1
00:00:00,989 --> 00:00:07,889
2011: a year of scientific discovery, technological innovation, and new

2
00:00:07,889 --> 00:00:10,910
destinations for exploration.

3
00:00:10,910 --> 00:00:14,629
That was “This Year at NASA.”

4
00:00:14,629 --> 00:00:26,130
2011 was a year of transition for human exploration of space.

5
00:00:26,130 --> 00:00:29,099
With the Dec. 23 arrival at the International Space Station of the remaining

6
00:00:29,099 --> 00:00:34,660
Expedition 30 crew members, the orbiting complex continued along its new path

7
00:00:34,660 --> 00:00:41,900
to full utilization as the world’s only laboratory in microgravity.

8
00:00:41,900 --> 00:00:46,720
The three new members of the Expedition 27 crew are busy making the International

9
00:00:46,720 --> 00:00:50,800
Space Station their new home for the next five months.

10
00:00:50,800 --> 00:00:55,430
Flight engineers Alexander Samokutyaev, Andrey Borisenko and Ron Garan

11
00:00:55,430 --> 00:01:00,070

arrived at the station in their Soyuz
spacecraft following a successful journey

12
00:01:00,070 --> 00:01:05,600
from the Baikonur Cosmodrome in
Kazakhstan.

13
00:01:05,600 --> 00:01:10,119
Cosmonauts Sergei Volkov and Alexander Samokutyaev
conducted a six-hour

14
00:01:10,119 --> 00:01:15,399
spacewalk to continue outfitting the Russian
segment of the International Space Station.

15
00:01:15,399 --> 00:01:20,700
The Expedition 28 Flight Engineers also installed
laser communications equipment and

16
00:01:20,700 --> 00:01:24,509
replaced experiments on the Zvezda service
module.

17
00:01:24,509 --> 00:01:29,119
“Ron Garan flashing a big smile as he’s
extracted…”

18
00:01:29,119 --> 00:01:34,520
The Soyuz spacecraft carrying NASA astronaut
Ron Garan and his fellow Expedition 28

19
00:01:34,520 --> 00:01:45,060
flight engineers returned safely to Earth
with a landing on the steppe of Kazakhstan.

20
00:01:45,060 --> 00:01:50,159
The International Space Station Program Office
at the Johnson Space Center partnered

21
00:01:50,159 --> 00:01:54,939

with the Glenn Research Center to highlight
the unique research opportunities offered

22
00:01:54,939 --> 00:01:58,409
by
the world’s laboratory in microgravity.

23
00:01:58,409 --> 00:02:03,829
Held in Cleveland at the Great Lakes Science
Center, this "Destination Station" forum noted

24
00:02:03,829 --> 00:02:08,869
the accomplishments of the ISS National
Laboratory, and promoted future opportunities

25
00:02:08,869 --> 00:02:15,570
for commercial, academic and
government research and technology development.

26
00:02:15,570 --> 00:02:21,690
Full utilization of the ISS could only be
realized after the final flights of Discovery…

27
00:02:21,690 --> 00:02:23,350
Endeavour… and Atlantis.

28
00:02:23,350 --> 00:02:26,640
“Assembly Complete.”The last great contribution
of

29
00:02:26,640 --> 00:02:31,290
many by the space shuttle in more than thirty
years of service to NASA and

30
00:02:31,290 --> 00:02:32,290
humankind.

31
00:02:32,290 --> 00:02:37,420
“Go for main engine start.

32
00:02:37,420 --> 00:02:40,360
We have main engine start…

33
00:02:40,360 --> 00:02:48,910
2-1, booster ignition, and the
final liftoff of Discovery; a tribute to the

34
00:02:48,910 --> 00:02:51,920
dedication, hard work and pride of America's
space shuttle team.

35
00:02:51,920 --> 00:02:53,140
The shuttle has cleared the tower."

36
00:02:53,140 --> 00:02:58,710
In the late afternoon of Feb. 24, shuttle
Discovery took off on its final mission into

37
00:02:58,710 --> 00:03:03,270
space,
to carry STS-133 crew members Commander Steven

38
00:03:03,270 --> 00:03:08,190
Lindsey, Pilot Eric Boe and
Mission Specialists Alvin Drew, Mike Barratt,

39
00:03:08,190 --> 00:03:12,270
Steve Bowen and Nicole Stott to the
International Space Station.

40
00:03:12,270 --> 00:03:16,000
This 35th shuttle mission to the ISS delivers
the Permanent

41
00:03:16,000 --> 00:03:21,700
Multipurpose Module, the Express Logistics
Carrier 4, and Robonaut 2, the first

42
00:03:21,700 --> 00:03:24,370

dexterous humanoid robot in space.

43
00:03:24,370 --> 00:03:26,890
R2 will become a permanent station resident.

44
00:03:26,890 --> 00:03:32,420
“Are you guys making him do chores up there
– washing the dishes or something or

45
00:03:32,420 --> 00:03:33,830
does he have more exciting jobs?”

46
00:03:33,830 --> 00:03:39,040
“He’s still in packing foam so we hope
to get him out shortly so it’s going to

47
00:03:39,040 --> 00:03:41,630
be fun to see
how he works.”

48
00:03:41,630 --> 00:03:45,470
“He’s still in packing foam?

49
00:03:45,470 --> 00:03:51,170
Come on guys, he flew all that way and you
haven’t

50
00:03:51,170 --> 00:03:52,170
unpacked him?”

51
00:03:52,170 --> 00:03:57,020
“Yeah the poor guy has been in foam for
about four months … every once in a while

52
00:03:57,020 --> 00:03:59,250
we
hear some scratching sounds from inside.”

