



1  
00:00:07,040 --> 00:00:10,470  
this week at nasa

2  
00:00:13,749 --> 00:00:11,910  
thanks for coming out and greeting the

3  
00:00:15,509 --> 00:00:13,759  
crew for what is the final final

4  
00:00:17,109 --> 00:00:15,519  
opportunity to do this at least in front

5  
00:00:18,630 --> 00:00:17,119  
of a space shuttle

6  
00:00:20,870 --> 00:00:18,640  
and i couldn't think of a better

7  
00:00:22,790 --> 00:00:20,880  
backdrop the final space shuttle crew

8  
00:00:25,910 --> 00:00:22,800  
spoke with reporters at the kennedy

9  
00:00:27,670 --> 00:00:25,920  
space center's launch pad 39a as they

10  
00:00:34,549 --> 00:00:27,680  
completed the terminal countdown

11  
00:00:39,990 --> 00:00:37,270  
the tcdt gives the crew and support

12  
00:00:41,510 --> 00:00:40,000  
personnel time to familiarize themselves

13  
00:00:45,350 --> 00:00:41,520

with equipment and procedures

14

00:00:47,510 --> 00:00:45,360  
surrounding an upcoming launch

15

00:00:49,430 --> 00:00:47,520  
the four veteran astronauts targeted to

16

00:00:52,310 --> 00:00:49,440  
lift off aboard atlantis for the

17

00:00:54,630 --> 00:00:52,320  
international space station on july 8th

18

00:00:56,790 --> 00:00:54,640  
on what will be the final mission of the

19

00:00:58,150 --> 00:00:56,800  
space shuttle era the space shuttle

20

00:00:59,910 --> 00:00:58,160  
program has been amazing what has done

21

00:01:02,150 --> 00:00:59,920  
all the great accomplishments and you

22

00:01:04,549 --> 00:01:02,160  
just don't want to let that momentum

23

00:01:06,469 --> 00:01:04,559  
down and so there is a lot of

24

00:01:09,830 --> 00:01:06,479  
a lot of pressure to do your job right

25

00:01:14,230 --> 00:01:12,070  
crosshairs are aligned and contact

26  
00:01:16,390 --> 00:01:14,240  
contact and capture confirmed the

27  
00:01:19,590 --> 00:01:16,400  
international space station welcomed the

28  
00:01:21,830 --> 00:01:19,600  
progress 43 on piloted cargo ship

29  
00:01:24,630 --> 00:01:21,840  
carrying close to three tons of food

30  
00:01:26,870 --> 00:01:24,640  
fuel and supplies for the six expedition

31  
00:01:30,550 --> 00:01:26,880  
28 crew members on board and we have

32  
00:01:32,710 --> 00:01:30,560  
separation confirmed 46 minutes past the

33  
00:01:35,270 --> 00:01:32,720  
hour that came several days after the

34  
00:01:37,510 --> 00:01:35,280  
unpiloted european space agency's

35  
00:01:40,390 --> 00:01:37,520  
johannes kepler automated transfer

36  
00:01:42,550 --> 00:01:40,400  
vehicle to undocked from the station

37  
00:01:45,190 --> 00:01:42,560  
atv2 had delivered several tons of

38  
00:01:48,469 --> 00:01:45,200

supplies to the crew in february a day

39

00:01:52,389 --> 00:01:48,479

after its undocking atv2 burned up on

40

00:01:58,230 --> 00:01:55,350

good morning i am

41

00:02:00,069 --> 00:01:58,240

nasa experts spoke at the annual space

42

00:02:02,389 --> 00:02:00,079

weather enterprise forum held at the

43

00:02:04,469 --> 00:02:02,399

national press club in washington

44

00:02:06,950 --> 00:02:04,479

space weather refers to conditions and

45

00:02:09,350 --> 00:02:06,960

events on the sun and near earth that

46

00:02:11,830 --> 00:02:09,360

can threaten human safety and hamper

47

00:02:14,309 --> 00:02:11,840

national security by impacting critical

48

00:02:16,790 --> 00:02:14,319

systems like electric power grids

49

00:02:18,869 --> 00:02:16,800

communications and satellite positioning

50

00:02:20,710 --> 00:02:18,879

and navigation systems collection of

51  
00:02:22,470 --> 00:02:20,720  
older crew members is a benefit rather

52  
00:02:24,309 --> 00:02:22,480  
than younger in terms of how much

53  
00:02:27,350 --> 00:02:24,319  
