1
00:00:02,180 --> 00:00:11,740
[Music]

2
00:00:17,720 --> 00:00:14,959
Saturn 1b quarterly film report number

3
00:00:23,359 --> 00:00:17,730
27 covers progress during the period

4
00:00:25,550 --> 00:00:23,369
January February March 1966 during this

5
00:00:26,779 --> 00:00:25,560
quarter with a successful launch of the

6
00:00:30,710 --> 00:00:26,789
first Saturn 1b

7
00:00:32,389 --> 00:00:30,720
a s 201 the Saturn 1b program moved from

8
00:00:36,680 --> 00:00:32,399
a year of intensive launch vehicle

9
00:00:38,750 --> 00:00:36,690
ground testing to flight testing in

10
00:00:42,229 --> 00:00:38,760
early January the launch escape system

11
00:00:44,569 --> 00:00:42,239
for a s 201 was erected atop the Apollo

12
00:00:47,959 --> 00:00:44,579
spacecraft completing erection of the

13
00:00:51,229 --> 00:00:47,969

space vehicle on launch complex 34 Cape

14
00:00:53,630 --> 00:00:51,239
Kennedy pre-flight check out of the

15
00:00:57,439 --> 00:00:53,640
vehicle started last quarter continued

16
00:00:59,150 --> 00:00:57,449
as planned concurrently Marshalls

17
00:01:01,760 --> 00:00:59,160
contractors were completing the final

18
00:01:04,219 --> 00:01:01,770
phases of qualification testing of the

19
00:01:06,500 --> 00:01:04,229
flight components in some instances

20
00:01:09,800 --> 00:01:06,510
Marshall granted component qualification

21
00:01:13,850 --> 00:01:09,810
waivers for SI 201 based on previous

22
00:01:16,219 --> 00:01:13,860
thorough testing during early February

23
00:01:17,929 --> 00:01:16,229
several technical meetings were held to

24
00:01:20,570 --> 00:01:17,939
evaluate the data from the various

25
00:01:22,999 --> 00:01:20,580
pre-launch tests including the space

26
00:01:26,840 --> 00:01:23,009
vehicle countdown demonstration test and

27
00:01:29,030 --> 00:01:26,850
the flight readiness test following two

28
00:01:31,490 --> 00:01:29,040
postponements caused by unfavorable

29
00:01:34,039 --> 00:01:31,500
weather final launch preparations were

30
00:01:36,469 --> 00:01:34,049
begun this final countdown was

31
00:01:38,990 --> 00:01:36,479
interrupted by two launch vehicle holds

32
00:01:47,260 --> 00:01:39,000
both because of low pressure in the

33
00:01:54,200 --> 00:01:50,480
liftoff of the unmanned vehicle occurred

34
00:01:55,630 --> 00:01:54,210
on February 26th at 11:12 a.m. Eastern

35
00:01:58,760 --> 00:01:55,640
Standard Time

36
00:02:00,620 --> 00:01:58,770
this liftoff marked the first use of a

37
00:02:04,100 --> 00:02:00,630
new flight testing procedure for the

38
00:02:06,139 --> 00:02:04,110

Saturn program the all-up concept where

39
00:02:08,779 --> 00:02:06,149
all stages and modules of the first

40
00:02:12,920 --> 00:02:08,789
flight vehicle are live or functioning

41
00:02:13,910 --> 00:02:12,930
units the Chrysler built and the eight

42
00:02:16,070 --> 00:02:13,920
Rocketdyne

43
00:02:19,100 --> 00:02:16,080
h-1 engines performed well within

44
00:02:21,800 --> 00:02:19,110
tolerances the pressure of the gaseous

45
00:02:26,900 --> 00:02:21,810
nitrogen control pressure sphere was as

46
00:02:29,600 --> 00:02:26,910
planned during flight at t-plus 141

47
00:02:32,090 --> 00:02:29,610
seconds the for inboard engines cut-off

48
00:02:37,479 --> 00:02:32,100
followed six seconds later by the

49
