man

154
00:11:54,410 --> 00:11:51,480
would not ride either booster until the

155
00:11:57,440 --> 00:11:54,420
full test program was a success

156
00:12:00,019 --> 00:11:57,450
the schedule included first instrumented

157
00:12:03,290 --> 00:12:00,029
capsules then capsules with a monkey

158
00:12:08,360 --> 00:12:03,300
aboard and then one of the seven would

159
00:12:09,710 --> 00:12:08,370
go into space the schedule also provided

160
00:12:12,050 --> 00:12:09,720
for the problems of flying near the

161
00:12:18,400 --> 00:12:12,060
earth they must maintain a proficiency

162
00:12:23,480 --> 00:12:20,840
out of this training together a strong

163
00:12:25,040 --> 00:12:23,490

esprit de corps develop they all felt

164
00:12:28,720 --> 00:12:25,050
that this must be a team effort

165
00:12:31,009 --> 00:12:28,730
involving all of Project Mercury

166
00:12:33,560 --> 00:12:31,019
recognition would undoubtedly go to the

167
00:12:36,110 --> 00:12:33,570
man who makes the first flight but the

168
00:12:37,759 --> 00:12:36,120
second third or fourth flights may

169
00:12:44,100 --> 00:12:37,769
produce far more scientific information

170
00:12:48,610 --> 00:12:46,720
soon all of the astronauts were busy

171
00:12:50,949 --> 00:12:48,620
qualifying themselves for a space flight

172
00:12:53,170 --> 00:12:50,959
they rode the human centrifuges of the

173
00:12:54,699 --> 00:12:53,180
Air Force and enable here they trained

174
00:12:56,079 --> 00:12:54,709
to increase their resistance to the

175
00:13:02,410 --> 00:12:56,089
forces of nature that were pitted

176
00:13:08,210 --> 00:13:05,930
but each new experience each small

177
00:13:12,470 --> 00:13:08,220
physical or mental victory was backed up

178
00:13:14,240 --> 00:13:12,480
by hours of classroom work the time had

179
00:13:16,730 --> 00:13:14,250
come to select the pressurized white

180
00:13:18,769 --> 00:13:16,740
suit they would wear all of the suits

181
00:13:20,360 --> 00:13:18,779
tested were air-conditioned at an

182
00:13:22,450 --> 00:13:20,370
attachable helmet and would protect the

183
00:13:28,070 --> 00:13:22,460
pilot from heat and from the deafening

184
00:13:29,630 --> 00:13:28,080
155 decibel noise of the blast-off the

185
00:13:32,060 --> 00:13:29,640
problem was to select the suit which had

186
00:13:34,400 --> 00:13:32,070
complete pressure integrity which was

187
00:13:36,890 --> 00:13:34,410
resistant to temperature and was not too

188
00:13:39,200 --> 00:13:36,900

bulky a suit which allowed comparative

189
00:13:43,760 --> 00:13:39,210
freedom of movement yet a suit which was

190
00:13:45,890 --> 00:13:43,770
completely reliable this modified US

191
00:13:49,610 --> 00:13:45,900
navy mark for suit worn by shepard was

192
00:13:52,460 --> 00:13:49,620
selected for further testing in the feel

193
00:13:54,320 --> 00:13:52,470
of space flight controls this trainer at

194
00:13:56,600 --> 00:13:54,330
n ASA's Lewis Research Center in

195
00:14:05,030 --> 00:13:56,610
Cleveland demonstrates the possible

196
00:14:09,360 --> 00:14:07,800
while the astronauts perfect themselves

197
00:14:11,059 --> 00:14:09,370
for their mission the hardware of

198