radiation they can be exposed to because

54  
00:02:30,710 --> 00:02:27,360  
of the the finite period at which time

55  
00:02:32,710 --> 00:02:30,720  
radiation might express itself dr john

56  
00:02:35,190 --> 00:02:32,720  
allen addressed the increased exposure

57  
00:02:37,750 --> 00:02:35,200  
to radiation faced by astronauts during

58  
00:02:39,430 --> 00:02:37,760  
adverse space weather conditions and

59  
00:02:41,990 --> 00:02:39,440  
what can be done to prepare them for

60  
00:02:44,150 --> 00:02:42,000  
such events the space weather enterprise

61  
00:02:46,949 --> 00:02:44,160  
brings together researchers policy

62  
00:02:49,430 --> 00:02:46,959  
makers forecasters and others to share

63  
00:02:52,150 --> 00:02:49,440

information and raise awareness of space

64

00:02:54,229 --> 00:02:52,160

weather and its effects on society

65

00:02:56,550 --> 00:02:54,239

space weather is predicted to increase

66

00:03:01,270 --> 00:02:56,560

as the sun reaches its forecasted peak

67

00:03:05,589 --> 00:03:03,270

when you were training to be astronauts

68

00:03:06,630 --> 00:03:05,599

no one had ever had that job description

69

00:03:12,070 --> 00:03:06,640

before

70

00:03:16,949 --> 00:03:14,070

everything

71

00:03:19,350 --> 00:03:16,959

every test you can imagine 50 years

72

00:03:21,750 --> 00:03:19,360

after the first human space flights

73

00:03:24,229 --> 00:03:21,760

nasa's two surviving mercury seven

74

00:03:26,309 --> 00:03:24,239

astronauts john glenn and scott

75

00:03:28,789 --> 00:03:26,319

carpenter sat down to talk about their

76  
00:03:31,030 --> 00:03:28,799  
experiences at the smithsonian national

77  
00:03:32,949 --> 00:03:31,040  
air and space museum in washington

78  
00:03:35,110 --> 00:03:32,959  
nasa's predecessor national advisory

79  
00:03:36,869 --> 00:03:35,120  
committee for aeronautics was doing some

80  
00:03:38,309 --> 00:03:36,879  
studies on a computer they had down at

81  
00:03:40,550 --> 00:03:38,319  
langley

82  
00:03:41,990 --> 00:03:40,560  
that were about orbital flight

83  
00:03:44,229 --> 00:03:42,000  
and they wanted someone to come down

84  
00:03:46,149 --> 00:03:44,239  
there and sort of go through some of

85  
00:03:47,110 --> 00:03:46,159  
that and i went down i volunteered for

86  
00:03:54,390 --> 00:03:47,120  
that

87  
00:03:57,270 --> 00:03:54,400  
this or i realized anyway the order said

88  
00:04:00,550 --> 00:03:57,280

report to washington

89

00:04:03,990 --> 00:04:00,560

at such and such a time do not discuss

90

00:04:07,670 --> 00:04:04,000

or speculate with anyone so i obeyed i

91

00:04:09,110 --> 00:04:07,680

did discuss and speculate with my wife

92

00:04:12,630 --> 00:04:09,120

however

93

00:04:15,589 --> 00:04:12,640

i went in to a briefing at the pentagon

94

00:04:20,150 --> 00:04:15,599

and that's how i heard about the nasa

95

00:04:22,710 --> 00:04:20,160

project on february 20th 1962 john glenn

96

00:04:24,950 --> 00:04:22,720

piloted his friendship 7 spacecraft on

97

00:04:25,990 --> 00:04:24,960

the united states first orbital mercury

98

00:04:29,270 --> 00:04:26,000

mission

99

00:04:31,990 --> 00:04:29,280

at age 77 glenn flew in space a second

100

00:04:35,510 --> 00:04:32,000

time in 1998 aboard space shuttle

101  
00:04:38,710 --> 00:04:35,520  
discovery on sts-95 after representing

102  
00:04:40,790 --> 00:04:38,720  
his native ohio in the u.s senate

103  
00:04:45,670 --> 00:04:40,800  
scott carpenter flew into space on may

104  
00:04:47,110 --> 00:04:45,680  
24 1962 aboard aurora 7 a three-orbit

105  
00:04:49,670 --> 00:04:47,120  
science mission

106  
00:04:52,230 --> 00:04:49,680  
the fourth american in space carpenter

