



1
00:00:34,750 --> 00:00:32,950
on august 11 the s15 stage si u5 and

2
00:00:37,270 --> 00:00:34,760
payload for the fifth Saturn flight

3
00:00:40,209 --> 00:00:37,280
vehicle left Marshall aboard the barge

4
00:00:42,549 --> 00:00:40,219
promised the barge arrived at the Cape

5
00:00:45,280 --> 00:00:42,559
on August 21st and the booster was

6
00:00:48,069 --> 00:00:45,290
delivered to Launch Complex 37 B two

7
00:00:52,119 --> 00:00:48,079
days later erection was completed on

8
00:00:55,060 --> 00:00:52,129
August 26th booster fins and the s4

9
00:00:56,700 --> 00:00:55,070
spacer were installed the instrument

10
00:00:59,049 --> 00:00:56,710
unit was structurally modified

11
00:01:02,079 --> 00:00:59,059
transferred to the launch complex and

12
00:01:04,990 --> 00:01:02,089
mated pre-launch checks and tests are

13
00:01:09,219 --> 00:01:05,000

being performed on schedule no major

14

00:01:11,530 --> 00:01:09,229

problems have been encountered pre

15

00:01:14,080 --> 00:01:11,540

static check out of s4 five was

16

00:01:16,210 --> 00:01:14,090

completed early in August the first

17

00:01:18,819 --> 00:01:16,220

flight acceptance test attempted on

18

00:01:21,310 --> 00:01:18,829

August 5th was aborted at sixty three

19

00:01:24,399 --> 00:01:21,320

and six ten seconds due to an indication

20

00:01:26,740 --> 00:01:24,409

of fire in the engine area subsequent

21

00:01:28,980 --> 00:01:26,750

investigations indicated that the fire

22

00:01:32,230 --> 00:01:28,990

detection system had malfunctioned the

23

00:01:35,260 --> 00:01:32,240

second test conducted August 12th was

24

00:01:37,540 --> 00:01:35,270

successful preliminary review of test

25

00:01:40,180 --> 00:01:37,550

data indicated that all systems

26

00:01:43,480 --> 00:01:40,190

performed satisfactorily and all test

27

00:01:46,930 --> 00:01:43,490

objectives were achieved cutoff occurred

28

00:01:50,860 --> 00:01:46,940

with LOX depletion at 477 seconds as

29

00:01:52,780 --> 00:01:50,870

planned post firing inspection revealed

30

00:01:56,410 --> 00:01:52,790

no damage to the stand and support

31

00:01:58,840 --> 00:01:56,420

equipment following post static check

32

00:02:01,359 --> 00:01:58,850

out and retrofit the stage was removed

33

00:02:07,139 --> 00:02:01,369

from the stand on September 14th at

34

00:02:11,140 --> 00:02:07,149

preparation for shipment began on

35

00:02:13,000 --> 00:02:11,150

September 20th the s45 stage left sacto

36

00:02:16,089 --> 00:02:13,010

aboard the guppy which was recently

37

00:02:19,509 --> 00:02:16,099

certified under FAA regulations and

38

00:02:21,640 --> 00:02:19,519

arrived at the Cape on September 21st by

39

00:02:25,300 --> 00:02:21,650

mid October the stage will be mated to

40

00:02:31,830 --> 00:02:25,310

the SI 5 booster Saturn 5 is scheduled

41

00:02:34,449 --> 00:02:31,840

for launch late next quarter at

42

00:02:36,459 --> 00:02:34,459

Marshalls test laboratory dynamic

43

00:02:39,009 --> 00:02:36,469

testing of the s4 stage

44

00:02:41,860 --> 00:02:39,019

instrument unit Apollo spacecraft and

45

00:02:43,630 --> 00:02:41,870

launch escape system for the SI 5 config

46

00:02:47,920 --> 00:02:43,640

duration was successfully completed

47

00:02:50,680 --> 00:02:47,930

early in this quarter following removal

48

00:02:52,930 --> 00:02:50,690

of the s for stage instrument unit an

49

00:02:56,710 --> 00:02:52,940

Apollo boilerplate from the stand in mid

50

00:03:00,460 --> 00:02:56,720

July preparation for sa6 dynamic testing

51
00:03:02,680 --> 00:03:00,470
was begun on July 25th the booster was

52
00:03:06,550 --> 00:03:02,690
erected in the dynamic stand and the

53
00:03:08,140 --> 00:03:06,560
fans installed the s for stage the

54
00:03:10,089 --> 00:03:08,150
instrument unit and the Apollo

55
00:03:13,660 --> 00:03:10,099
boilerplate were erected within two

56
00:03:16,539 --> 00:03:13,670
weeks dynamic testing of the complete

57
00:03:20,289 --> 00:03:16,549
vehicle began on August 21st and is

58
00:03:22,690 --> 00:03:20,299
proceeding as planned during the quarter