00:14:15,840 --> 00:14:11,069
Project Mercury is being tested

199
00:14:18,930 --> 00:14:15,850
evaluated reshaped and tested again off

200
00:14:21,540 --> 00:14:18,940
Wallops Island Virginia capsule drops at

201
00:14:28,460 --> 00:14:21,550
high altitude test the parachute and

202
00:14:28,470 --> 00:14:44,750
at 10,000 feet the parachute will open

203
00:14:49,350 --> 00:14:47,520
the astronaut riding its capsule will

204
00:14:58,829 --> 00:14:49,360
end in the Atlantic recovery area off

205
00:15:02,980 --> 00:15:01,389
the astronaut must learn to tolerate the

206
00:15:08,230 --> 00:15:02,990
heating he encounters during his fall

207
00:15:17,360 --> 00:15:08,240
back into the atmosphere these courts to

208
00:15:21,290 --> 00:15:19,519
among the astronauts Walter sure i is

209
00:15:30,400 --> 00:15:21,300
charged with the special problem of

210
00:15:35,210 --> 00:15:32,750
but there are some moments of rest for

211
00:15:36,800 --> 00:15:35,220
the astronauts here they sit in a

212
00:15:38,240 --> 00:15:36,810
projection room and watch the films

213
00:15:41,750 --> 00:15:38,250

taken of their visit to the Atlantic

214
00:15:43,460 --> 00:15:41,760
Missile Range cape canaveral on trips

215
00:15:45,920 --> 00:15:43,470
like this each man gathers information

216
00:15:48,380 --> 00:15:45,930
concerning his particular assigned area

217
00:15:50,150 --> 00:15:48,390
of individual study he is then

218
00:16:00,600 --> 00:15:50,160
responsible to the rest of the group for

219
00:16:00,610 --> 00:16:10,310
Oh

220
00:16:14,540 --> 00:16:12,980
Grissom's area of responsibility is the

221
00:16:20,240 --> 00:16:14,550
flight control system including the

222
00:16:21,890 --> 00:16:20,250
automatic pilot Cooper's area concerns

223
00:16:28,100 --> 00:16:21,900
the ballistic flights with the redstone

224
00:16:37,960 --> 00:16:30,480
Shepherd is concerned with tracking and

225
00:16:37,970 --> 00:16:43,190
Glenn has the cockpit area

226
00:16:43,200 --> 00:17:03,629
carpenter communication and navigation

227
00:17:17,889 --> 00:17:07,059
and slaton has the responsibility for

228
00:17:19,569 --> 00:17:17,899
knowing atlas and all of its systems the

229
00:17:21,730 --> 00:17:19,579
possibility that trouble may develop

230
00:17:23,889 --> 00:17:21,740
with the Atlas or the redstone during

231
00:17:25,569 --> 00:17:23,899
the countdown or during the take-off is

232
00:17:27,879 --> 00:17:25,579
looked squarely in the eye by the

233
00:17:31,419 --> 00:17:27,889
astronauts and the engineers behind the

234
00:17:33,549 --> 00:17:31,429
project but this booster was not a

235
00:17:35,620 --> 00:17:33,559
mercury big but imagine the worst

236
00:17:38,500 --> 00:17:35,630
possible situation for the astronaut

237
00:17:44,320 --> 00:17:38,510
that his capsule is now mounted on top

238
00:18:00,720 --> 00:17:44,330

of this Apple the escape rocket takes

239
00:18:21,630 --> 00:18:11,950
the tower the parachute opens and the

240
00:18:27,360 --> 00:18:24,940
success in a pioneer mission depends on

241
00:18:29,710 --> 00:18:27,370
optimal human performance and

242
00:18:31,240 --> 00:18:29,720
performance this is the voice of dr.