53
00:03:59,250 --> 00:04:10,950

“2, 1 and liftoff of the final launch of
Endeavour – expanding our knowledge, expanding

54
00:04:10,950 --> 00:04:13,800
our lives in space.”

55
00:04:13,800 --> 00:04:17,400
Space shuttle Endeavour lifted off Monday
from the Kennedy Space Center for the

56
00:04:17,400 --> 00:04:21,470
International Space Station and STS-134.

57
00:04:21,470 --> 00:04:25,879
Commander Mark Kelly and his five
crewmates began their mission with a picture-perfect

58
00:04:25,879 --> 00:04:29,740
launch at 8:56 a.m.

59
00:04:29,740 --> 00:04:30,930
Eastern.

60
00:04:30,930 --> 00:04:35,830
Before a crowd of thousands, lead singer Bono
dedicated their award-winning hit

61
00:04:35,830 --> 00:04:41,069
'Beautiful Day' to Kelly’s wife, Congresswoman
Gabby Giffords, who is recovering from a

62
00:04:41,069 --> 00:04:46,560
gunshot wound, while Kelly enthusiastically
greeted the crowd and sent a heartwarming

63
00:04:46,560 --> 00:04:50,960
message to his wife in a prerecorded message
from his time aboard the International

64

00:04:50,960 --> 00:04:53,379
Space Station during mission STS-134.

65
00:04:53,379 --> 00:04:59,300
: “Tell my wife I love her very much.

66
00:04:59,300 --> 00:05:00,789
She knows.”

67
00:05:00,789 --> 00:05:05,629
In a history making event from the Vatican,
Pope Benedict XVI spoke with the

68
00:05:05,629 --> 00:05:12,610
Expedition 27 and STS-134 crews working on-orbit
aboard the International Space

69
00:05:12,610 --> 00:05:13,610
Station.

70
00:05:13,610 --> 00:05:18,680
-“From your excellent observation point,
how do you see the situation on Earth, do

71
00:05:18,680 --> 00:05:21,389
you
see science phenomena to which we need to

72
00:05:21,389 --> 00:05:22,719
be more attentive.”

73
00:05:22,719 --> 00:05:26,130
Well your holiness, it’s a great honor to
speak with you, and you are right it really

74
00:05:26,130 --> 00:05:29,590
is an
extraordinary advantage point we have up here,

75

00:05:29,590 --> 00:05:33,940
on the one hand we can see how
indescribably beautiful the planet that we

76
00:05:33,940 --> 00:05:36,250
have been given is, but on the other hand,
we

77
00:05:36,250 --> 00:05:39,499
can really clearly so how fragile it is."

78
00:05:39,499 --> 00:05:43,069
Those newly-released images of a space shuttle
docked to the International Space

79
00:05:43,069 --> 00:05:48,690
Station are the first taken from the perspective
of a Russian Soyuz spacecraft.

80
00:05:48,690 --> 00:05:52,699
On May
23, European Space Agency astronaut Paolo

81
00:05:52,699 --> 00:05:59,259
Nespoli took the pictures and video of the
ISS and Endeavour on STS-134.

82
00:05:59,259 --> 00:06:05,949
Nespoli, along with Russian cosmonaut Dmitry
Kondratyev and NASA astronaut Cady Coleman

83
00:06:05,949 --> 00:06:10,059
were aboard the Soyuz that had just
undocked from the station and was about to

84
00:06:10,059 --> 00:06:12,419
carry them back to Earth.

85
00:06:12,419 --> 00:06:18,889
: "All three engines up and burning…

86
00:06:18,889 --> 00:06:23,550
2-1- 0 and liftoff, the final liftoff of Atlantis.

87
00:06:23,550 --> 00:06:26,749
On the
shoulders of the space shuttle, America will

88
00:06:26,749 --> 00:06:28,599
continue the dream.

89
00:06:28,599 --> 00:06:29,599
“

90
00:06:29,599 --> 00:06:33,439
Space shuttle Atlantis lifted off from launch
pad 39A at the Kennedy Space Center on

91
00:06:33,439 --> 00:06:40,849
July 8 to begin STS-135, the final mission
of NASA’s Space Shuttle Program.

92
00:06:40,849 --> 00:06:47,370
: “Landing gear down and locked.”

93
00:06:47,370 --> 00:06:52,389
After more than 30 years, NASA’s shuttle
era has come to a close.

94
00:06:52,389 --> 00:06:57,879
Atlantis made a picture-perfect, pre-dawn
landing at the Kennedy Space Center during

95
00:06:57,879 --> 00:07:01,349
STS-135’s 200th orbit of Earth.

96
00:07:01,349 --> 00:07:02,409
“Mission complete Houston.

97
00:07:02,409 --> 00:07:06,849
After serving the world for over 30 years,
the space shuttle

98
00:07:06,849 --> 00:07:09,680
which has earned its place in history has
come to a final stop.”

99
00:07:09,680 --> 00:07:14,110
Brought safely home after 13 days of stocking
up the International Space Station for the

100
00:07:14,110 --> 00:07:19,879
post-shuttle era was the STS-135 crew: Commander
Chris Ferguson…

101
00:07:19,879 --> 00:07:23,379
Pilot Doug
Hurley… and Mission Specialists Sandy Magnus…

102
00:07:23,379 --> 00:07:26,960
and Rex Walheim.

103
00:07:26,960 --> 00:07:31,279
In spaceflight history, the date “April
12” is special.

104
00:07:31,279 --> 00:07:38,020
On that day in 1981, the first shuttle
mission, STS-1, began with the launch of Columbia

105
00:07:38,020 --> 00:07:41,229
from the Kennedy Space Center in
Florida.

