
AUTO
DAY
170
180
190
140
232
30460
13.0
0.63
2.4
10:46:34
130
MENU
125
BRT
CONT
I/P
ADF
OFF
VOL
COMM I
5
CLR
0
ENT
A/P
IFF
TCN
ILS
D/L
BCN
ENGINE

1
00:00:07,040 --> 00:00:16,070
this week at nasa

2
00:00:21,269 --> 00:00:18,710
the orion crew capsule as it completed

3
00:00:23,429 --> 00:00:21,279
the last in a series of water drop tests

4
00:00:24,950 --> 00:00:23,439
at the langley research center's hydro

5
00:00:27,750 --> 00:00:24,960
impact basin

6
00:00:30,070 --> 00:00:27,760
testing of the 18 thousand pound capsule

7
00:00:32,950 --> 00:00:30,080
which began last summer simulates

8
00:00:35,190 --> 00:00:32,960
various water landing scenarios this one

9
00:00:37,910 --> 00:00:35,200
represented a worst case landing in

10
00:00:40,310 --> 00:00:37,920
rough seas after a launch aboard the

11
00:00:42,869 --> 00:00:40,320
test impact condition simulated all

12
00:00:45,830 --> 00:00:42,879
parachutes being deployed as the capsule

13
00:00:48,389 --> 00:00:45,840

traveling about 47 miles per hour hits

14
00:00:50,549 --> 00:00:48,399
the water at an extreme angle before

15
00:00:52,310 --> 00:00:50,559
rolling over into what's called the

16
00:00:54,790 --> 00:00:52,320
stable two position

17
00:00:57,510 --> 00:00:54,800
as with the apollo capsule orion will

18
00:00:59,910 --> 00:00:57,520
have an onboard uprighting system this

19
00:01:02,630 --> 00:00:59,920
type of scenario is highly unlikely

20
00:01:05,270 --> 00:01:02,640
during actual vehicle operation but is

21
00:01:07,830 --> 00:01:05,280
essential for the orion's validation as

22
00:01:10,390 --> 00:01:07,840
nasa's next steep space exploration

23
00:01:13,190 --> 00:01:10,400
vehicle to carry astronauts beyond low

24
00:01:14,710 --> 00:01:13,200
earth orbit

25
00:01:16,469 --> 00:01:14,720
at this time the

26
00:01:20,390 --> 00:01:16,479
reconfiguration of the spacecraft for

27
00:01:22,950 --> 00:01:20,400
the post loi configuration has begun

28
00:01:25,429 --> 00:01:22,960
and that will continue with rearing of

29
00:01:28,469 --> 00:01:25,439
fall protection the project team at the

30
00:01:30,950 --> 00:01:28,479
jet propulsion lab reacts to telemetry

31
00:01:33,429 --> 00:01:30,960
reporting that the first of nasa's twin

32
00:01:34,550 --> 00:01:33,439
grail spacecraft has achieved lunar

33
00:01:36,870 --> 00:01:34,560
orbit

34
00:01:39,510 --> 00:01:36,880
the gravity recovery and interior

35
00:01:42,870 --> 00:01:39,520
laboratory missions a spacecraft reached

36
00:01:45,910 --> 00:01:42,880
its near polar elliptical orbit at 5 pm

37
00:01:50,630 --> 00:01:45,920
eastern new year's eve followed by grail

38
00:01:52,950 --> 00:01:50,640

b on new year's day at 5 43 pm eastern

39
00:01:54,389 --> 00:01:52,960
grail data will enable scientists to

40
00:01:56,950 --> 00:01:54,399
better understand the moon's

41
00:01:58,870 --> 00:01:56,960
gravitational field as well as what goes

42
00:02:01,429 --> 00:01:58,880
on below its surface

43
00:02:03,749 --> 00:02:01,439
those crest to core data are also

44
00:02:05,990 --> 00:02:03,759
expected to increase our knowledge about

45
00:02:08,469 --> 00:02:06,000
how earth and its rocky neighbors in the

46
00:02:15,110 --> 00:02:08,479
inner solar system developed into the

47
00:02:19,670 --> 00:02:17,430
this year's season of first for

48
00:02:22,470 --> 00:02:19,680
inspiration and recognition of science

49
00:02:30,390 --> 00:02:22,480
and technology kicks off this week with

50
00:02:34,869 --> 00:02:32,710
some 60 000 high school students will

51
00:02:37,589 --> 00:02:34,879
buy for college scholarships using