107  
00:04:56,150 --> 00:04:52,240  
also performed important habitability

108  
00:04:58,230 --> 00:04:56,160  
research on the ocean floor

109  
00:05:00,870 --> 00:04:58,240  
the ames research center hosted a

110  
00:05:03,749 --> 00:05:00,880  
tribute to baruch barry blumberg the

111  
00:05:06,390 --> 00:05:03,759  
former nasa scientist who identified and

112  
00:05:08,150 --> 00:05:06,400  
developed the vaccine for the hepatitis

113  
00:05:10,150 --> 00:05:08,160

b virus

114

00:05:12,230 --> 00:05:10,160

blumberg died after suffering a heart

115

00:05:14,230 --> 00:05:12,240

attack earlier this year at the

116

00:05:16,790 --> 00:05:14,240

international lunar research park

117

00:05:20,469 --> 00:05:16,800

exploratory workshop at ames where he

118

00:05:20,479 --> 00:05:24,870

and now centerpieces

119

00:05:29,510 --> 00:05:27,590

a good idea rarely goes out of style

120

00:05:31,830 --> 00:05:29,520

just ask some of the firms developing

121

00:05:33,830 --> 00:05:31,840

next generation spacecraft

122

00:05:35,350 --> 00:05:33,840

sierra nevada one of four winners of

123

00:05:37,270 --> 00:05:35,360

second round funding from nasa's

124

00:05:39,590 --> 00:05:37,280

commercial crew development program

125

00:05:42,870 --> 00:05:39,600

based its dream chaser design

126  
00:05:44,390 --> 00:05:42,880  
on the hl 20 space taxi concept

127  
00:05:46,150 --> 00:05:44,400  
that idea was developed by nasa's

128  
00:05:47,270 --> 00:05:46,160  
langley research center in the 80s and

129  
00:05:49,110 --> 00:05:47,280  
90s

130  
00:05:51,270 --> 00:05:49,120  
company and nasa headquarters officials

131  
00:05:53,830 --> 00:05:51,280  
came to the center in hampton virginia

132  
00:05:57,110 --> 00:05:53,840  
to recognize those studies and langley's

133  
00:05:59,430 --> 00:05:57,120  
50-year history of lifting body research

134  
00:06:02,469 --> 00:05:59,440  
we're proud of the work that we at nasa

135  
00:06:03,749 --> 00:06:02,479  
did on hl20 on the lifting body concept

136  
00:06:05,990 --> 00:06:03,759  
and we're pleased

137  
00:06:07,430 --> 00:06:06,000  
that it's being utilized today we would

138  
00:06:09,110 --> 00:06:07,440

not be here i would not be at this

139

00:06:11,430 --> 00:06:09,120

podium if it wasn't for the great work

140

00:06:14,230 --> 00:06:11,440

that you did langley engineers devised

141

00:06:16,309 --> 00:06:14,240

an entire plan for the hl-20 they

142

00:06:18,469 --> 00:06:16,319

created pilot landing scenarios for

143

00:06:20,790 --> 00:06:18,479

flight simulators some of which are now

144

00:06:23,350 --> 00:06:20,800

adapted for newer facilities

145

00:06:25,590 --> 00:06:23,360

they tested designs in wind tunnels

146

00:06:28,150 --> 00:06:25,600

and even built a full-scale model with

147

00:06:29,430 --> 00:06:28,160

the help of universities to study crew

148

00:06:32,070 --> 00:06:29,440

challenges

149

00:06:33,749 --> 00:06:32,080

that model is at sierra nevada

150

00:06:36,469 --> 00:06:33,759

many of the researchers who gave birth

151

00:06:38,870 --> 00:06:36,479

to the hl 20 attended the recognition

152

00:06:40,550 --> 00:06:38,880

ceremony we really appreciate this

153

00:06:42,950 --> 00:06:40,560

opportunity to

154

00:06:43,830 --> 00:06:42,960

to get together again and

155

00:06:45,830 --> 00:06:43,840

the

156

00:06:48,390 --> 00:06:45,840

recognition that you provided us for a

157

00:06:50,390 --> 00:06:48,400

job that we were excited about

158

00:06:51,830 --> 00:06:50,400

we still are excited about and quite

159

00:06:53,270 --> 00:06:51,840

frankly i thought this day would never

160

00:06:55,189 --> 00:06:53,280

come

161

00:06:57,110 --> 00:06:55,199