106
00:07:41,229 --> 00:07:45,240
Administrator Charles Bolden led a commemorative
program at Kennedy to honor the

107

00:07:45,240 --> 00:07:50,219
space shuttle’s work force for its invaluable
contributions to space exploration over the

108
00:07:50,219 --> 00:07:51,330
past 30 years.

109
00:07:51,330 --> 00:07:55,949
“I want to thank each and every one of you,
and the many others in the shuttle work force

110
00:07:55,949 --> 00:08:00,999
over the years for your significant contribution
to this tremendous American

111
00:08:00,999 --> 00:08:01,999
accomplishment.

112
00:08:01,999 --> 00:08:05,339
You’ve inspired a generation, helped make
the world a better place

113
00:08:05,339 --> 00:08:08,860
and given us a road map for future space exploration.”

114
00:08:08,860 --> 00:08:14,949
Bolden also announced the four locations at
which the orbiters Atlantis, Discovery,

115
00:08:14,949 --> 00:08:22,050
Endeavour and Enterprise will spend their
retirement on permanent display.

116
00:08:22,050 --> 00:08:26,669
With the shuttle retired, NASA and its commercial
partners continued development

117
00:08:26,669 --> 00:08:37,560
of new ways to get astronauts and cargo to
the International Space Station.

118
00:08:37,560 --> 00:08:44,250
This engine test, the successful test fire
of Aerojet Corporation’s AJ26 flight engine,

119
00:08:44,250 --> 00:08:46,710
was
one of several events at which NASA senior

120
00:08:46,710 --> 00:08:50,519
leaders showed support for their
commercial spaceflight partners.

121
00:08:50,519 --> 00:08:55,180
“The whole NASA family is really proud whenever
we’re able to do something like this.

122
00:08:55,180 --> 00:09:01,709
We work every day to try to reach new heights
because we look to reveal things that are

123
00:09:01,709 --> 00:09:05,100
previously unknown so that we can make life
better here on earth.”

124
00:09:05,100 --> 00:09:11,181
The AJ26 will power the first stage of Orbital
Sciences Corporation’s Taurus II space

125
00:09:11,181 --> 00:09:13,089
launch vehicle.

126
00:09:13,089 --> 00:09:16,889
NASA has partnered with Orbital through the
agency’s ongoing

127
00:09:16,889 --> 00:09:20,160
Commercial Orbital Transportation Services
initiative.

128
00:09:20,160 --> 00:09:24,209
Under COTS, Orbital is
scheduled to provide eight commercial cargo

129
00:09:24,209 --> 00:09:30,600
flights to the International Space Station
beginning early next year.

130
00:09:30,600 --> 00:09:35,930
NASA has awarded more than $269 million for
the continued development of

131
00:09:35,930 --> 00:09:41,449
commercial transportation systems to carry
astronauts to and from low-Earth orbit.

132
00:09:41,449 --> 00:09:47,449
Four U.S. companies, Blue Origin of Kent,
Wash., the Sierra Nevada Corporation,

133
00:09:47,449 --> 00:09:52,870
Louisville, Colo., SpaceX of Hawthorne, Calif.,
and the Boeing Company in Houston

134
00:09:52,870 --> 00:09:58,660
received the awards in the second round of
NASA’s Commercial Crew Development, or

135
00:09:58,660 --> 00:10:00,350
CCDev, effort.

136
00:10:00,350 --> 00:10:05,480
: “So many people on both the government
and industry teams worked so very hard to

137
00:10:05,480 --> 00:10:07,769
build this wonderful high-tech facility

138
00:10:07,769 --> 00:10:11,980

Administrator Charles Bolden was joined by
Sen. Barbara Mikulski of Maryland and

139
00:10:11,980 --> 00:10:16,040
other dignitaries for the unveiling of the
Wallops Flight Facility's new Horizontal

140
00:10:16,040 --> 00:10:18,370
Rocket
Integration Facility, or HIF."

141
00:10:18,370 --> 00:10:25,319
"The genius of the private sector working
with government is going to lead the way in

142
00:10:25,319 --> 00:10:33,000
commercial spacecraft to take cargo to the
space station so the space station can

143
00:10:33,000 --> 00:10:39,420
continue the innovation and discovery, be
the national laboratory in the sky.

144
00:10:39,420 --> 00:10:44,649
"Today I am happy to announce that the Boeing
company has settled Florida for its

145
00:10:44,649 --> 00:10:47,589
commercial crew office"…clapping

146
00:10:47,589 --> 00:10:53,800
A new partnership has been formed between
NASA and Space Florida to occupy, use

147
00:10:53,800 --> 00:11:00,340
and modify the Kennedy Space Center's Orbiter
Processing Facility, OPF 3, the Space

148
00:11:00,340 --> 00:11:04,900
Shuttle Main Engine Processing Facility and

Processing Control Center.

149
00:11:04,900 --> 00:11:08,589
The 15-year
use permit deal is the latest step Kennedy

150
00:11:08,589 --> 00:11:15,310
is making in its transition from a historically
government-only launch complex to a multi-user

151
00:11:15,310 --> 00:11:16,310
spaceport.

152
00:11:16,310 --> 00:11:17,310
- Deputy Admin.

153
00:11:17,310 --> 00:11:18,310
Lori Garver: “Kennedy and the entire space
coast have been

154
00:11:18,310 --> 00:11:22,769
synonymous with NASA’s historic 30 year
shuttle program as well as America’s first

155
00:11:22,769 --> 00:11:25,610
50
years in human space flight and the agreement

156
00:11:25,610 --> 00:11:29,810
that we have reached today with
Spaceport Florida will help set-up an even

157
00:11:29,810 --> 00:11:31,060
future.”