243
00:18:34,180 --> 00:18:31,250
Theodore Benzinger at the Naval Medical

244
00:18:35,890 --> 00:18:34,190
Center Bethesda Maryland they astronauts

245
00:18:39,880 --> 00:18:35,900
each take their afternoon of sweating it

246
00:18:43,030 --> 00:18:39,890
out in this gradient eat calorimeter in

247
00:18:45,580 --> 00:18:43,040
a temperature as hot as it is in here

248
00:18:50,590 --> 00:18:45,590
now for him and will later be for you

249
00:18:53,190 --> 00:18:50,600
Alan 14 degrees Fahrenheit your internal

250
00:18:56,440 --> 00:18:53,200
body temperature is protected by a

251
00:19:01,360 --> 00:18:56,450
physiological mechanism of very high

252
00:19:03,400 --> 00:19:01,370
power and precision in the submarine

253
00:19:05,410 --> 00:19:03,410
carbon dioxide chamber at that has dro

254
00:19:07,270 --> 00:19:05,420
the astronaut to learn that space

255
00:19:11,080 --> 00:19:07,280
medicine and submarine medicine have

256
00:19:12,910 --> 00:19:11,090
common problems under emergency

257
00:19:14,740 --> 00:19:12,920
conditions there is a danger of the

258
00:19:16,810 --> 00:19:14,750
presence of unusual amounts of carbon

259
00:19:28,760 --> 00:19:16,820
dioxide in the space capsule or a

260
00:19:33,090 --> 00:19:31,140
after two hours in the chamber under

261
00:19:35,610 --> 00:19:33,100
three percent carbon dioxide these men a

262
00:19:38,010 --> 00:19:35,620
time but they were convinced that they

263
00:19:39,390 --> 00:19:38,020

could function for quite a long time at

264
00:19:41,340 --> 00:19:39,400
least long enough to make a complete

265
00:19:48,690 --> 00:19:41,350
orbit of the earth and then to make an

266
00:19:50,930 --> 00:19:48,700
emergency re-entry and landing but

267
00:19:52,860 --> 00:19:50,940
before a man's life is risk in space

268
00:19:55,650 --> 00:19:52,870
animals will undergo the same

269
00:19:57,240 --> 00:19:55,660
operational stresses the animal research

270
00:19:59,220 --> 00:19:57,250
program connected with Project Mercury

271
00:20:04,509 --> 00:19:59,230
is an important core equity to research

272
00:20:04,519 --> 00:20:09,200
you

273
00:20:14,369 --> 00:20:11,849
the na sa research which created the

274
00:20:16,320 --> 00:20:14,379
individually molded couch was another

275
00:20:41,220 --> 00:20:16,330
step toward minimizing the hazard of

276
00:20:47,860 --> 00:20:45,160
this is the same man John Glenn sitting

277
00:20:49,810 --> 00:20:47,870
in his couch under 14 G's in the

278
00:20:51,640 --> 00:20:49,820
centrifuge at the naval aviation medical

279
00:20:59,590 --> 00:20:51,650
acceleration laboratory johnsville

280
00:21:04,510 --> 00:21:02,650
and this is Gus Grissom the astronauts

281
00:21:05,980 --> 00:21:04,520
consider this experience is probably the

282
00:21:23,240 --> 00:21:05,990
most important phase of their

283
00:21:41,940 --> 00:21:27,900
alan shepard as he takes the G load of

284
00:21:45,850 --> 00:21:44,380
to be able to take this physical beating

285
00:21:50,050 --> 00:21:45,860
these men must be conditioned like

286
00:21:51,520 --> 00:21:50,060
athletes and the astronauts find that

287
00:21:54,370 --> 00:21:51,530
the physical discipline of underwater

288
00:22:16,810 --> 00:21:54,380

swimming is oddly effective in training

289
00:22:21,950 --> 00:22:19,549
Navy underwater demolition team 21 of

290
00:22:24,980 --> 00:22:21,960
Little Creek Virginia supervises the

291
00:22:26,930 --> 00:22:24,990
instruction of the astronauts Al Shepard

292
00:22:28,910 --> 00:22:26,940
and Wally schirra have just completed a

293
00:22:34,820 --> 00:22:28,920
half-mile swim by compass course to the

294
00:22:36,500 --> 00:22:34,830
beach underwater swimming aside from

295
00:22:38,420 --> 00:22:36,510
being an excellent physical condition er

296
00:22:40,220 --> 00:22:38,430
accustoms the astronaut to a forced

297
00:22:41,630 --> 00:22:40,230
breathing discipline and closely

298
00:22:43,940 --> 00:22:41,640
approximates the condition of

299
00:22:52,810 --> 00:22:43,950
weightlessness which will be encountered

300
00:22:58,269 --> 00:22:56,440
now imagine if you will that you are

301
00:22:59,710 --> 00:22:58,279
watching the first project mercury

302
00:23:02,409 --> 00:22:59,720
launching at the Atlantic Missile Range

303
00:23:04,930 --> 00:23:02,419
Cape Canaveral

304
00:23:07,180 --> 00:23:04,940
at launch time the man capsule with its

