SATURN IB
Quarterly Report
No. 22

October · November · December · 1964

1
00:00:17,480 --> 00:00:15,169
Saturn one 1b quarterly film report

2
00:00:23,150 --> 00:00:17,490
number 22 covers progress during the

3
00:00:26,060 --> 00:00:23,160
period October November December 1964 at

4
00:00:27,890 --> 00:00:26,070
Marshall on October 6th static firing of

5
00:00:30,500 --> 00:00:27,900
the booster for the 10th flight vehicle

6
00:00:34,100 --> 00:00:30,510
s 1:10 concluded the highly successful

7
00:00:37,100 --> 00:00:34,110
s1 booster static test program during

8
00:00:41,119 --> 00:00:37,110
this test program from April 29th 1960

9
00:00:44,540 --> 00:00:41,129
to October 6 to 1964 a total of 24

10
00:00:47,569 --> 00:00:44,550
firings was conducted accumulating 1885

11
00:00:50,389 --> 00:00:47,579
seconds of flight stage firing following

12
00:00:52,639 --> 00:00:50,399
completion of its static firing s1 10

13
00:00:54,139 --> 00:00:52,649

was prepared for shipment to miss Yu for

14
00:00:56,689 --> 00:00:54,149
post static check out

15
00:01:03,049 --> 00:00:56,699
it left Marshall on November 3rd and

16
00:01:06,080 --> 00:01:03,059
arrived at miss you November 7th at

17
00:01:08,480 --> 00:01:06,090
Michou Chrysler started preparing s1 10

18
00:01:10,130 --> 00:01:08,490
for post static check out the work

19
00:01:12,320 --> 00:01:10,140
included installation of flight

20
00:01:16,490 --> 00:01:12,330
components and instrumentation as well

21
00:01:19,550 --> 00:01:16,500
as stage modification and repair early

22
00:01:21,109 --> 00:01:19,560
this quarter s-19 completed post static

23
00:01:24,560 --> 00:01:21,119
check out at Marshalls quality

24
00:01:26,570 --> 00:01:24,570
laboratory the stage and si u9 were then

25
00:01:29,630 --> 00:01:26,580
shipped to Cape Kennedy by barge on

26
00:01:32,120 --> 00:01:29,640
October 19th during rough seas in

27
00:01:34,969 --> 00:01:32,130
transit instrumentation indicated high

28
00:01:38,480 --> 00:01:34,979
g-forces on the stage which warranted

29
00:01:39,050 --> 00:01:38,490
inspection no damage was revealed eleven

30
00:01:42,980 --> 00:01:39,060
days later

31
00:01:44,929 --> 00:01:42,990
s19 arrived at KSC following receiving

32
00:01:48,980 --> 00:01:44,939
inspection the stage was erected on the

33
00:01:51,380 --> 00:01:48,990
pad November 3rd at the sacto test

34
00:01:54,109 --> 00:01:51,390
facility Douglas completed all phases of

35
00:01:56,719 --> 00:01:54,119
s4 nine tes ting and final inspection

36
00:01:58,940 --> 00:01:56,729
the stage was stored temporarily until

37
00:02:02,450 --> 00:01:58,950
October 21st when it was flown to Cape

38
00:02:04,940 --> 00:02:02,460

Kennedy arriving October 22nd the stage

39
00:02:07,969 --> 00:02:04,950
was transported to hangar AF and hangar

40
00:02:10,400 --> 00:02:07,979
checkout was begun following application

41
00:02:13,330 --> 00:02:10,410
of a special heat-resistant paint the

42
00:02:15,490 --> 00:02:13,340
stage was erected on the pad November 19

43
00:02:17,830 --> 00:02:15,500
the purpose of the paint is to prevent

44
00:02:20,290 --> 00:02:17,840
thermal damage to the Pegasus spacecraft

45
00:02:24,670 --> 00:02:20,300
during flight the same paint was applied

46
00:02:26,619 --> 00:02:24,680
to the instrument unit on November 19th

47
00:02:31,479 --> 00:02:26,629
upon completion of the paint curing

48
00:02:33,430 --> 00:02:31,489
process si u9 was also erected launch

49
00:02:36,970 --> 00:02:33,440
vehicle pre-flight check out is

50
00:02:39,400 --> 00:02:36,980