also while in hampton nasa's deputy

162

00:06:59,430 --> 00:06:57,120

administrator lori garver and chief

163

00:07:01,270 --> 00:06:59,440

technologist bobby braun got the chance

164

00:07:03,029 --> 00:07:01,280

to see a new manufacturing technique

165

00:07:05,430 --> 00:07:03,039

developed at langley that could

166

00:07:11,990 --> 00:07:05,440

revolutionize the way aerospace parts

167

00:07:16,469 --> 00:07:14,469

with a blast of confetti center director

168

00:07:18,469 --> 00:07:16,479

lisa rowe and several elected officials

169

00:07:20,390 --> 00:07:18,479

cut the ribbon to celebrate the opening

170

00:07:22,550 --> 00:07:20,400

of the new green headquarters facility

171

00:07:24,230 --> 00:07:22,560

at the lainley research center the first

172

00:07:27,830 --> 00:07:24,240

new building constructed at langley in

173

00:07:30,870 --> 00:07:27,840

35 years it covers 79 000 square feet

174

00:07:32,870 --> 00:07:30,880

and houses more than 250 employees from

175

00:07:35,749 --> 00:07:32,880

six different center organizations

176  
00:07:39,589 --> 00:07:35,759  
today's ceremony and the building behind

177  
00:07:41,830 --> 00:07:39,599  
me dramatically signify a new langley

178  
00:07:44,469 --> 00:07:41,840  
and the completion of the first element

179  
00:07:46,150 --> 00:07:44,479  
in our revitalization plan the new

180  
00:07:48,070 --> 00:07:46,160  
structure uses some of the newest

181  
00:07:49,110 --> 00:07:48,080  
technology to reduce its impact on the

182  
00:07:51,270 --> 00:07:49,120  
environment

183  
00:07:53,990 --> 00:07:51,280  
its roof deflects heat and reduces storm

184  
00:07:56,309 --> 00:07:54,000  
water runoff and geothermal wells assist

185  
00:07:58,230 --> 00:07:56,319  
in heating and cooling all to achieve

186  
00:08:00,710 --> 00:07:58,240  
the highest rating by the u.s green

187  
00:08:01,909 --> 00:08:00,720  
building council these buildings will

188  
00:08:04,550 --> 00:08:01,919

stand

189

00:08:06,629 --> 00:08:04,560

as an icon in this community for that

190

00:08:08,950 --> 00:08:06,639

science for that technology for that

191

00:08:10,469 --> 00:08:08,960

development for what nasa does each and

192

00:08:12,790 --> 00:08:10,479

every day and for what it stands for

193

00:08:15,430 --> 00:08:12,800

going in the future so we're working to

194

00:08:17,589 --> 00:08:15,440

really design that laboratory the second

195

00:08:19,510 --> 00:08:17,599

element in langley's revitalization plan

196

00:08:21,670 --> 00:08:19,520

an integrated services building that

197

00:08:24,070 --> 00:08:21,680

will house a new cafeteria conference

198

00:08:30,309 --> 00:08:24,080

center and additional office spaces will

199

00:08:34,310 --> 00:08:32,230

walt's flight facility became rocket

200

00:08:36,630 --> 00:08:34,320

university for seven days in june as

201  
00:08:38,389 --> 00:08:36,640  
more than 120 high school educators and

202  
00:08:40,550 --> 00:08:38,399  
university students and instructors

203  
00:08:42,630 --> 00:08:40,560  
spent a week learning about rocketry and

204  
00:08:44,710 --> 00:08:42,640  
conducting science experiments in space

205  
00:08:47,350 --> 00:08:44,720  
we've learned a great deal there's a lot

206  
00:08:49,269 --> 00:08:47,360  
more to rockets than i ever dreamed of

207  
00:08:51,350 --> 00:08:49,279  
we've gotten to actually build rockets

208  
00:08:53,269 --> 00:08:51,360  
hands-on make our own we've got to shoot

209  
00:08:55,350 --> 00:08:53,279  
them off a lot of nice people talk to

210  
00:08:57,430 --> 00:08:55,360  
and learn how they do things at other

211  
00:08:59,670 --> 00:08:57,440  
schools and and what their specialties