59
00:03:25,150 --> 00:03:22,700
Fairchild Stratus continued development

60
00:03:28,530 --> 00:03:25,160
of the micrometeoroid satellite which

61
00:03:31,240 --> 00:03:28,540
will be placed in orbit by sa9 and si8

62
00:03:33,520 --> 00:03:31,250
design of the data satellite system was

63
00:03:35,949 --> 00:03:33,530

completed the function of this system

64

00:03:38,530 --> 00:03:35,959

will be to collect store and condition

65

00:03:42,149 --> 00:03:38,540

for transmission to earth micrometeoroid

66

00:03:45,430 --> 00:03:42,159

data collected by the satellite in

67

00:03:47,039 --> 00:03:45,440

mid-july the s4 dynamics facilities

68

00:03:49,390 --> 00:03:47,049

checkout vehicle was successfully

69

00:03:51,309 --> 00:03:49,400

transported aboard the guppy from the

70

00:04:02,190 --> 00:03:51,319

Atlantic Missile Range to the west coast

71

00:04:06,839 --> 00:04:04,350

the booster for the sixth Saturn one

72

00:04:08,839 --> 00:04:06,849

flight vehicle si six is presently

73

00:04:11,160 --> 00:04:08,849

undergoing post static checkout

74

00:04:13,620 --> 00:04:11,170

completion of checkout and remaining

75

00:04:16,110 --> 00:04:13,630

booster work including shipment have

76
00:04:19,110 --> 00:04:16,120
been revised to match the presents for

77
00:04:22,159 --> 00:04:19,120
six scheduled post static checkout is

78
00:04:24,390 --> 00:04:22,169
now scheduled for completion in October

79
00:04:26,520 --> 00:04:24,400
preparation for shipment is underway

80
00:04:28,980 --> 00:04:26,530
then the stage will be stored at

81
00:04:34,230 --> 00:04:28,990
Marshall until late December when Cape

82
00:04:35,909 --> 00:04:34,240
shipment will occur pre static checkout

83
00:04:38,879 --> 00:04:35,919
of the booster for the seventh flight

84
00:04:41,610 --> 00:04:38,889
vehicle sa seven was completed early in

85
00:04:44,280 --> 00:04:41,620
September the stage has now been erected

86
00:04:47,280 --> 00:04:44,290
in the static test stand and propellant

87
00:04:49,290 --> 00:04:47,290
loading operations are underway the

88
00:04:52,320 --> 00:04:49,300

first test firing is scheduled for the

89

00:04:54,330 --> 00:04:52,330

first of October at Marshalls

90

00:04:56,719 --> 00:04:54,340

manufacturing engineering laboratory

91

00:04:59,129 --> 00:04:56,729

assembly of the booster for sa9

92

00:05:03,680 --> 00:04:59,139

continued this quarter with engine

93

00:05:09,600 --> 00:05:06,990

at mizzou Chrysler Corporation is

94

00:05:12,719 --> 00:05:09,610

completing s18 tail area Phase two

95

00:05:14,610 --> 00:05:12,729

assembly an installation on board

96

00:05:17,070 --> 00:05:14,620

engines installation began late in

97

00:05:20,040 --> 00:05:17,080

August outboard engines are being

98

00:05:24,170 --> 00:05:20,050

modified stage assembly completion is

99

00:05:27,870 --> 00:05:24,180

expected September 30th as scheduled

100

00:05:30,420 --> 00:05:27,880

early in September s 110 fuel tanks were

101
00:05:33,210 --> 00:05:30,430
clustered all engines have been received

102
00:05:35,040 --> 00:05:33,220
and are undergoing modification stage

103
00:05:38,779 --> 00:05:35,050
assembly is expected to be completed

104
00:05:41,190 --> 00:05:38,789
late next quarter as scheduled

105
00:05:43,260 --> 00:05:41,200
fabrication of the second stage adapter

106
00:05:47,880 --> 00:05:43,270
and tail section assemblies is underway

107
00:05:52,170 --> 00:05:47,890
for s11 11 for 70-inch fuel tanks and

108
00:05:54,350 --> 00:05:52,180
the 105 inch LOX tank and 270 inch LOX

109
00:05:56,880 --> 00:05:54,360
tanks were received by mid-september

110
00:06:01,260 --> 00:05:56,890
tank clustering is expected to begin

111
00:06:03,659 --> 00:06:01,270
early next quarter at massú the first

112
00:06:06,060 --> 00:06:03,669
booster check out complex was activated

113
00:06:06,690 --> 00:06:06,070

this quarter delivery and check out of

114

00:06:09,210 --> 00:06:06,700

packard-bell

115

00:06:11,880 --> 00:06:09,220

automatic equipment is complete the

116

00:06:13,980 --> 00:06:11,890

complex consists of packard-bell 250