00:02:39,830 --> 00:02:37,489
outboard engines within a few seconds

50
00:02:42,140 --> 00:02:39,840
successful stage separation had been

51
00:02:44,750 --> 00:02:42,150
achieved and the second stage engine

52
00:02:47,449 --> 00:02:44,760
ignited as shown by a camera mounted in

53
00:02:49,430 --> 00:02:47,459
the first stage separation disturbances

54
00:02:52,850 --> 00:02:49,440
were quite small with the first stage

55
00:02:55,039 --> 00:02:52,860
being very stable the Douglas built

56
00:02:57,590 --> 00:02:55,049
second stages overall performance was

57
00:03:00,470 --> 00:02:57,600
excellent this was the first flight test

58
00:03:02,780 --> 00:03:00,480
of the stage and it's j2 engine the

59
00:03:04,970 --> 00:03:02,790
engine built by Rocketdyne is the most

60
00:03:08,870 --> 00:03:04,980
powerful liquid hydrogen engine being

61
00:03:10,850 --> 00:03:08,880
manufactured after about 20 seconds of

62
00:03:13,580 --> 00:03:10,860
second stage burning the launch escape

63
00:03:17,780 --> 00:03:13,590

tower of the 46 thousand pound Apollo

64
00:03:20,870 --> 00:03:17,790
spacecraft was jettisoned the instrument

65
00:03:22,970 --> 00:03:20,880
unit built by IBM performed precisely as

66
00:03:25,729 --> 00:03:22,980
designed commanding the flight of the

67
00:03:27,500 --> 00:03:25,739
vehicle through payload separation this

68
00:03:29,750 --> 00:03:27,510
was also the first flight test of the

69
00:03:32,000 --> 00:03:29,760
instrument unit which like the second

70
00:03:36,590 --> 00:03:32,010
stage will be used with the saturn v

71
00:03:38,990 --> 00:03:36,600
launch vehicle ten minutes after liftoff

72
00:03:42,289 --> 00:03:39,000
the second stage engine had completed

73
00:03:44,360 --> 00:03:42,299
its job and shut down at this point the

74
00:03:45,229 --> 00:03:44,370
Apollo spacecraft was a hundred sixty

75
00:03:47,240 --> 00:03:45,239
miles high

76
00:03:51,050 --> 00:03:47,250
traveling over fifteen thousand miles

77
00:03:53,960 --> 00:03:51,060
per hour after reaching an Apogee of

78
00:03:55,280 --> 00:03:53,970
about 300 miles the spacecraft was

79
00:03:58,370 --> 00:03:55,290
propelled back into the Earth's

80
00:04:00,500 --> 00:03:58,380
atmosphere by a service module engine to

81
00:04:03,979 --> 00:04:00,510
provide an extreme test for the command

82
00:04:06,440 --> 00:04:03,989
modules heat shield the command module

83
00:04:08,330 --> 00:04:06,450
was recovered in the South Atlantic by

84
00:04:11,840 --> 00:04:08,340
Department of Defense recovery forces

85
00:04:14,120 --> 00:04:11,850
and returned for detailed study the

86
00:04:16,460 --> 00:04:14,130
complete success of a s 201 in

87
00:04:18,529 --> 00:04:16,470
performing its prime missions which

88
00:04:21,199 --> 00:04:18,539

included verifying spacecraft and launch

89
00:04:24,020 --> 00:04:21,209
vehicle compatibility and launch vehicle

90
00:04:26,029 --> 00:04:24,030
structural integrity provided NASA with

91
00:04:27,680 --> 00:04:26,039
increased confidence in meeting its

92
00:04:32,930 --> 00:04:27,690
manned space exploration

93
00:04:36,080 --> 00:04:32,940
goals as planned AAS 203 now scheduled

94
00:04:38,450 --> 00:04:36,090
for launch before a s 202 will not carry

95
00:04:40,970 --> 00:04:38,460
an Apollo spacecraft but rather a

96
00:04:43,580 --> 00:04:40,980