158
00:11:31,060 --> 00:11:37,009
Space Florida, the state’s aerospace economic
development agency, is leasing OPF-3

159

00:11:37,009 --> 00:11:41,380
to the Boeing Company to manufacture and test
the company's Crew Space

160
00:11:41,380 --> 00:11:43,920
Transportation spacecraft.

161
00:11:43,920 --> 00:11:50,110
Development of the CST-100, a reusable capsule-shaped
spacecraft to transport up to seven people,

162
00:11:50,110 --> 00:11:56,550
or a combination of people and cargo to
space, is expected to create as many as 550

163
00:11:56,550 --> 00:12:00,959
jobs along the Space Coast.

164
00:12:00,959 --> 00:12:05,910
Space Exploration Technologies, or SpaceX,
is scheduled to launch its Dragon

165
00:12:05,910 --> 00:12:10,670
spacecraft on its second Commercial Orbital
Transportation Services demonstration

166
00:12:10,670 --> 00:12:13,029
flight in Feb. 2012.

167
00:12:13,029 --> 00:12:17,920
Pending completion of final safety reviews,
testing and verification,

168
00:12:17,920 --> 00:12:25,560
SpaceX might also send Dragon to rendezvous
with the International Space Station.

169
00:12:25,560 --> 00:12:30,400
With travel to low Earth orbit covered commercially,
NASA is freed up to send

170
00:12:30,400 --> 00:12:37,139
humans to explore new destinations beyond,
such as asteroids, the moon and,

171
00:12:37,139 --> 00:12:39,730
eventually, Mars.

172
00:12:39,730 --> 00:12:44,850
“The next chapter of America’s space exploration
story is being written today.”

173
00:12:44,850 --> 00:12:49,750
Administrator Charlie Bolden was on Capitol
Hill for the announcement of NASA’s

174
00:12:49,750 --> 00:12:53,300
selected design of its new Space Launch System.

175
00:12:53,300 --> 00:12:55,579
(nat launch animation)

176
00:12:55,579 --> 00:13:01,980
The new heavy-lift rocket will take NASA astronauts
farther into space than ever before.

177
00:13:01,980 --> 00:13:06,370
The booster will be America’s most powerful
since the Saturn V rocket that carried

178
00:13:06,370 --> 00:13:11,170
Apollo astronauts to the moon and will launch
humans to places no one has gone

179
00:13:11,170 --> 00:13:12,170
before.

180
00:13:12,170 --> 00:13:18,820
“We’ve got near earth asteroids to go

look at, possible visits to the moon, La Grangian

181
00:13:18,820 --> 00:13:24,360
Point, higher earth orbit, geosynch orbit;
lots of opportunities out there, we just have

182
00:13:24,360 --> 00:13:26,970
to
sort out what makes sense."

183
00:13:26,970 --> 00:13:30,570
: "The Space Coast is open for business."

184
00:13:30,570 --> 00:13:35,180
Administrator Charlie Bolden led members of
the media on a tour of NASA's new

185
00:13:35,180 --> 00:13:38,620
mobile launcher at the Kennedy Space Center.

186
00:13:38,620 --> 00:13:43,500
Center Director Bob Cabana and other
Kennedy management joined Bolden to discuss

187
00:13:43,500 --> 00:13:45,350
NASA's Space Launch System.

188
00:13:45,350 --> 00:13:59,740
The
SLS is the agency's heavy-lift rocket.

189
00:13:59,740 --> 00:14:04,569
This is one of three successful drop tests
of NASA's next deep space exploration vehicle

190
00:14:04,569 --> 00:14:09,089
conducted this summer at the Langley Research
Center's new $1.7 million Hydro

191

00:14:09,089 --> 00:14:14,509
Impact Basin.

192
00:14:14,509 --> 00:14:24,129
“3 ..2…1…GO!”

193
00:14:24,129 --> 00:14:27,910
Langley hosted an official ribbon-cutting
ceremony for the new facility that expands

194
00:14:27,910 --> 00:14:30,420
the
center's capabilities to test and certify

195
00:14:30,420 --> 00:14:32,459
future spacecrafts for water landings.

196
00:14:32,459 --> 00:14:37,600
: “The Lander facility and the vast experience
of its Langley staff provide a perfect

197
00:14:37,600 --> 00:14:43,050
combination to study the Orion Multi-Purpose
Crew Vehicle’s options for returning to

198
00:14:43,050 --> 00:14:46,129
Earth.”

199
00:14:46,129 --> 00:14:51,430
Assembly of the first J-2X, dubbed engine
ten thousand one, is in full swing at NASA’s

200
00:14:51,430 --> 00:14:52,699
Stennis Space Center.

201
00:14:52,699 --> 00:14:56,139
The J-2X engine is designed to be a highly
efficient and versatile

202

00:14:56,139 --> 00:15:01,440
rocket engine and has the ideal performance
characteristics to power the upper-stage of

203
00:15:01,440 --> 00:15:08,000
a heavy-lift launch vehicle.

204
00:15:08,000 --> 00:15:12,490
And NASA conducted its latest test firing
of the J-2X rocket engine.

205
00:15:12,490 --> 00:15:15,689
The next-
generation engine will help propel Orion beyond

206
00:15:15,689 --> 00:15:17,290
low Earth orbit.

207
00:15:17,290 --> 00:15:20,680
This test is to give
engineers a better understanding of start

208
00:15:20,680 --> 00:15:26,850
and shutdown procedures, and the
performance of modifications made since previous

209
00:15:26,850 --> 00:15:28,980
test firings.

210
00:15:28,980 --> 00:15:34,060
2011 was another banner year for science.