52
00:02:39,110 --> 00:02:37,599
robots built in six weeks from a common

53
00:02:41,589 --> 00:02:39,120
kit of parts

54
00:02:43,430 --> 00:02:41,599
the finalists of the 2400 competing

55
00:02:45,830 --> 00:02:43,440
teams will meet at the first

56
00:02:50,150 --> 00:02:45,840
championships in april at the edward

57
00:02:52,550 --> 00:02:50,160
jones dome in st louis

58
00:02:54,630 --> 00:02:52,560
leaders from more than 70 aerospace

59
00:02:57,589 --> 00:02:54,640
companies attended the space launch

60
00:03:00,309 --> 00:02:57,599
system's advanced booster industry day

61
00:03:02,309 --> 00:03:00,319
held at the marshall space flight center

62
00:03:04,390 --> 00:03:02,319
nasa is seeking proposals from the

63
00:03:07,110 --> 00:03:04,400

aerospace industry for engineering

64
00:03:09,830 --> 00:03:07,120
demonstrations and or strategies to

65
00:03:11,270 --> 00:03:09,840
reduce risk on an advanced booster for

66
00:03:13,190 --> 00:03:11,280
the sls

67
00:03:15,910 --> 00:03:13,200
marshall is leading the design and

68
00:03:18,390 --> 00:03:15,920
development of the sls the new heavy

69
00:03:20,790 --> 00:03:18,400
lift launch vehicle that'll propel the

70
00:03:25,589 --> 00:03:20,800
orion crew vehicle on new missions of

71
00:03:30,710 --> 00:03:27,990
in case you missed it here's your chance

72
00:03:33,030 --> 00:03:30,720
to marvel at the unprecedented imagery

73
00:03:35,910 --> 00:03:33,040
of comet lovejoy captured in late

74
00:03:37,750 --> 00:03:35,920
december by expedition 30 commander dan

75
00:03:39,350 --> 00:03:37,760
burbank from the international space

76
00:03:41,430 --> 00:03:39,360
station's cupola

77
00:03:44,630 --> 00:03:41,440
burbank described what he saw in an

78
00:03:46,550 --> 00:03:44,640
interview with detroit's wdiv tv but

79
00:03:47,830 --> 00:03:46,560
it's probably the most spectacular thing

80
00:03:49,110 --> 00:03:47,840
you can imagine and from the vantage

81
00:03:50,550 --> 00:03:49,120
point of space

82
00:03:51,910 --> 00:03:50,560
it's different than seeing it from

83
00:03:55,830 --> 00:03:51,920
planet earth because there's no

84
00:03:59,270 --> 00:03:57,509
nasa's dryden flight research center

85
00:04:01,429 --> 00:03:59,280
recently completed a study at edwards

86
00:04:03,030 --> 00:04:01,439
air force base in southern california

87
00:04:05,110 --> 00:04:03,040
designed to gauge public attitudes

88
00:04:08,949 --> 00:04:05,120

towards sonic booms

89
00:04:12,309 --> 00:04:08,959
rolling in three two one now

90
00:04:16,629 --> 00:04:14,470
the waveforms and sonic boom perception

91
00:04:18,310 --> 00:04:16,639
and response project gather data from

92
00:04:20,390 --> 00:04:18,320
more than a hundred volunteer edwards

93
00:04:23,670 --> 00:04:20,400
residents about their reactions to low

94
00:04:25,670 --> 00:04:23,680
noise booms created by nasa f a 18 test

95
00:04:27,350 --> 00:04:25,680
aircraft with whisper we're trying to

96
00:04:30,070 --> 00:04:27,360
get a read back from the people on the

97
00:04:32,310 --> 00:04:30,080
ground to some kind of annoyance level

98
00:04:35,189 --> 00:04:32,320
how annoying was this low boom how

99
00:04:35,990 --> 00:04:35,199
annoying was this more moderate

100
00:04:37,830 --> 00:04:36,000
boom

101
00:04:39,830 --> 00:04:37,840
nasa and industry are working on

102
00:04:41,590 --> 00:04:39,840
technology that will reduce the noise

103
00:04:44,390 --> 00:04:41,600
and annoyance associated with sonic

104
00:04:46,230 --> 00:04:44,400
booms so they won't disturb the piece

105
00:04:48,070 --> 00:04:46,240