lightweight nose cone this will allow

97
00:04:46,160 --> 00:04:43,590
the s4b to go into orbit with about ten

98
00:04:48,680 --> 00:04:46,170
tons of liquid hydrogen aboard during

99
00:04:50,810 --> 00:04:48,690
the three orbit mission the dynamics of

100
00:04:53,060 --> 00:04:50,820
liquid hydrogen in space will be studied

101
00:04:55,060 --> 00:04:53,070
to gain additional data on the behavior

102
00:04:57,890 --> 00:04:55,070
of this fuel under weightless conditions

103
00:05:00,490 --> 00:04:57,900
such information is needed to perfect

104
00:05:10,180 --> 00:05:00,500
the restart of the s4b in Earth orbit

105
00:05:15,860 --> 00:05:13,700
booster post static check out for sa 203

106
00:05:18,100 --> 00:05:15,870
was completed at Marshalls Mishu

107
00:05:20,330 --> 00:05:18,110
assembly facility in early March

108
00:05:23,150 --> 00:05:20,340
preparations for stage shipment are in

109
00:05:26,690 --> 00:05:23,160
process shipment to the Cape is planned

110
00:05:28,490 --> 00:05:26,700
for early April on the west coast

111
00:05:31,640 --> 00:05:28,500
Douglas efforts centered around the

112
00:05:33,770 --> 00:05:31,650
second stage for sa 203 do two part

113
00:05:35,990 --> 00:05:33,780

shortages pre accept inspiring

114
00:05:38,780 --> 00:05:36,000
activities proceeded slowly until the

115
00:05:41,540 --> 00:05:38,790
first week in February stage power on

116
00:05:43,880 --> 00:05:41,550
check out an LH to experiment TV system

117
00:05:47,060 --> 00:05:43,890
manual checkout was completed by mid

118
00:05:49,460 --> 00:05:47,070
quarter in late February to acceptance

119
00:05:51,320 --> 00:05:49,470
firings were aborted due to malfunctions

120
00:05:53,960 --> 00:05:51,330
in the automatic firing sequence tapes

121
00:05:58,220 --> 00:05:53,970
and a small fire in the engine fuel pump

122
00:06:00,680 --> 00:05:58,230
area on February 26th a 289 second

123
00:06:02,990 --> 00:06:00,690
acceptance firing - LOX depletion was

124
00:06:06,730 --> 00:06:03,000
successfully completed shipment to the

125
00:06:11,300 --> 00:06:09,710
meanwhile installation of components in

126
00:06:13,700 --> 00:06:11,310
the instrument unit for the second

127
00:06:16,330 --> 00:06:13,710
flight vehicle was completed on February

128
00:06:18,710 --> 00:06:16,340
23rd and check-out began the next day

129
00:06:22,070 --> 00:06:18,720
unit checkout continued throughout the

130
00:06:25,520 --> 00:06:22,080
quarter shipment to KSC is planned for

131
00:06:27,409 --> 00:06:25,530
next quarter preparation for shipping

132
00:06:29,840 --> 00:06:27,419
the lightweight nose cone was completed

133
00:06:32,480 --> 00:06:29,850
in February the nose cone departed

134
00:06:36,740 --> 00:06:32,490
Marshall March first and arrived at KSC

135
00:06:38,690 --> 00:06:36,750
ten days later following post static

136
00:06:41,159 --> 00:06:38,700
check out the booster for the third

137
00:06:42,719 --> 00:06:41,169
flight vehicle sa 202

138
00:06:44,999 --> 00:06:42,729

was shipped from Chrysler's musci

139
00:06:45,600 --> 00:06:45,009
assembly facility to the Cape February

140
00:06:48,450 --> 00:06:45,610
7th

141
00:06:50,850 --> 00:06:48,460
immediately after launch complex 34 pad

142
00:06:55,439 --> 00:06:50,860
refurbishment the stage was erected on

143