211
00:15:34,060 --> 00:15:39,110
Four new NASA missions were
launched, and contributions by seasoned stalwarts

212
00:15:39,110 --> 00:15:43,210
of science exploration added
to our understanding of life here on Earth

213
00:15:43,210 --> 00:15:46,120
– and what lies beyond.

214
00:15:46,120 --> 00:15:53,490
“These photos have been already a great
revelation to the team about what the surface

215
00:15:53,490 --> 00:15:58,370
is like; we did not imagine the detail that
we’re seeing.”

216
00:15:58,370 --> 00:16:03,070
Newly-captured, full-frame images of the asteroid
Vesta were unveiled by the Dawn

217
00:16:03,070 --> 00:16:06,569
mission team at a Jet Propulsion Laboratory
news conference.

218
00:16:06,569 --> 00:16:10,920
“Vesta is much larger than the state of
California and it is has some very exciting

219
00:16:10,920 --> 00:16:15,569
geomorphological and composition features
that you’ll be hearing about and will shed

220
00:16:15,569 --> 00:16:19,330
some light on how our solar system actually
was formed.”

221
00:16:19,330 --> 00:16:24,339
The Dawn spacecraft was successfully inserted
into the giant asteroid’s orbit several

222
00:16:24,339 --> 00:16:28,670
weeks ago and has since begun collecting scientific
data.

223

00:16:28,670 --> 00:16:35,560
“And lift off of the Atlas V with Juno on
a trek to Jupiter.”

224
00:16:35,560 --> 00:16:40,840
The wait is over, and launch teams are celebrating
the successful liftoff of the Juno

225
00:16:40,840 --> 00:16:46,259
spacecraft from the Kennedy Space Center as
it begins a five-year cruise to the planet

226
00:16:46,259 --> 00:16:50,779
Jupiter to investigate the planet’s structure,
atmosphere and magnetosphere.

227
00:16:50,779 --> 00:16:55,839
It will also provide detailed images of Jupiter’s
surface and capture the first high-

228
00:16:55,839 --> 00:16:58,110
resolution views of its poles.

229
00:16:58,110 --> 00:17:03,810
“We’re on our way, and at this point the
spacecraft’s out, it’s open; the solar

230
00:17:03,810 --> 00:17:06,939
arrays are
open; we’re flowing our electricity through

231
00:17:06,939 --> 00:17:10,839
the veins of Juno.”

232
00:17:10,839 --> 00:17:15,970
These dark, finger-like features extending
down some Martian slopes could be flowing

233
00:17:15,970 --> 00:17:20,289
water occurring during the warmest months

on the planet Mars.

234
00:17:20,289 --> 00:17:23,060
NASA’s Mars
Reconnaissance Orbiter, has been repeatedly

235
00:17:23,060 --> 00:17:28,530
tracking and observing seasonal changes
in these recurring patterns in Mars’ southern

236
00:17:28,530 --> 00:17:29,530
hemisphere.

237
00:17:29,530 --> 00:17:36,840
“We have followed the water and we have
found repeated and predictable evidence

238
00:17:36,840 --> 00:17:39,450
suggesting water flowing on Mars.”

239
00:17:39,450 --> 00:17:43,940
This discovery, which was discussed at a press
briefing held at NASA headquarters,

240
00:17:43,940 --> 00:17:49,060
could be vital to continued studies on whether
life could exist on the Red Planet.

241
00:17:49,060 --> 00:17:54,190
According to scientists the flow of liquid
briny water is the best explanation, thus

242
00:17:54,190 --> 00:17:57,350
far, for
these dark lineations which spread down some

243
00:17:57,350 --> 00:18:03,000
Martian slopes during late spring through
summer, fade in winter, and then return during

244
00:18:03,000 --> 00:18:06,789
the next spring.

245
00:18:06,789 --> 00:18:16,020
“3-2-1-zero, and liftoff of the Delta 2
with GRAIL; journey to the center of the Moon.”

246
00:18:16,020 --> 00:18:20,740
A Delta II rocket launched from Cape Canaveral
Air Force Station in Florida has sent the

247
00:18:20,740 --> 00:18:24,510
twin GRAIL spacecraft on their way to the
moon.

248
00:18:24,510 --> 00:18:28,880
The two spacecraft will fly in tandem orbits
around the moon for several months to

249
00:18:28,880 --> 00:18:34,650
measure its gravity field in unprecedented
detail from crust to core.

250
00:18:34,650 --> 00:18:38,230
The mission also will
answer longstanding questions about the moon

251
00:18:38,230 --> 00:18:42,940
and provide scientists with a better
understanding of how Earth and other rocky

252
00:18:42,940 --> 00:18:46,830
planets in the solar system formed.

253
00:18:46,830 --> 00:18:49,380
On November 26th -- at 10:02 a.m.

254
00:18:49,380 --> 00:18:55,179
Eastern Standard Time, NASA’s Mars Science

Laboratory Curiosity rover launched aboard

255
00:18:55,179 --> 00:19:00,240
a United Launch Alliance Atlas V rocket
from Cape Canaveral Air Force Station, in

256
00:19:00,240 --> 00:19:01,240
Florida.

257
00:19:01,240 --> 00:19:06,720
MSL is scheduled to reach the Red
Planet next August at a site known as Gale

258
00:19:06,720 --> 00:19:07,720
Crater.

259
00:19:07,720 --> 00:19:12,650
Curiosity rover's ten instruments will
investigate whether that area of Mars could

260
00:19:12,650 --> 00:19:16,970
ever have sustained microbial life.

261
00:19:16,970 --> 00:19:22,330
Also sent aloft was the Aquarius/SAC-D spacecraft,
roaring off the launch pad at

262
00:19:22,330 --> 00:19:25,480
Vandenberg Air Force Base in California.