proceeding on schedule the spacecraft

51
00:02:41,890 --> 00:02:39,410
service module and adapter for si 9

52
00:02:45,430 --> 00:02:41,900
arrived at the Cape on November 13th and

53
00:02:47,319 --> 00:02:45,440
was transported to hangar AF here the

54
00:02:49,809 --> 00:02:47,329
service module is being checked out for

55
00:02:52,240 --> 00:02:49,819
flight this includes checking of Pegasus

56
00:02:54,520 --> 00:02:52,250
mounting pads for alignment the command

57
00:02:58,089 --> 00:02:54,530
module was shipped to Cape Kennedy last

58
00:03:01,330 --> 00:02:58,099
quarter care child Hiller completed

59
00:03:03,670 --> 00:03:01,340
fabrication of Pegasus a4 s a9 at

60
00:03:06,280 --> 00:03:03,680
Hagerstown Maryland early this quarter

61
00:03:08,259 --> 00:03:06,290
following assembly and functional tests

62
00:03:10,449 --> 00:03:08,269
the unit was then shipped to General

63
00:03:12,880 --> 00:03:10,459

Electric Valley Forge Pennsylvania in

64
00:03:15,610 --> 00:03:12,890
December there it was subjected to

65
00:03:18,190 --> 00:03:15,620
low-level vibration and shake tests

66
00:03:21,009 --> 00:03:18,200
later the unit was moved into a vacuum

67
00:03:23,229 --> 00:03:21,019
test chamber for systems checkout and

68
00:03:25,990 --> 00:03:23,239
electric component testing following

69
00:03:27,610 --> 00:03:26,000
satisfactory testing the spacecraft was

70
00:03:30,819 --> 00:03:27,620
packaged and shipped to Cape Kennedy

71
00:03:34,930 --> 00:03:30,829
December 29th it was taken to hangar D

72
00:03:37,210 --> 00:03:34,940
where checkout has begun meanwhile at

73
00:03:40,270 --> 00:03:37,220
Marshalls Michou operations Chrysler

74
00:03:43,839 --> 00:03:40,280
completed post static check out of s18

75
00:03:45,580 --> 00:03:43,849
on December 22nd by the end of December

76
00:03:48,069 --> 00:03:45,590
the stage was being prepared for

77
00:03:51,640 --> 00:03:48,079
shipment to Cape Kennedy next report

78
00:03:53,949 --> 00:03:51,650
period early this report period at SAC

79
00:03:56,500 --> 00:03:53,959
doe s for eight static firing

80
00:03:58,690 --> 00:03:56,510
preparations started on November 20th

81
00:04:06,940 --> 00:03:58,700
the stage was successfully fired for a

82
00:04:09,309 --> 00:04:06,950
period of 476 seconds at santa monica

83
00:04:11,559 --> 00:04:09,319
s410 simulated flight tests were

84
00:04:14,199 --> 00:04:11,569
completed in mid-october and stage

85
00:04:15,970 --> 00:04:14,209
modifications were begun following

86
00:04:19,029 --> 00:04:15,980
modifications the stage was shipped to

87
00:04:22,180 --> 00:04:19,039
sacto this marks the completion of s4

88
00:04:24,790 --> 00:04:22,190

manufacturing by douglas s410 was

89
00:04:27,280 --> 00:04:24,800
installed in test and to be on December

90
00:04:30,970 --> 00:04:27,290
5th Static firing is scheduled

91
00:04:34,000 --> 00:04:30,980
January 20th check out of the instrument

92
00:04:36,160 --> 00:04:34,010
unit for the night flight vehicle si u8

93
00:04:38,920 --> 00:04:36,170
located at Marshalls quality and

94
00:04:41,260 --> 00:04:38,930
reliability assurance laboratory began

95
00:04:43,720 --> 00:04:41,270
October 28th and continued through

96
00:04:46,000 --> 00:04:43,730
December checkout of components is

97
00:04:49,440 --> 00:04:46,010
expected to continue as scheduled with

98
00:04:52,960 --> 00:04:49,450
completion of tests due in January

99
00:04:55,120 --> 00:04:52,970
also at Marshall SIU 10 component

100
00:04:59,020 --> 00:04:55,130