00:06:57,420 --> 00:06:55,449
March 4th at Douglass's sacto facility

144
00:07:00,600 --> 00:06:57,430
post static checkout of the second stage

145
00:07:02,519 --> 00:07:00,610
was completed January 6th the stage was

146
00:07:05,369 --> 00:07:02,529
shipped from sacto by ocean vessel

147
00:07:06,749 --> 00:07:05,379
January 15 and was offloaded at the Cape

148
00:07:08,610 --> 00:07:06,759
January 29th

149
00:07:10,439 --> 00:07:08,620
it was then moved to the vertical

150
00:07:13,050 --> 00:07:10,449
Assembly Building for inspection and

151
00:07:17,129 --> 00:07:13,060
storage the stage was stacked atop the

152
00:07:19,499 --> 00:07:17,139
booster March 9th at IBM Huntsville

153
00:07:22,320 --> 00:07:19,509
instrument unit checkout was completed

154
00:07:24,890 --> 00:07:22,330
on February 4th the unit was barged to

155
00:07:27,749 --> 00:07:24,900
the Cape arriving February 21st

156
00:07:30,329 --> 00:07:27,759
following pre erection activities it was

157
00:07:32,550 --> 00:07:30,339
stacked atop the second stage March 11th

158
00:07:36,300 --> 00:07:32,560
preflight check out of the entire launch

159
00:07:38,640 --> 00:07:36,310
vehicle is underway at the Marshall

160
00:07:40,649 --> 00:07:38,650
systems development facility development

161
00:07:43,260 --> 00:07:40,659
and verification of the computer program

162
00:07:46,529 --> 00:07:43,270
tapes for automatic check out of ese 202

163
00:07:49,050 --> 00:07:46,539

was completed in March at the end of

164
00:08:00,179 --> 00:07:49,060
March the facility was being updated to

165
00:08:01,829 --> 00:08:00,189
the ese 203 configuration at Marshall

166
00:08:03,929 --> 00:08:01,839
the booster for the fourth flight

167
00:08:07,110 --> 00:08:03,939
vehicle underwent two successful static

168
00:08:14,309 --> 00:08:07,120
firings the first on January 17th the

169
00:08:17,100 --> 00:08:14,319
second on January 21st the booster was

170
00:08:19,709 --> 00:08:17,110
shipped from Marshall January 28th ten

171
00:08:21,889 --> 00:08:19,719
days ahead of schedule adverse weather

172
00:08:24,989 --> 00:08:21,899
and river conditions at Cairo Illinois

173
00:08:27,929 --> 00:08:24,999
prevented further safe transit the pole

174
00:08:30,239 --> 00:08:27,939
Amon returned to MSFC February 9th and

175
00:08:32,639 --> 00:08:30,249
loaded the instrument unit for the third

176
00:08:35,279 --> 00:08:32,649
flight vehicle for simultaneous River

177
00:08:37,740 --> 00:08:35,289
shipment to miss you the barge departed

178
00:08:42,300 --> 00:08:37,750
the center February 11 and arrived at

179
00:08:44,430 --> 00:08:42,310
MAF February 16th the stage was

180
00:08:46,769 --> 00:08:44,440
subsequently offloaded then moved to the

181
00:08:49,230 --> 00:08:46,779
assembly facility where post static

182
00:08:51,360 --> 00:08:49,240
checkout began March 31st ahead of

183
00:08:53,370 --> 00:08:51,370
schedule the instrument unit was

184
00:08:54,400 --> 00:08:53,380
transshipped to the barge promise for

185
00:08:57,670 --> 00:08:54,410
shipment to the

186
00:08:59,350 --> 00:08:57,680
a prosthetic check out for the fifth

187
00:09:00,309 --> 00:08:59,360
flight booster was completed in early

188
00:09:02,009 --> 00:09:00,319

January

189
00:09:05,769 --> 00:09:02,019
it was then prepared for shipment

190