117

00:06:16,020 --> 00:06:13,990

general-purpose computers linked

118

00:06:19,020 --> 00:06:16,030

together by common memory element

119

00:06:21,420 --> 00:06:19,030

under a master/slave circuit stage

120

00:06:23,970 --> 00:06:21,430

hardware forms a closed-loop system

121

00:06:26,490 --> 00:06:23,980

which provides generation switching and

122

00:06:29,250 --> 00:06:26,500

response retrieval all under computer

123

00:06:32,490 --> 00:06:29,260

control the equipment is scheduled to

124

00:06:39,930 --> 00:06:32,500

become operational next quarter with s18

125

00:06:43,110 --> 00:06:39,940

checkout to begin in mid-october at

126
00:06:45,810 --> 00:06:43,120
santa monica retrofit and modification

127
00:06:48,420 --> 00:06:45,820
of the s4 sixth stage continued

128
00:06:50,370 --> 00:06:48,430
throughout the report period transfer of

129
00:06:52,440 --> 00:06:50,380
the stage to the test site was delayed

130
00:06:54,600 --> 00:06:52,450
so certain modifications could be

131
00:06:57,600 --> 00:06:54,610
performed at santa monica rather than

132
00:07:00,440 --> 00:06:57,610
its act o flight qualification testing

133
00:07:03,720 --> 00:07:00,450
is expected to begin during october s

134
00:07:06,000 --> 00:07:03,730
4/7 stage is behind schedule due to late

135
00:07:07,110 --> 00:07:06,010
engineering releases and qualification

136
00:07:10,560 --> 00:07:07,120
testing problems

137
00:07:12,720 --> 00:07:10,570
the s4 nine stage has been moved to the

138
00:07:15,140 --> 00:07:12,730

assembly area and preparations are

139

00:07:18,570 --> 00:07:15,150

underway for start of final installation

140

00:07:21,270 --> 00:07:18,580

start of s4 nine installation remains

141

00:07:25,940 --> 00:07:21,280

dependent on completion of s4 seven work

142

00:07:28,950 --> 00:07:25,950

scheduled and the assembly tower at

143

00:07:31,770 --> 00:07:28,960

Sacramento on August 21st the all

144

00:07:34,890 --> 00:07:31,780

systems s4 vehicle underwent two

145

00:07:37,410 --> 00:07:34,900

successful propellant loading tests test

146

00:07:39,720 --> 00:07:37,420

objectives included functional checks of

147

00:07:43,020 --> 00:07:39,730

the common bulkhead system propellant

148

00:07:46,140 --> 00:07:43,030

transfer system lh2 tanking system and

149

00:07:48,480 --> 00:07:46,150

fuel tank insulation post-test

150

00:07:51,930 --> 00:07:48,490

inspection revealed no structural stage

151
00:07:54,510 --> 00:07:51,940
damaged vehicle build-up to support hot

152
00:08:03,570 --> 00:07:54,520
firings has begun and is scheduled for

153
00:08:10,710 --> 00:08:08,040
at Marshall si u6 checkout is proceeding

154
00:08:13,320 --> 00:08:10,720
satisfactorily pressure and functional

155
00:08:16,250 --> 00:08:13,330
tests alignment electrical continuity

156
00:08:18,420 --> 00:08:16,260
and status checks have been completed

157
00:08:21,030 --> 00:08:18,430
electrical checkout was temporarily

158
00:08:23,730 --> 00:08:21,040
delayed due to modifications to bus

159
00:08:26,340 --> 00:08:23,740
distribution the instrument unit is

160
00:08:29,940 --> 00:08:26,350
ready for integrated tests with the s4

161
00:08:34,710 --> 00:08:29,950
interface and the s-1 system these tests

162
00:08:37,860 --> 00:08:34,720
will begin during October Assembly of

163
00:08:40,070 --> 00:08:37,870

SIU 7 began at Marshall on August 12th

164

00:08:42,450 --> 00:08:40,080

and is continuing satisfactorily

165

00:08:48,330 --> 00:08:42,460

assembly completion is scheduled for

166

00:08:50,580 --> 00:08:48,340

November on August 5th MSFC and Chrysler

167

00:08:54,030 --> 00:08:50,590

completed negotiations modifying the

168

00:08:57,540 --> 00:08:54,040

present s-1 contract to include s1 be

169

00:09:01,770 --> 00:08:57,550

stages the modified contract includes s1

170

00:09:05,100 --> 00:09:01,780

redesign to s1 B configuration delivery

171

00:09:09,510 --> 00:09:05,110

of 12s 1b stages and reduction of the

172

00:09:11,670 --> 00:09:09,520

required number of s1 stages to 8 early

173

00:09:15,330 --> 00:09:11,680