installation begun last quarter is

101
00:05:01,510 --> 00:04:59,030
continuing as scheduled at the fairchild

102
00:05:03,880 --> 00:05:01,520
hiller facility Hagerstown Maryland the

103
00:05:06,010 --> 00:05:03,890
Pegasus prototype was used to prove out

104
00:05:09,160 --> 00:05:06,020
minor circuit changes prior to in

105
00:05:11,200 --> 00:05:09,170
cooperation in Pegasus a next quarter

106
00:05:13,660 --> 00:05:11,210
the prototype will be shipped to General

107
00:05:17,650 --> 00:05:13,670
Electric Valley Forge Pennsylvania for

108
00:05:19,720 --> 00:05:17,660
functional testing shell Dahl Northfield

109
00:05:22,690 --> 00:05:19,730
Minnesota has successfully bonded

110
00:05:24,250 --> 00:05:22,700
acceptable detector panels all the

111
00:05:26,830 --> 00:05:24,260
required panels were delivered to

112
00:05:29,110 --> 00:05:26,840
Fairchild on November 30th following

113
00:05:32,950 --> 00:05:29,120

successful completion of qualification

114
00:05:35,860 --> 00:05:32,960
tests structural component assembly on

115
00:05:38,710 --> 00:05:35,870
Pegasus B and C is underway at the

116
00:05:40,990 --> 00:05:38,720
fairchild hiller facility fabrication of

117
00:05:43,540 --> 00:05:41,000
black boxes for both satellites is on

118
00:05:51,790 --> 00:05:43,550
schedule installation of flight systems

119
00:05:53,950 --> 00:05:51,800
is expected next quarter at Marshalls

120
00:05:56,800 --> 00:05:53,960
Michou operations functional check out

121
00:05:59,650 --> 00:05:56,810
of the s1b dynamics stage was completed

122
00:06:01,180 --> 00:05:59,660
in mid-december by December 22nd the

123
00:06:04,300 --> 00:06:01,190
stage was ready for shipment from

124
00:06:06,730 --> 00:06:04,310
Chrysler miss you to MSFC for use in

125
00:06:10,300 --> 00:06:06,740
dynamic testing of the Saturn 1b vehicle

126
00:06:12,370 --> 00:06:10,310
configuration meanwhile at da C's

127
00:06:15,100 --> 00:06:12,380
Huntington Beach facility assembly and

128
00:06:17,350 --> 00:06:15,110
check out of the s4 be dynamic stage was

129
00:06:19,360 --> 00:06:17,360
completed early this quarter during

130
00:06:21,610 --> 00:06:19,370
November the stage was prepared for

131
00:06:23,890 --> 00:06:21,620
shipment to Marshall on December night

132
00:06:26,200 --> 00:06:23,900
the stage left the west coast aboard an

133
00:06:29,290 --> 00:06:26,210
ocean freighter arriving at New Orleans

134
00:06:31,330 --> 00:06:29,300
December 21st at New Orleans the stage

135
00:06:33,610 --> 00:06:31,340
was transferred to a river barge and

136
00:06:36,940 --> 00:06:33,620
departed for MSFC with the barge

137
00:06:39,130 --> 00:06:36,950
carrying the s1 be dynamic stage the

138
00:06:40,719 --> 00:06:39,140

dynamic test stages were unloaded at

139
00:06:45,249 --> 00:06:40,729
Marshall 13

140
00:06:47,350 --> 00:06:45,259
later during the same time period MSFC

141
00:06:49,600 --> 00:06:47,360
completed assembly of the dynamic test

142
00:06:51,640 --> 00:06:49,610
instrument unit structure from segments

143
00:06:54,249 --> 00:06:51,650
fabricated by General Dynamics Fort

144
00:06:56,559 --> 00:06:54,259
Worth Texas following installation of

145
00:06:59,230 --> 00:06:56,569
dummy components the unit will be mated

146
00:07:02,579 --> 00:06:59,240
to the s4b dynamics stage in the test

147
00:07:05,769 --> 00:07:02,589
stand testing will start next quarter

148
00:07:08,739 --> 00:07:05,779
the delivery of the Saturn 1b dynamic

149
00:07:10,869 --> 00:07:08,749
test vehicle to MSFC indicates the

150