aviation and governmental authorities

106
00:04:50,150 --> 00:04:48,080
may then consider lifting current

107
00:04:52,390 --> 00:04:50,160
prohibitions on aircraft flying over

108
00:04:54,629 --> 00:04:52,400
land at supersonic speeds

109
00:04:56,710 --> 00:04:54,639
currently we're limited by overland

110
00:04:59,189 --> 00:04:56,720
sonic booms there's no regulation

111
00:05:01,350 --> 00:04:59,199
stipulating what kind of sonic booms can

112
00:05:03,909 --> 00:05:01,360
be projected over land right now the

113
00:05:05,670 --> 00:05:03,919

rule is no sonic boom's overlaying

114
00:05:07,430 --> 00:05:05,680
data from the recent study will be a

115
00:05:09,270 --> 00:05:07,440
valuable guide for future public

116
00:05:12,550 --> 00:05:09,280
perception studies in communities that

117
00:05:13,749 --> 00:05:12,560
normally don't experience sonic booms

118
00:05:14,950 --> 00:05:13,759
people here at the edwards air force

119
00:05:16,310 --> 00:05:14,960
base they're obviously very familiar

120
00:05:18,150 --> 00:05:16,320
with sonic booms eventually we want to

121
00:05:20,150 --> 00:05:18,160
take this to a broader level where

122
00:05:21,590 --> 00:05:20,160
people that's never heard of sonic boom

123
00:05:22,710 --> 00:05:21,600
so first we need to figure out how to do

124
00:05:24,310 --> 00:05:22,720
that

125
00:05:25,990 --> 00:05:24,320
the research was sponsored by the

126
00:05:27,110 --> 00:05:26,000
supersonics project and nasa's

127
00:05:29,189 --> 00:05:27,120
aeronautics research mission

128
00:05:31,749 --> 00:05:29,199
directorate's fundamental aeronautics

129
00:05:38,469 --> 00:05:34,870
and liftoff of the atlas 5 with

130
00:05:41,430 --> 00:05:38,479
curiosity see nasa's car-sized curiosity

131
00:05:43,350 --> 00:05:41,440
rover may be on cruise control to mars

132
00:05:45,909 --> 00:05:43,360
but that doesn't mean it's not working

133
00:05:48,310 --> 00:05:45,919
hard along the eight-month-long trip

134
00:05:51,270 --> 00:05:48,320
the mars science laboratory rover is

135
00:05:54,710 --> 00:05:51,280
busy monitoring space radiation with its

136
00:05:56,629 --> 00:05:54,720
radiation assessment detector or rad

137
00:05:59,110 --> 00:05:56,639
the instrument detects high energy

138
00:05:59,909 --> 00:05:59,120

atomic and subatomic particles from the

139
00:06:02,710 --> 00:05:59,919
sun

140
00:06:05,350 --> 00:06:02,720
distant supernovas and other sources

141
00:06:07,510 --> 00:06:05,360
that might impact humans on future long

142
00:06:09,110 --> 00:06:07,520
duration spaceflights

143
00:06:12,070 --> 00:06:09,120
so measuring the radiation environment

144
00:06:13,990 --> 00:06:12,080
in space is not new but what is new is

145
00:06:15,990 --> 00:06:14,000
that rad will measure for the first time

146
00:06:18,710 --> 00:06:16,000
the radiation environment inside the

147
00:06:20,950 --> 00:06:18,720
spacecraft which will be very similar to

148
00:06:23,350 --> 00:06:20,960
the environment that a future astronaut

149
00:06:27,830 --> 00:06:23,360
will see inside their spacecraft on a

150
00:06:32,150 --> 00:06:29,909
officials from nasa's johnson space

151
00:06:34,230 --> 00:06:32,160
center and texas a m university signed

152
00:06:35,909 --> 00:06:34,240
an agreement certifying the transfer of

153
00:06:38,309 --> 00:06:35,919
the space shuttle launch and landing

154
00:06:40,629 --> 00:06:38,319
trainer the shuttle motion simulator to

155
00:06:43,749 --> 00:06:40,639
texas a m this isn't going to go to

156
00:06:46,390 --> 00:06:43,759
texas a m just as a museum piece

157
00:06:47,830 --> 00:06:46,400