00:09:10,180 --> 00:09:05,779
departing Mishu February 17 and arriving

191
00:09:12,069 --> 00:09:10,190
at Marshall February 26 the stage was

192
00:09:14,319 --> 00:09:12,079
immediately installed in the static test

193
00:09:16,869 --> 00:09:14,329
stand and Chrysler prepared the stage

194
00:09:19,300 --> 00:09:16,879
for acceptance firing the stage was

195
00:09:21,490 --> 00:09:19,310
fired March 23rd and March 31st as

196
00:09:25,329 --> 00:09:21,500
scheduled the stage is now being

197
00:09:27,249 --> 00:09:25,339
prepared for shipment to miss Yu stage

198
00:09:29,259 --> 00:09:27,259
assembly of the six flight booster was

199
00:09:31,540 --> 00:09:29,269
completed this quarter pre static

200
00:09:33,460 --> 00:09:31,550
checkout got underway immediately and is

201
00:09:37,179 --> 00:09:33,470
scheduled for completion early next

202
00:09:38,769 --> 00:09:37,189
quarter Assembly of the first stage for

203
00:09:40,990 --> 00:09:38,779
the seventh flight vehicle started

204
00:09:44,889 --> 00:09:41,000
February 2nd and is scheduled for

205
00:09:46,480 --> 00:09:44,899
completion next quarter fabrication of

206
00:09:48,460 --> 00:09:46,490
the eighth flight booster continued

207
00:09:51,720 --> 00:09:48,470
throughout the quarter and fabrication

208
00:09:54,009 --> 00:09:51,730
of the ninth flight booster got underway

209
00:09:56,350 --> 00:09:54,019
Chrysler continued with component

210
00:10:04,550 --> 00:09:56,360
qualification testing of s1b units

211
00:10:09,290 --> 00:10:07,179
at Douglass's Huntington Beach facility

212
00:10:11,420 --> 00:10:09,300
inspection and installation of

213
00:10:12,829 --> 00:10:11,430

components in the lh2 tank for the

214
00:10:15,259 --> 00:10:12,839
second stage of the fourth flight

215
00:10:18,410 --> 00:10:15,269
vehicle were completed in early January

216
00:10:20,389 --> 00:10:18,420
On January 10th the stage was shipped

217
00:10:23,840 --> 00:10:20,399
aboard the Orion from Seal Beach

218
00:10:26,030 --> 00:10:23,850
arriving at SAC tow January 14th it was

219
00:10:28,910 --> 00:10:26,040
installed in beta 3 tests and upon

220
00:10:30,920 --> 00:10:28,920
arrival following receiving inspection

221
00:10:33,319 --> 00:10:30,930
and modification and installation of

222
00:10:37,309 --> 00:10:33,329
late parts pre static checks began

223
00:10:39,319 --> 00:10:37,319
January 24th on March 18th Douglas

224
00:10:41,600 --> 00:10:39,329
successfully acceptance fired the stage

225
00:10:43,819 --> 00:10:41,610
on the first attempt the stage is now

226
00:10:47,329 --> 00:10:43,829
expected to be ready for delivery well

227
00:10:50,660 --> 00:10:47,339
ahead of schedule back to recheck out

228
00:10:52,850 --> 00:10:50,670
for s4b 205 shown at right started this

229
00:10:54,559 --> 00:10:52,860
quarter at Douglas parts shortages

230
00:10:57,350 --> 00:10:54,569
temporarily delayed completion of

231
00:10:59,360 --> 00:10:57,360
checkout until March 22nd following

232
00:11:03,650 --> 00:10:59,370
final inspections it will be shipped to

233
00:11:05,329 --> 00:11:03,660
sacto next quarter insulating the second

234
00:11:07,819 --> 00:11:05,339
stage of the six flight vehicle was

235
00:11:09,860 --> 00:11:07,829
completed in January miscellaneous

236
00:11:12,410 --> 00:11:09,870