00:07:15,219 --> 00:07:10,879
significant progress of the Saturn 1b

151
00:07:18,459 --> 00:07:15,229
program at Mizzou Chrysler completed

152
00:07:21,129 --> 00:07:18,469
assembly operations on the s-1 b1 first

153
00:07:23,320 --> 00:07:21,139
flight stage early this quarter pre

154
00:07:26,110 --> 00:07:23,330
static checkout operations of the stage

155
00:07:28,059 --> 00:07:26,120
are now well underway with mechanical

156
00:07:32,230 --> 00:07:28,069
testing and measurement calibrations

157
00:07:34,510 --> 00:07:32,240
progressing as scheduled s 1 B 2 tank

158
00:07:37,089 --> 00:07:34,520
clustering was completed during October

159
00:07:39,070 --> 00:07:37,099
other assembly operations continued

160
00:07:40,899 --> 00:07:39,080
throughout the quarter and are scheduled

161
00:07:45,879 --> 00:07:40,909
for completion during the next report

162
00:07:47,769 --> 00:07:45,889
period s1 b3 tail section assembly was

163
00:07:50,139 --> 00:07:47,779

completed and build-up of the stages

164
00:07:52,510 --> 00:07:50,149
spider beam began during the quarter

165
00:07:54,879 --> 00:07:52,520
stage fabrication is expected to be

166
00:07:58,360 --> 00:07:54,889
completed early next quarter and will be

167
00:08:01,079 --> 00:07:58,370
followed by tank clustering fabrication

168
00:08:03,790 --> 00:08:01,089
operations are underway for s1 d4

169
00:08:06,519 --> 00:08:03,800
build-up of the upper and lower thrust

170
00:08:09,869 --> 00:08:06,529
ring began in late October tank

171
00:08:13,179 --> 00:08:09,879
clustering is scheduled for late March a

172
00:08:15,730 --> 00:08:13,189
DAC Sacramento tests aerial preparations

173
00:08:18,159 --> 00:08:15,740
for the first s4b battleship hot firing

174
00:08:19,719 --> 00:08:18,169
continued through October routine

175
00:08:22,420 --> 00:08:19,729
hardware and equipment checks were made

176
00:08:26,499 --> 00:08:22,430
followed by successful j2 engine thrust

177
00:08:28,629 --> 00:08:26,509
chamber chill down tests on November 7th

178
00:08:30,969 --> 00:08:28,639
the first hot pairing was cut off prior

179
00:08:33,850 --> 00:08:30,979
to main stage by a gas generator over

180
00:08:36,009 --> 00:08:33,860
temperature command on November 24th a

181
00:08:38,079 --> 00:08:36,019
second firing of the stage resulted in a

182
00:08:40,180 --> 00:08:38,089
successful test of one second duration

183
00:08:42,670 --> 00:08:40,190
on December 1st

184
00:08:46,930 --> 00:08:42,680
a third firing lasting 10 seconds was

185
00:08:49,689 --> 00:08:46,940
performed on December 23rd a 416 second

186
00:08:52,090 --> 00:08:49,699
firing was highly successful static test

187
00:08:52,900 --> 00:08:52,100
will continue next quarter engine chill

188
00:08:55,150 --> 00:08:52,910

down propeller

189
00:08:59,080 --> 00:08:55,160
utilization and engine gimbal intest

190
00:09:01,720 --> 00:08:59,090
will also be conducted at SAC toes gamma

191
00:09:03,940 --> 00:09:01,730
complex a series of single and multiple

192
00:09:06,340 --> 00:09:03,950
attitude control engines first phase

193
00:09:08,550 --> 00:09:06,350
development firings was successfully

194
00:09:11,500 --> 00:09:08,560
conducted in October

195
00:09:13,120 --> 00:09:11,510
also at Sacramento Douglas continued

196
00:09:15,520 --> 00:09:13,130
installation of ground support equipment

197
00:09:18,130 --> 00:09:15,530
and necessary instrumentation on beta

198
00:09:20,920 --> 00:09:18,140
test stand number three when the stand

199
00:09:22,900 --> 00:09:20,930
is completed the s4b facilities checkout