305
00:23:09,009 --> 00:23:07,190
escape system is thrust into the sky by

306
00:23:16,570 --> 00:23:09,019
the two booster engines and one

307
00:23:21,950 --> 00:23:19,910
at an altitude of about 50 miles after

308
00:23:25,310 --> 00:23:21,960
some two minutes of flight the booster

309
00:23:27,080 --> 00:23:25,320
engines are turned off and jettison the

310
00:23:28,700 --> 00:23:27,090
sustainer engine continues its thrust

311
00:23:30,980 --> 00:23:28,710
toward orbital speed as the escape

312
00:23:44,530 --> 00:23:30,990
rocket fires pulling the escaped our

313
00:23:49,690 --> 00:23:46,660

orbital speed will be achieved at about

314
00:23:53,500 --> 00:23:49,700
100 miles altitude once in orbit

315
00:23:55,880 --> 00:23:53,510
explosive bolts release the capsule

316
00:24:03,799 --> 00:23:55,890
separation rockets on the capsule fire

317
00:24:09,750 --> 00:24:06,810
now the capsule automatic pilot rotates

318
00:24:12,480 --> 00:24:09,760
the capsule if the automatic pilot fails

319
00:24:14,340 --> 00:24:12,490
to respond or becomes erratic the pilot

320
00:24:19,230 --> 00:24:14,350
has controls to maneuver the capsule

321
00:24:22,350 --> 00:24:19,240
into proper orbital attitude through a

322
00:24:25,710 --> 00:24:22,360
periscope or through his window the

323
00:24:36,180 --> 00:24:25,720
pilot observes the earth below and the

324
00:24:40,860 --> 00:24:39,060
near the end of the third order when the

325
00:24:43,230 --> 00:24:40,870
capsule is several hundred miles west

326
00:24:47,399 --> 00:24:43,240
off the coast of California the signal

327
00:24:49,560 --> 00:24:47,409
for re-entry is given retro rockets fire

328
00:24:55,139 --> 00:24:49,570
causing the capsule to leave its orbital

329
00:24:58,649 --> 00:24:55,149
path now man and capsule for and meteor

330
00:25:00,090 --> 00:24:58,659
light plunged toward the earth plunging

331
00:25:04,919 --> 00:25:00,100
through the atmosphere the heat shield

332
00:25:09,880 --> 00:25:04,929
glows white hi the blunt end must be

333
00:25:30,150 --> 00:25:12,490
the low patrol aircraft sweep the

334
00:25:38,840 --> 00:25:33,030
at 10,000 feet the main parachute

335
00:25:45,540 --> 00:25:41,910
the bomb exploding some 3,000 feet under

336
00:25:47,250 --> 00:25:45,550
the ocean provides an accurate fix with

337
00:25:48,720 --> 00:25:47,260
this information patrol aircraft and

338
00:25:54,780 --> 00:25:48,730

ships converge on the spot where the

339
00:25:56,580 --> 00:25:54,790
capsule is expected to land when the

340
00:25:58,560 --> 00:25:56,590
capsule hits the water the parachute is

341
00:26:01,350 --> 00:25:58,570
released in sea dye marker spreads out

342
00:26:02,970 --> 00:26:01,360
on the surface of the water as a capsule

343
00:26:05,370 --> 00:26:02,980
floats in the see a signal light and

344
00:26:09,480 --> 00:26:05,380
automatic radio transmitter indicate the

345
00:26:12,930 --> 00:26:09,490
exact position so before the Earth turns

346
00:26:15,160 --> 00:26:12,940
many hundred times another booster will

347
00:26:17,740 --> 00:26:15,170
rest on the pad of the Cape

348
00:26:21,670 --> 00:26:17,750
and one of the astronauts will ride here

349
00:26:23,800 --> 00:26:21,680
on the shoulders of atlas this unmanned

350
00:26:25,860 --> 00:26:23,810
Atlas booster and capsule proved in the

351
00:26:28,240 --> 00:26:25,870
flight test experiment named Big Joe

352
00:26:38,770 --> 00:26:28,250
that this vehicle could perform the

353
00:26:44,390 --> 00:26:42,260
the castle without escape tower rocketed

354
00:26:46,040 --> 00:26:44,400
to 100 miles and was thrust downward to

355
00:26:48,380 --> 00:26:46,050
re-enter the Earth's atmosphere at a

356
00:26:52,130 --> 00:26:48,390
speed just below the predicted reentry

357
00:26:56,470 --> 00:26:52,140
speed the capsule was recovered the

358
00:26:58,940 --> 00:26:56,480
Atlantic Ocean the tests will continue

359
00:27:03,110 --> 00:26:58,950
the experiments of training will go on

360
00:27:05,200 --> 00:27:03,120
to put man into orbit these are the

361
00:27:13,570 --> 00:27:05,210
astronauts

362
00:27:15,549 --> 00:27:13,580
united states Project Mercury we hope

363
00:27:18,130 --> 00:27:15,559

that you enjoyed the first edition of

364
00:27:21,190 --> 00:27:18,140
the astronauts thank you for joining us

365
00:27:22,930 --> 00:27:21,200
until next time this is Lynn Bondurant