horizontal installations cleaning of the

237
00:11:14,170 --> 00:11:12,420
lh2 tank joining the thrust structure

238
00:11:16,549 --> 00:11:14,180

and forward and aft skirts and

239
00:11:18,920 --> 00:11:16,559
installation of the engine were also

240
00:11:23,090 --> 00:11:18,930
completed this quarter factory checkout

241
00:11:25,309 --> 00:11:23,100
is underway joining the forward LH to

242
00:11:27,410 --> 00:11:25,319
dome to the LH to tank for the second

243
00:11:30,079 --> 00:11:27,420
stage of the seventh flight vehicle was

244
00:11:32,269 --> 00:11:30,089
completed in January the stage was then

245
00:11:35,210 --> 00:11:32,279
subjected to hydrostatic pneumatic leak

246
00:11:37,429 --> 00:11:35,220
and dive tests in February installation

247
00:11:40,400 --> 00:11:37,439
of stage insulation was completed March

248
00:11:44,389 --> 00:11:40,410
10 components are now being installed in

249
00:11:46,340 --> 00:11:44,399
the stage the LOX tank and forward lh2

250
00:11:48,889 --> 00:11:46,350
dome for the second stage of the 8th

251
00:11:50,809 --> 00:11:48,899
launch vehicle were shipped from da C's

252
00:11:53,449 --> 00:11:50,819
Santa Monica facility to Huntington

253
00:11:54,829 --> 00:11:53,459
Beach early this quarter stage assembly

254
00:11:57,350 --> 00:11:54,839
progressed at Huntington Beach

255
00:11:59,150 --> 00:11:57,360
throughout the quarter hydrostatic proof

256
00:12:01,790 --> 00:11:59,160
testing of the tanks is scheduled to

257
00:12:03,650 --> 00:12:01,800
begin next quarter fabrication of the

258
00:12:08,059 --> 00:12:03,660
stages for the 9th and 10th launch

259
00:12:10,040 --> 00:12:08,069
vehicles was begun Douglas continued s4b

260
00:12:12,679 --> 00:12:10,050
qualification testing this period

261
00:12:14,949 --> 00:12:12,689
testing of the s4 be common bulkhead

262
00:12:17,689 --> 00:12:14,959
test specimen under cryogenic conditions

263
00:12:19,210 --> 00:12:17,699

started last quarter was completed in

264
00:12:21,800 --> 00:12:19,220
early Jan

265
00:12:24,140 --> 00:12:21,810
although the specimen failed during the

266
00:12:27,200 --> 00:12:24,150
latter test phases data from this test

267
00:12:30,770 --> 00:12:27,210
program indicated no problem existed for

268
00:12:33,050 --> 00:12:30,780
the flight stages other qualification

269
00:12:35,120 --> 00:12:33,060
testing included vibration thermal shock

270
00:12:37,910 --> 00:12:35,130
and functional testing of the s4 bees

271
00:12:41,390 --> 00:12:37,920
main fuel feed duct at Douglass's Santa

272
00:12:43,850 --> 00:12:41,400
Monica facility and testing of the s4 B

273
00:12:53,030 --> 00:12:43,860
oxidizer duct assembly at wiley

274
00:12:55,160 --> 00:12:53,040
laboratory El Segundo California at

275
00:12:57,200 --> 00:12:55,170
Marshall structural testing of the

276
00:12:59,780 --> 00:12:57,210
second structural test instrument unit

277
00:13:02,360 --> 00:12:59,790
begun December 30th was completed this

278
00:13:07,010 --> 00:13:02,370
quarter following a series of successful

279
00:13:08,900 --> 00:13:07,020
tests the unit failed February 2nd the

280
00:13:12,170 --> 00:13:08,910
IU was later broken down into sections

281
00:13:13,820 --> 00:13:12,180
for post test examination evaluation of

282
00:13:15,440 --> 00:13:13,830
all test data indicated that the