200
00:09:25,150 --> 00:09:22,910
stage will be installed for propellant

201
00:09:29,020 --> 00:09:25,160
loading tests scheduled to start in

202
00:09:30,790 --> 00:09:29,030
early March cleaning and installation of

203
00:09:33,340 --> 00:09:30,800
the facilities checkout stage at

204
00:09:35,050 --> 00:09:33,350
Huntington Beach is now complete Douglas

205
00:09:36,550 --> 00:09:35,060
will use the stage for facilities

206
00:09:40,390 --> 00:09:36,560
checkout at Cape Kennedy after

207
00:09:42,280 --> 00:09:40,400
propellant loading tests components from

208
00:09:44,380 --> 00:09:42,290
the original facilities checkout stage

209
00:09:46,900 --> 00:09:44,390
have been reallocated as an s4b

210
00:09:48,550 --> 00:09:46,910
sectional mock-up the stage will be

211
00:09:52,540 --> 00:09:48,560
shipped to Marshall for use on an

212
00:09:54,090 --> 00:09:52,550
overall Saturn 1b simulator at the air

213
00:09:56,950 --> 00:09:54,100

research facility in Phoenix Arizona

214
00:09:59,560 --> 00:09:56,960
pressure testing of s4b propellant

215
00:10:02,670 --> 00:09:59,570
loading flexible hoses to failure was

216
00:10:05,320 --> 00:10:02,680
conducted this quarter for Douglas a

217
00:10:07,360 --> 00:10:05,330
Douglass's Santa Monica and huntington

218
00:10:10,510 --> 00:10:07,370
beach facilities fabrication and

219
00:10:14,140 --> 00:10:10,520
assembly of s 4 D 1 B flight stages is

220
00:10:18,070 --> 00:10:14,150
also well underway at Huntington Beach

221
00:10:20,170 --> 00:10:18,080
tank insulation of the s4 b1 b1 first

222
00:10:22,660 --> 00:10:20,180
flight stage was completed this quarter

223
00:10:24,280 --> 00:10:22,670
work was also underway at the end of the

224
00:10:28,170 --> 00:10:24,290
quarter an installation of electrical

225
00:10:30,220 --> 00:10:28,180
and mechanical systems on the stage

226
00:10:34,180 --> 00:10:30,230
application of liquid hydrogen tank

227
00:10:37,810 --> 00:10:34,190
insulation on s4 b1 b2 was completed in

228
00:10:39,460 --> 00:10:37,820
mid-december fabrication and assembly of

229
00:10:43,290 --> 00:10:39,470
the propellant tanks and thrust

230
00:10:45,790 --> 00:10:43,300
structures for s4 b1 b3 and 1b for

231
00:10:47,890 --> 00:10:45,800
continued during this quarter tank

232
00:10:50,730 --> 00:10:47,900
installation for both of the stages is

233
00:10:53,290 --> 00:10:50,740
scheduled to begin next quarter and

234
00:10:56,020 --> 00:10:53,300
rocket Dynes said a susanna test

235
00:10:58,090 --> 00:10:56,030
facility j2 engine preliminary flight

236
00:11:01,960 --> 00:10:58,100
rating tests were successfully completed

237
00:11:03,730 --> 00:11:01,970
this quarter with 18 starts and 2351

238
00:11:07,600 --> 00:11:03,740

seconds of firing time

239
00:11:09,970 --> 00:11:07,610
R&D engine Oh fifteen frt configuration

240
00:11:12,370 --> 00:11:09,980
accumulated forty starts and four

241
00:11:14,710 --> 00:11:12,380
thousand sixty three seconds including

242
00:11:17,290 --> 00:11:14,720
three for duration five hundred second

243
00:11:19,630 --> 00:11:17,300
firings evaluation of start condition

244
00:11:27,970 --> 00:11:19,640
limits on this engine indicates no

245
00:11:30,100 --> 00:11:27,980
problems with the start signals the j2

246
00:11:32,350 --> 00:11:30,110
engines restart capability was

247
00:11:35,320 --> 00:11:32,360
demonstrated during the report period an

248
00:11:39,070 --> 00:11:35,330
engine was fired for 165 seconds

249
00:11:43,600 --> 00:11:39,080
shutdown for 75 minutes restarted and