263
00:19:25,480 --> 00:19:30,890
From its polar orbit of the Earth, the NASA-
built Aquarius, the spacecraft's primary

264
00:19:30,890 --> 00:19:37,380
instrument, will analyze the oceans for their
comparative levels of salinity, or the waters'

265
00:19:37,380 --> 00:19:40,950

saltiness, a major factor in the flow of
currents that, ultimately, affect climate.

266
00:19:40,950 --> 00:19:48,279
The nation's newest Earth-observing satellite
has begun its mission.

267
00:19:48,279 --> 00:19:52,220
The National Polar-
orbiting Operational Environmental Satellite

268
00:19:52,220 --> 00:19:58,779
System Preparatory Project, or NPP, was
launched from Vandenberg Air Force Base in

269
00:19:58,779 --> 00:20:04,120
California, heralding a new era of climate
change science and weather forecasting for

270
00:20:04,120 --> 00:20:05,780
the United States.

271
00:20:05,780 --> 00:20:11,149
Data from NPP will enable the National Oceanic
and Atmospheric Administration to

272
00:20:11,149 --> 00:20:18,750
continue issuing accurate forecasts and provide
advance warning for severe weather.

273
00:20:18,750 --> 00:20:24,190
For the first time, NASA-funded researchers
have created a complete map showing the

274
00:20:24,190 --> 00:20:27,900
speed and direction ice flows throughout Antarctica.

275
00:20:27,900 --> 00:20:33,110
The animation demonstrates how
ice is naturally transported from the continent’s

276
00:20:33,110 --> 00:20:35,409
deep interior region to the coast.

277
00:20:35,409 --> 00:20:36,409
The
colors represent the speed of the ice flow

278
00:20:36,409 --> 00:20:39,160
with red and purple areas flowing fastest.

279
00:20:39,160 --> 00:20:43,029
The
map was created using integrated radar observations

280
00:20:43,029 --> 00:20:45,400
from a consortium of international
satellites.

281
00:20:45,400 --> 00:20:49,020
Observing the map will give scientists not
only a better understanding of how

282
00:20:49,020 --> 00:20:54,059
ice sheets flow, but also better insight on
how they might respond to climate change and

283
00:20:54,059 --> 00:20:58,030
contribute to sea levels in the future.

284
00:20:58,030 --> 00:21:02,500
Several craft in NASA’S fleet of Earth Observing
Satellites have captured these images

285
00:21:02,500 --> 00:21:06,120
of severe flooding along the Mississippi River
Basin.

286
00:21:06,120 --> 00:21:11,330

So far, nearly 3 million acres in
Arkansas, Tennessee, and Mississippi, have

287
00:21:11,330 --> 00:21:14,370
been affected by severe springtime rains.

288
00:21:14,370 --> 00:21:19,070
The Mississippi River Basin is third largest
in the world, and managing floods in this

289
00:21:19,070 --> 00:21:24,360
area has been a challenge for more than a
century.

290
00:21:24,360 --> 00:21:29,230
More than 34 years after its launch, NASA's
Voyager 1 spacecraft has entered a new

291
00:21:29,230 --> 00:21:32,350
region between our solar system and interstellar
space.

292
00:21:32,350 --> 00:21:37,330
Data it’s obtained over the last
year suggest this new region is a kind of

293
00:21:37,330 --> 00:21:41,140
cosmic purgatory, where the solar wind is
calm,

294
00:21:41,140 --> 00:21:46,640
our solar system's magnetic field piles up,
and higher-energy particles appear to leak

295
00:21:46,640 --> 00:21:50,169
from our solar system into interstellar space.

296
00:21:50,169 --> 00:21:56,559
Although Voyager 1 is about 11 billion miles
from the sun, it has yet to cross one major,

297
00:21:56,559 --> 00:21:57,559
space-faring threshold.

298
00:21:57,559 --> 00:22:00,770
“We’re very close to the edge of interstellar
space now.

299
00:22:00,770 --> 00:22:03,990
Unfortunately, our models are
not accurate enough to tell us how close.

300
00:22:03,990 --> 00:22:07,890
So, it could be a few more months or it could
be a few more years.

301
00:22:07,890 --> 00:22:12,320
But Voyager One is moving out a billion miles
every three years,

302
00:22:12,320 --> 00:22:17,010
so we shouldn’t have too long to wait to
find out what’s outside.”

303
00:22:17,010 --> 00:22:22,600
NASA’s Hubble Space Telescope has discovered
what astronomers believe is the most

304
00:22:22,600 --> 00:22:25,720
distant object ever seen in the universe.

305
00:22:25,720 --> 00:22:28,640
The dim object is a tiny, compact galaxy of
blue

306
00:22:28,640 --> 00:22:36,080
stars that existed 13.2 billion years ago,
roughly 150 million years farther back in

307

00:22:36,080 --> 00:22:39,030
time
than the previous record holder.

308
00:22:39,030 --> 00:22:42,320
The age of the universe is 13.7 billion years.

309
00:22:42,320 --> 00:22:48,600
The tiny galaxy, so small that more than a
hundred similarly-sized galaxies would be

310
00:22:48,600 --> 00:22:53,570
needed to make up our Milky Way galaxy, was
discovered by Hubble’s Wide Field

311
00:22:53,570 --> 00:22:59,039
Camera 3, installed in 2009 during the last
space shuttle servicing mission to the

312
00:22:59,039 --> 00:23:00,460
telescope.

313
00:23:00,460 --> 00:23:06,779
“This is the first time we're really pinpointing
when these black holes were really forming

314
00:23:06,779 --> 00:23:07,779
and growing.”