in July Marshall directed Chrysler to

174

00:09:16,860 --> 00:09:15,340

redesign s1 beef fins the eight s one

175

00:09:18,990 --> 00:09:16,870

stage stub fins

176

00:09:21,090 --> 00:09:19,000

did not provide an adequate vehicle

177

00:09:24,480 --> 00:09:21,100

stability margin for manned spacecraft

178

00:09:27,690 --> 00:09:24,490

manual abort the redesign provides the

179

00:09:34,080 --> 00:09:27,700

required vehicle stability and a 2500

180

00:09:37,800 --> 00:09:34,090

pound s1 B stage weight reduction the

181

00:09:38,700 --> 00:09:37,810

s4v Saturn 1b contract negotiations at

182

00:09:41,130 --> 00:09:38,710

Santa Monica

183

00:09:43,470 --> 00:09:41,140

were completed on August 6th the

184

00:09:45,390 --> 00:09:43,480

contract signed by Douglas on September

185

00:09:46,950 --> 00:09:45,400

10th has been submitted to NASA

186

00:09:49,410 --> 00:09:46,960

headquarters for approval of

187

00:09:55,290 --> 00:09:49,420

manufacturing and delivering of for R&D

188

00:09:56,880 --> 00:09:55,300

s4 b 1b stages construction of the s4 B

189

00:09:59,220 --> 00:09:56,890

Assembly Building at Douglass's

190

00:10:02,220 --> 00:09:59,230

Huntington Beach facility is continuing

191

00:10:04,290 --> 00:10:02,230

and tooling is being installed assembly

192

00:10:06,470 --> 00:10:04,300

tower foundations have been finished and

193

00:10:08,610 --> 00:10:06,480

structural steel is being erected

194

00:10:10,880 --> 00:10:08,620

Construction is behind schedule however

195

00:10:13,410 --> 00:10:10,890

because of delays and contract award

196

00:10:16,050 --> 00:10:13,420

present estimated start of stage

197

00:10:18,840 --> 00:10:16,060

assembly is November 30th

198

00:10:21,450 --> 00:10:18,850

at Sacto Douglas has successfully

199

00:10:23,550 --> 00:10:21,460

completed s4b battleship tank

200

00:10:26,700 --> 00:10:23,560

hydrostatic and mass spectrometer leak

201
00:10:28,860 --> 00:10:26,710
tests as well as tank calibration at the

202
00:10:30,750 --> 00:10:28,870
present time the tank is being prepared

203
00:10:32,730 --> 00:10:30,760
for installation of the internal

204
00:10:35,460 --> 00:10:32,740
insulation and is scheduled to be

205
00:10:39,570 --> 00:10:35,470
installed in beta test stand one by

206
00:10:42,240 --> 00:10:39,580
mid-november 1963 at santa monica the

207
00:10:44,820 --> 00:10:42,250
s4b dynamics stage fabrication and

208
00:10:47,370 --> 00:10:44,830
assembly is underway the common bulkhead

209
00:10:49,470 --> 00:10:47,380
aft dome assembly is being prepared for

210
00:10:52,470 --> 00:10:49,480
welding to the just completed tearing

211
00:10:54,450 --> 00:10:52,480
all common bulkhead forward dome segments

212
00:10:57,260 --> 00:10:54,460
have been fabricated and are presently

213
00:10:59,910 --> 00:10:57,270

being installed in the Meridian welder

214

00:11:02,010 --> 00:10:59,920

3lh two cylinder skins have been

215

00:11:04,920 --> 00:11:02,020

finished machined and are being formed

216

00:11:06,930 --> 00:11:04,930

at da C's Long Beach facility while two

217

00:11:07,350 --> 00:11:06,940

others are being rough machined at Santa

218

00:11:09,600 --> 00:11:07,360

Monica

219

00:11:11,340 --> 00:11:09,610

following milling machine adjustments

220

00:11:12,870 --> 00:11:11,350

the cylinder skins will be finished

221

00:11:19,650 --> 00:11:12,880

machined and forwarded to Long Beach

222

00:11:22,200 --> 00:11:19,660

performing construction of complex beta

223

00:11:23,010 --> 00:11:22,210

for s4b testing is continuing on

224

00:11:24,870 --> 00:11:23,020

schedule

225

00:11:27,090 --> 00:11:24,880

erection of test stand one

226

00:11:29,330 --> 00:11:27,100

superstructure has now been completed

227

00:11:32,520 --> 00:11:29,340

with the exception of the way bridge

228

00:11:34,320 --> 00:11:32,530

tests tan threes concrete foundation has

229

00:11:36,930 --> 00:11:34,330

been completed with direction of

230

00:11:39,120 --> 00:11:36,940

structural steel underway beta one

231

00:11:42,000 --> 00:11:39,130

instrumentation tunnel construction has