212  
00:09:01,590 --> 00:08:59,680  
are lying on this nasa terrier improved

213  
00:09:03,509 --> 00:09:01,600

orion suborbital sounding rocket were

214

00:09:05,509 --> 00:09:03,519

experiments constructed by the student

215

00:09:06,870 --> 00:09:05,519

participants you get to do this part

216

00:09:08,870 --> 00:09:06,880

i'll do the next part later i mean it

217

00:09:11,030 --> 00:09:08,880

was a lot of teamwork that was involved

218

00:09:11,910 --> 00:09:11,040

for something that was so little three

219

00:09:17,670 --> 00:09:11,920

two

220

00:09:21,670 --> 00:09:19,509

after launch and payload recovery the

221

00:09:23,910 --> 00:09:21,680

participants conducted preliminary data

222

00:09:26,230 --> 00:09:23,920

analysis and discussed their results it

223

00:09:28,070 --> 00:09:26,240

was a great day for a launch we had

224

00:09:29,430 --> 00:09:28,080

perfect weather you could see everything

225

00:09:32,550 --> 00:09:29,440

clearly

226

00:09:34,150 --> 00:09:32,560

great skies great winds lots of people

227

00:09:35,670 --> 00:09:34,160

lots of excitement

228

00:09:37,670 --> 00:09:35,680

one of the best launches i've ever seen

229

00:09:39,750 --> 00:09:37,680

the annual week-long workshop is

230

00:09:42,230 --> 00:09:39,760

supported by nasa's sounding rocket

231

00:09:44,310 --> 00:09:42,240

program the office of education and the

232

00:09:46,070 --> 00:09:44,320

agency's national space grant college

233

00:09:47,829 --> 00:09:46,080

and fellowship program in partnership

234

00:09:50,710 --> 00:09:47,839

with the space grant consortia of

235

00:09:52,550 --> 00:09:50,720

colorado and virginia this experience

236

00:09:56,310 --> 00:09:52,560

absolutely incredible

237

00:09:58,710 --> 00:09:57,590

we have three main engines up and

238

00:09:59,750 --> 00:09:58,720

running

239

00:10:00,790 --> 00:09:59,760

two

240

00:10:02,550 --> 00:10:00,800

one

241

00:10:04,630 --> 00:10:02,560

and liftoff of the space shuttle

242

00:10:06,630 --> 00:10:04,640

atlantis on a mission that will herald a

243

00:10:11,350 --> 00:10:06,640

new day of international cooperation in

244

00:10:13,829 --> 00:10:11,360

space sixteen years ago on june 27 1995

245

00:10:15,509 --> 00:10:13,839

shuttle atlantis became the 100th u.s

246

00:10:17,990 --> 00:10:15,519

human space flight launch from cape

247

00:10:20,550 --> 00:10:18,000

canaveral embarking on a mission that

248

00:10:22,550 --> 00:10:20,560

would link it with mir for the first u.s

249

00:10:23,870 --> 00:10:22,560

space shuttle russian space station

250

00:10:26,630 --> 00:10:23,880

docking

251  
00:10:29,430 --> 00:10:26,640  
sts-71 would also mark the first

252  
00:10:31,990 --> 00:10:29,440  
on-orbit changeout of shuttle crew

253  
00:10:33,750 --> 00:10:32,000  
atlantis commander hoot gibson and crew

254  
00:10:37,110 --> 00:10:33,760  
brought with them the members of the new

255  
00:10:39,670 --> 00:10:37,120  
mir 19 mission anatoly solovyev and

256  
00:10:42,470 --> 00:10:39,680  
nikolai boudari and would return home

257  
00:10:45,670 --> 00:10:42,480  
with the mir 18 crew of norm thagard

258  
00:10:48,230 --> 00:10:45,680  
vladimir desjarov and gennady streckler

259  
00:10:50,630 --> 00:10:48,240  
over a five-day period astronauts and

260  
00:10:52,949 --> 00:10:50,640  
cosmonauts conducted joint biomedical

261  
00:10:55,670 --> 00:10:52,959  
and scientific investigations

262  
00:10:57,990 --> 00:10:55,680  
atlantis undocked on the 4th of july and

263  
00:11:00,310 --> 00:10:58,000

landed back at the kennedy space center

264

00:11:03,190 --> 00:11:00,320

on july 7th

265

00:11:05,430 --> 00:11:03,200

and that's this week at nasa for more on