250
00:11:46,660 --> 00:11:43,610
run for 310 seconds at Santa Susana

251
00:11:49,210 --> 00:11:46,670
vertical test stands 3a is closed for

252
00:11:51,160 --> 00:11:49,220
renovation accessory improvements are

253
00:11:53,260 --> 00:11:51,170
expected to provide better engine start

254
00:11:55,930 --> 00:11:53,270
conditions and more effective altitude

255
00:12:00,820 --> 00:11:55,940
simulation for flight ratings the stands

256
00:12:03,280 --> 00:12:00,830
will be reactivated in January 1965 as a

257
00:12:05,920 --> 00:12:03,290
result of a j2 engine gas generator

258
00:12:08,020 --> 00:12:05,930
explosion last quarter Rocketdyne built

259
00:12:10,600 --> 00:12:08,030
on pneumatic control system mock-up

260
00:12:13,440 --> 00:12:10,610
including the gas generator to evaluate

261
00:12:16,720 --> 00:12:13,450
the problem and to determine a solution

262
00:12:18,430 --> 00:12:16,730
the j2 engine gas generator valve case

263
00:12:21,580 --> 00:12:18,440

was connected to the control pressure

264
00:12:23,590 --> 00:12:21,590
point then tested analysis of test data

265
00:12:25,570 --> 00:12:23,600
indicated that this method of assembly

266
00:12:28,300 --> 00:12:25,580
would be successful in preventing an

267
00:12:30,760 --> 00:12:28,310
explosion during this quarter at

268
00:12:32,620 --> 00:12:30,770
Rocketdyne flame resistance testing of

269
00:12:35,290 --> 00:12:32,630
the connector for the flexible armored

270
00:12:37,660 --> 00:12:35,300
harness used for all j2 electrical

271
00:12:40,540 --> 00:12:37,670
control and instrumentation wiring was

272
00:12:42,640 --> 00:12:40,550
conducted in this test the system which

273
00:12:45,100 --> 00:12:42,650
stood a time in temperature rate of 6

274
00:12:47,320 --> 00:12:45,110
and 1/2 minutes and 2,000 degrees

275
00:12:51,850 --> 00:12:47,330
Fahrenheit which exceeds normal

276
00:12:54,340 --> 00:12:51,860
requirements at MSFC construction of the

277
00:12:56,860 --> 00:12:54,350
j2 engine test facility is virtually

278
00:13:00,850 --> 00:12:56,870
complete unofficial use of the facility

279
00:13:03,220 --> 00:13:00,860
is expected in January vibration testing

280
00:13:05,830 --> 00:13:03,230
for evaluation of instrument unit cold

281
00:13:08,800 --> 00:13:05,840
plates manufactured by four vendors of

282
00:13:11,770 --> 00:13:08,810
cold North American solar aircraft and

283
00:13:14,170 --> 00:13:11,780
Toronto continued at MSFC during this

284
00:13:16,420 --> 00:13:14,180
period vendor selection will be made

285
00:13:18,130 --> 00:13:16,430
following completion of evaluation

286
00:13:20,510 --> 00:13:18,140
testing

287
00:13:22,460 --> 00:13:20,520
manufacture of the instrument unit to be

288
00:13:24,830 --> 00:13:22,470

used for vibration testing is now

289
00:13:26,870 --> 00:13:24,840
complete the unit was shipped November

290
00:13:28,870 --> 00:13:26,880
30th to the test site at Wiley

291
00:13:30,980 --> 00:13:28,880
laboratories Huntsville Alabama

292
00:13:33,200 --> 00:13:30,990
preparation of test facilities is

293
00:13:36,130 --> 00:13:33,210
continuing and vibration testing is

294
00:13:38,690 --> 00:13:36,140
scheduled to start next quarter

295
00:13:40,730 --> 00:13:38,700
negotiations of the Saturn 1b 5

296
00:13:42,440 --> 00:13:40,740
instrument unit mission contract is

297
00:13:45,650 --> 00:13:42,450
continuing with International Business

298
00:13:48,800 --> 00:13:45,660
Machines IBM personnel are currently at

299
00:13:50,540 --> 00:13:48,810