283
00:13:19,750 --> 00:13:15,450
instrument unit structure is fully

284
00:13:21,830 --> 00:13:19,760
qualified for manned Saturn 1b vehicles

285
00:13:23,540 --> 00:13:21,840
component installation in the fourth

286
00:13:25,280 --> 00:13:23,550
flight instrument unit continued

287
00:13:28,940 --> 00:13:25,290
throughout the period with completion

288
00:13:30,680 --> 00:13:28,950

planned for next quarter structural

289
00:13:32,840 --> 00:13:30,690
segments for the next instrument unit

290
00:13:34,540 --> 00:13:32,850
were received this quarter assembly

291
00:13:44,840 --> 00:13:34,550
started March fifth component

292
00:13:47,930 --> 00:13:44,850
installation will start next quarter at

293
00:13:50,450 --> 00:13:47,940
rocket Dynes Santa Susana facility j2

294
00:13:52,220 --> 00:13:50,460
engine qualification service life tests

295
00:13:54,650 --> 00:13:52,230
were conducted in early January the

296
00:13:59,990 --> 00:13:54,660
engine was subjected to seven successive

297
00:14:02,420 --> 00:14:00,000
full duration 502nd firings at Canoga

298
00:14:04,220 --> 00:14:02,430
Park a new facility an electrical

299
00:14:06,830 --> 00:14:04,230
assembly cleanroom production line has

300
00:14:08,570 --> 00:14:06,840
been placed in operation it will be used

301
00:14:17,890 --> 00:14:08,580
in the buildup of electrical control

302
00:14:22,820 --> 00:14:20,480
delivery of electrical ground support

303
00:14:25,460 --> 00:14:22,830
equipment from general electrics Daytona

304
00:14:27,800 --> 00:14:25,470
fabrication facility to KSC was

305
00:14:29,450 --> 00:14:27,810
completed at the end of February this

306
00:14:32,870 --> 00:14:29,460
equipment has been installed at launch

307
00:14:35,360 --> 00:14:32,880
complex 37b the second of two Saturn 1b

308
00:14:39,650 --> 00:14:35,370
launch complexes check out of this

309
00:14:41,330 --> 00:14:39,660
equipment is in progress during March in

310
00:14:44,090 --> 00:14:41,340
connection with the super guppy flight

311
00:14:46,580 --> 00:14:44,100
test program a ground test second stage

312
00:14:50,300 --> 00:14:46,590
was successfully flown in the guffy from

313
00:14:52,880 --> 00:14:50,310

Huntsville to California at Marshalls

314
00:14:56,330 --> 00:14:52,890
auxiliary propulsion system facility an

315
00:14:58,940 --> 00:14:56,340
ApS module was tested on January 26th in

316
00:15:01,250 --> 00:14:58,950
the altitude test cell to check out

317
00:15:03,320 --> 00:15:01,260
compatibility of the module and facility

318
00:15:06,400 --> 00:15:03,330
this was the first in a series of

319
00:15:09,800 --> 00:15:06,410
altitude tests using the complete system

320
00:15:12,230 --> 00:15:09,810
in summary January February and March

321
00:15:14,210 --> 00:15:12,240
were months of notable achievements and

322
00:15:16,910 --> 00:15:14,220
on schedule deliveries within the Saturn

323
00:15:19,990 --> 00:15:16,920
1b program including the orderly build

324
00:15:22,490 --> 00:15:20,000
up of Saturn 1b stages and equipment

325
00:15:25,940 --> 00:15:22,500
delivery of ground support equipment to

326
00:15:29,720 --> 00:15:25,950
Launch Complex 37 be increased load

327
00:15:32,090 --> 00:15:29,730
capacity in air freight service and the

328
00:15:34,230 --> 00:15:32,100
spectacular and highly successful flight