315
00:23:07,779 --> 00:23:12,029
NASA’s Science Mission Directorate conducted
two news conferences to update the

316
00:23:12,029 --> 00:23:16,659
media on progress and developments in the
Chandra X-Ray Observatory and

317
00:23:16,659 --> 00:23:18,580
MESSENGER missions.

318
00:23:18,580 --> 00:23:22,039
The first of the two provided a look at new
pictures and data

319
00:23:22,039 --> 00:23:23,790
collected by Chandra.

320
00:23:23,790 --> 00:23:28,789
Black holes are the last evolutionary stage
in the lifetimes of stars that were once at

321
00:23:28,789 --> 00:23:33,220
least
10 to 15 times as massive as our own sun.

322
00:23:33,220 --> 00:23:38,310
These cold remnants are extremely dense,
exerting a gravitational pull so strong that

323
00:23:38,310 --> 00:23:42,720
nothing, not even light, can escape their
grasp.

324
00:23:42,720 --> 00:23:47,539
At a press conference held at NASA Ames Research
Center, the Kepler team

325
00:23:47,539 --> 00:23:52,480
announced the discovery of its first confirmed
planet in the "habitable zone" or the region

326
00:23:52,480 --> 00:23:57,130
around a star where liquid water could exist
on a planet’s surface.

327
00:23:57,130 --> 00:24:01,960
Named Kepler-22b,
the planet is about 2.4 times the radius of

328

00:24:01,960 --> 00:24:05,390
the Earth and orbits a sun-like star about
600

329
00:24:05,390 --> 00:24:09,039
light years away between the constellations
of Cygnus and Lyra.

330
00:24:09,039 --> 00:24:13,210
“Well, certainly the thing that’s most
exciting to me is the fact, that finally after

331
00:24:13,210 --> 00:24:15,800
looking at
all these candidates, spending all this effort,

332
00:24:15,800 --> 00:24:21,630
that we can confirm a planet, in the
habitable zone that’s nearly Earth size.

333
00:24:21,630 --> 00:24:26,590
Scientists don't know yet if Kepler-22b has
a predominantly rocky, gaseous or liquid

334
00:24:26,590 --> 00:24:32,130
composition, but its discovery is a step closer
to finding Earth-like planets.

335
00:24:32,130 --> 00:24:37,440
NASA's aeronautical innovators continued in
2011 to lay the foundation for the

336
00:24:37,440 --> 00:24:42,680
future of flight by exploring new ways to
manage air traffic, build more fuel-

337
00:24:42,680 --> 00:24:48,450
efficient and environmentally friendly airliners,
and ensure aviation's outstanding

338

00:24:48,450 --> 00:24:54,880
safety record.

339
00:24:54,880 --> 00:24:59,480
Airplane passengers and people living near
airports are all too familiar with the noise

340
00:24:59,480 --> 00:25:01,799
associated with air travel.

341
00:25:01,799 --> 00:25:05,769
After years of work and research with partners
in industry and

342
00:25:05,769 --> 00:25:10,799
academia, NASA has developed a noise-reduction
technology called chevrons.

343
00:25:10,799 --> 00:25:16,559
Chevrons, the sawtooth pattern on this jet
engine’s trailing edges, can significantly

344
00:25:16,559 --> 00:25:22,730
reduce the noise caused by commercial jet
airplanes.

345
00:25:22,730 --> 00:25:28,970
It's not every day that a Marine V-22 Osprey
lands at a convention center parking lot.

346
00:25:28,970 --> 00:25:33,529
The tilt-rotor made a special appearance at
the American Helicopter Society forum in

347
00:25:33,529 --> 00:25:35,710
Virginia Beach, Virginia.

348
00:25:35,710 --> 00:25:38,380
The annual event is where the who's who in
rotorcraft

349
00:25:38,380 --> 00:25:43,190
research and technology meet to showcase the
latest in vertical flight.

350
00:25:43,190 --> 00:25:45,980
Among the
presentations – 31 papers from s researchers

351
00:25:45,980 --> 00:25:50,660
at NASA's Langley, Ames and Glenn
Research Centers.

352
00:25:50,660 --> 00:25:55,210
The Ames Research Center recently completed
a series of tests that may help take

353
00:25:55,210 --> 00:26:02,149
some of the loudness out of sonic booms and
allow supersonic aircraft to fly over land.

354
00:26:02,149 --> 00:26:08,210
Inside Ames' 9-foot by 7-foot supersonic
wind tunnel, fans or compressors moved air

355
00:26:08,210 --> 00:26:13,600
over a sleek new aircraft design at speeds
replicating flying conditions.

356
00:26:13,600 --> 00:26:16,980
Tests like these
help researchers understand the forces acting

357
00:26:16,980 --> 00:26:22,809
on a real aircraft and its impact, like the
creation of a sonic boom, on the surrounding

358
00:26:22,809 --> 00:26:24,480
atmosphere.

359
00:26:24,480 --> 00:26:28,990
NASA also broke new ground in how it reaches
out to the next generation of

360
00:26:28,990 --> 00:26:34,990
space enthusiasts, winning kudos for its successful
use of the Web, Facebook,

361
00:26:34,990 --> 00:26:38,029
Twitter and other, popular social media.

362
00:26:38,029 --> 00:26:43,470
A group of fifty-five science and space enthusiasts
who follow the NASA Ames twitter

363
00:26:43,470 --> 00:26:48,380
account were invited to NASA Ames Research
Center to participate in an event called

364
00:26:48,380 --> 00:26:49,590
a “Tweet-up.”