work in the Huntsville facility one of

300
00:13:52,820 --> 00:13:50,550
the activities in which IBM is

301
00:13:55,370 --> 00:13:52,830
participating is preparation for the

302
00:13:57,950 --> 00:13:55,380
flight systems test program a thermal

303
00:14:00,350 --> 00:13:57,960
vacuum test of the entire IU under

304
00:14:02,510 --> 00:14:00,360
simulated space flight conditions to be

305
00:14:04,280 --> 00:14:02,520
performed in an environmental chamber at

306
00:14:07,400 --> 00:14:04,290
Douglas aircrafts Huntington Beach

307
00:14:09,470 --> 00:14:07,410
facility to reduce costly duplication of

308
00:14:11,390 --> 00:14:09,480
testing facilities special test

309
00:14:13,640 --> 00:14:11,400
equipment which will be required both at

310
00:14:15,890 --> 00:14:13,650
Huntsville and Huntington Beach is being

311
00:14:20,150 --> 00:14:15,900
installed in trailers which can be air

312
00:14:22,250 --> 00:14:20,160
transported between these locations IBM

313
00:14:24,260 --> 00:14:22,260

personnel performed a circuitry analysis

314
00:14:26,930 --> 00:14:24,270
of the I use remote digital sub

315
00:14:29,030 --> 00:14:26,940
multiplexer breadboard circuit modules

316
00:14:31,370 --> 00:14:29,040
which duplicate production hardware in

317
00:14:33,800 --> 00:14:31,380
component utilization and location are

318
00:14:35,900 --> 00:14:33,810
tested in a temperature chamber to

319
00:14:38,090 --> 00:14:35,910
detect possible circuit pal functions

320
00:14:41,780 --> 00:14:38,100
resulting from components tolerance

321
00:14:44,240 --> 00:14:41,790
accumulations also in progress this

322
00:14:46,520 --> 00:14:44,250
quarter were design evaluation studies

323
00:14:49,730 --> 00:14:46,530
on a newly designed channel unit for the

324
00:14:52,280 --> 00:14:49,740
IU telemetry system experience gained in

325
00:14:55,160 --> 00:14:52,290
all these operations is expected to find

326
00:14:57,350 --> 00:14:55,170
valuable applications as IBM phases into

327
00:15:01,090 --> 00:14:57,360
complete responsibility for a mission

328
00:15:04,850 --> 00:15:01,100
qualified Saturn 1b five instrument unit

329
00:15:06,800 --> 00:15:04,860
at MSFC installation of equipment for

330
00:15:09,350 --> 00:15:06,810
the Saturn 1b system development

331
00:15:11,300 --> 00:15:09,360
breadboard facility continued the

332
00:15:13,340 --> 00:15:11,310
facility will be used for checkout of

333
00:15:16,400 --> 00:15:13,350
vehicle hardware and ground computer

334
00:15:18,410 --> 00:15:16,410
programs the first Saturn 1b test was

335
00:15:20,270 --> 00:15:18,420
performed recently to verify the

336
00:15:22,460 --> 00:15:20,280
compatibility of the ground support

337
00:15:27,200 --> 00:15:22,470
equipment and associated vehicle systems

338
00:15:30,630 --> 00:15:27,210

with the st 124 stabilized platform in

339
00:15:32,520 --> 00:15:30,640
summary October November and December

340
00:15:36,270 --> 00:15:32,530
months of noticeable achievements in the

341
00:15:38,430 --> 00:15:36,280
Saturn one and Saturn 1b programs sa9

342
00:15:41,310 --> 00:15:38,440
was being readied for its operational

343
00:15:43,920 --> 00:15:41,320
flight a significant highlight was the

344
00:15:48,510 --> 00:15:43,930
successful long duration hot firing of

345
00:15:51,590 --> 00:15:48,520
the s4b battleship stage j2 engine hot

346
00:15:54,000 --> 00:15:51,600
firings were highly successful

347
00:15:56,250 --> 00:15:54,010
accomplishments in the Saturn 1 program

348
00:15:59,130 --> 00:15:56,260
have broadened the outlook for an