it's going to be able to be used to be

158
00:06:52,390 --> 00:06:47,840
educational

159
00:06:54,390 --> 00:06:52,400
facilities for future generations of

160
00:06:56,950 --> 00:06:54,400
engineers we're counting on all those

161
00:06:59,430 --> 00:06:56,960
bright minds those young people with the

162
00:07:01,430 --> 00:06:59,440
big ideas and the dreams and the

163
00:07:03,749 --> 00:07:01,440

willingness to work hard to turn them

164
00:07:05,670 --> 00:07:03,759
into realities we're counting on it and

165
00:07:08,550 --> 00:07:05,680
looking forward to it the shuttle motion

166
00:07:12,029 --> 00:07:08,560
simulator began operations at jsc in

167
00:07:22,390 --> 00:07:12,039
1977 and was used in training for all

168
00:07:35,430 --> 00:07:25,110
installation of the sms at texas a m

169
00:07:40,070 --> 00:07:37,749
nasa astronaut barry butch wilmore

170
00:07:42,469 --> 00:07:40,080
celebrated the holidays by participating

171
00:07:44,629 --> 00:07:42,479
in pregame ceremonies of the clash of

172
00:07:46,790 --> 00:07:44,639
his hometown tennessee titans with the

173
00:07:54,309 --> 00:07:46,800
visiting jacksonville jaguars in

174
00:07:59,430 --> 00:07:56,550
wilmore who was selected as a pilot by

175
00:08:02,150 --> 00:07:59,440
nasa in 2000 was honored with this

176
00:08:03,909 --> 00:08:02,160
jumbotron video at lp field

177
00:08:06,390 --> 00:08:03,919
wilmore made other appearances in the

178
00:08:08,629 --> 00:08:06,400
nashville area to spread holiday cheer

179
00:08:10,390 --> 00:08:08,639
and share his experiences aboard space

180
00:08:12,110 --> 00:08:10,400
shuttle atlantis and the international

181
00:08:17,029 --> 00:08:12,120
space station on

182
00:08:20,469 --> 00:08:19,430
we have main engines up and running

183
00:08:21,510 --> 00:08:20,479
three

184
00:08:22,629 --> 00:08:21,520
two

185
00:08:24,790 --> 00:08:22,639
one

186
00:08:27,029 --> 00:08:24,800
booster ignition and liftoff of the

187
00:08:30,309 --> 00:08:27,039
spatial atlantis on a 10-day mission to

188
00:08:34,149 --> 00:08:30,319

dock with russia's orbiting outpost

189
00:08:36,230 --> 00:08:34,159
15 years ago on january 12 1997

190
00:08:38,070 --> 00:08:36,240
the crew of space shuttle atlantis

191
00:08:38,829 --> 00:08:38,080
launched from the kennedy space center

192
00:08:40,469 --> 00:08:38,839
on

193
00:08:43,589 --> 00:08:40,479
sts-81

194
00:08:45,829 --> 00:08:43,599
about 66 hours later atlantis made the

195
00:08:49,590 --> 00:08:45,839
fifth docking of a space shuttle to the

196
00:08:51,750 --> 00:08:49,600
mir space station three two one

197
00:08:53,269 --> 00:08:51,760
capture light

198
00:08:55,910 --> 00:08:53,279
capture

199
00:08:58,790 --> 00:08:55,920
during five days of mated operations

200
00:09:01,110 --> 00:08:58,800
nearly six thousand pounds of water u.s

201
00:09:03,190 --> 00:09:01,120
science equipment and russian logistical

202
00:09:05,470 --> 00:09:03,200
equipment were transferred from atlantis

203
00:09:08,230 --> 00:09:05,480
to the russian complex

204
00:09:11,829 --> 00:09:08,240
sts-81's 10-day mission brought home

205
00:09:13,670 --> 00:09:11,839
astronaut john blaha after a 118-day

206
00:09:16,310 --> 00:09:13,680
stay aboard mir

207
00:09:19,110 --> 00:09:16,320
among the seven-person atlantis crew was

208
00:09:21,509 --> 00:09:19,120
mission specialist john grunsfeld who's

209
00:09:24,710 --> 00:09:21,519
just taken over as the new head of

210
00:09:27,030 --> 00:09:24,720
nasa's science mission directorate

211
00:09:29,190 --> 00:09:27,040
and that's this week at nasa