365
00:26:49,590 --> 00:26:55,010
These tweeps, or people who use twitter, were
given a rare opportunity to tour the labs

366
00:26:55,010 --> 00:26:59,409
at NASA Ames, listen to presentations and
get answers to their questions from

367
00:26:59,409 --> 00:27:01,950
researchers who work at the Center.

368
00:27:01,950 --> 00:27:04,789
“Social networking is really critical.

369
00:27:04,789 --> 00:27:10,520
As we move forward as a country, this is an
increasing way that the public, particularly

370
00:27:10,520 --> 00:27:16,590
the interested public, can actually participate
and ride with us as we do the wonderful things

371
00:27:16,590 --> 00:27:17,590
we do at NASA.”

372
00:27:17,590 --> 00:27:21,960
Elmo Monster, one of the most popular characters
on public television, brought a film

373
00:27:21,960 --> 00:27:26,350
crew from Sesame Street to the Kennedy Space
Center to talk with NASA experts like

374
00:27:26,350 --> 00:27:30,350
Leland Melvin, astronaut and NASA’s Associate
Administrator for Education.

375
00:27:30,350 --> 00:27:35,809
“And here’s the external tank, the big
orange tank, this falls back into the ocean

376
00:27:35,809 --> 00:27:37,610
and
burns up.

377
00:27:37,610 --> 00:27:38,610
“Really?”

378
00:27:38,610 --> 00:27:44,860
He also participated in a tweet-up with Astro-Mike,
aka, Mike Massimino and Astro-

379
00:27:44,860 --> 00:27:47,380
Wheels, the handle for astronaut Doug Wheelock.

380
00:27:47,380 --> 00:27:49,940

: “Elmo did you touch anything?”

381
00:27:49,940 --> 00:27:52,510
“Elmo did not touch nothing.”

382
00:27:52,510 --> 00:27:53,510
(laughter)

383
00:27:53,510 --> 00:27:58,010
Once again, NASA has been recognized for several
of the world’s best Internet sites by

384
00:27:58,010 --> 00:28:01,040
winning two Webby Awards.

385
00:28:01,040 --> 00:28:03,929
NASA.gov received its third consecutive People's
Voice

386
00:28:03,929 --> 00:28:09,850
Award for best government Website, and NASA's
Global Climate Change site, last

387
00:28:09,850 --> 00:28:14,850
year's People's Voice Award winner for science,
captured this year’s Judges' Award for

388
00:28:14,850 --> 00:28:16,940
best science site.

389
00:28:16,940 --> 00:28:21,230
Created in 1996, the Webby Award honors excellence
in online

390
00:28:21,230 --> 00:28:22,620
technology and creativity.

391
00:28:22,620 --> 00:28:30,179
“It’s an honor to be here … I’ve always

dreamed of coming to watch rocket leave the

392
00:28:30,179 --> 00:28:31,179
planet.”

393
00:28:31,179 --> 00:28:35,880
Helping Melvin tout the importance of inspiring
our youth about STEM-based careers

394
00:28:35,880 --> 00:28:40,179
was entertainer Will.i.am of the musical group,
The Black Eyed Peas.

395
00:28:40,179 --> 00:28:44,549
An avid fan of
robotics, will and Melvin were interviewed

396
00:28:44,549 --> 00:28:47,630
by TV stations and networks throughout North
America.

397
00:28:47,630 --> 00:28:52,471
“When you think about tomorrow and the people
who are going to be leading the way—

398
00:28:52,471 --> 00:28:55,000
it’s the youth that we have right now.”

399
00:28:55,000 --> 00:29:00,160
NASA continued its mission to promote student
education in science, technology,

400
00:29:00,160 --> 00:29:07,990
engineering, and math – disciplines so vital
to the future of NASA and our nation.

401
00:29:07,990 --> 00:29:12,010
Teen-agers around the world are ramping up
their engineering skills with the start of

402
00:29:12,010 --> 00:29:15,350
the
2011 FIRST Robotics competition.

403
00:29:15,350 --> 00:29:19,420
High school teams from southeast Virginia
filed into the Virginia Air and Space Center

404
00:29:19,420 --> 00:29:24,030
in
Hampton January 8 to learn this year’s challenge.

405
00:29:24,030 --> 00:29:29,039
They watched as speakers, and a live
broadcast on NASA TV, unveiled the requirements

406
00:29:29,039 --> 00:29:37,289
for Logomotion: build a robot and
mini-bot that can move and climb.

407
00:29:37,289 --> 00:29:46,409
The excitement and inspiration of space exploration
was the subject of a special forum

408
00:29:46,409 --> 00:29:49,799
held in New York to celebrate Women’s History
Month.

409
00:29:49,799 --> 00:29:54,110
NASA's Deputy Administrator
Lori Garver, and Associate Administrator for

410
00:29:54,110 --> 00:29:59,070
Education and former astronaut Leland
Melvin attended the event at the Stephen Weiss

411
00:29:59,070 --> 00:30:03,409
Studio in Greenwich Village and met
with 200 young women from middle and high

412
00:30:03,409 --> 00:30:04,940
schools in the city.

413
00:30:04,940 --> 00:30:09,930
“NASA is a wonderful place that is making
a difference in people’s lives every day.

414
00:30:09,930 --> 00:30:12,500
Our
satellites look back on the planet to help

415
00:30:12,500 --> 00:30:17,179
us learn what’s happening with our own planet
so that we can have a more secure future.

416
00:30:17,179 --> 00:30:22,230
Co-sponsored by fashion designer Donna Karan's
Urban Zen Foundation and the

417
00:30:22,230 --> 00:30:26,830
Foundation for Advancing Women Now, founded
by singer Mary J. Blige, the event

418
00:30:26,830 --> 00:30:32,409
encouraged the students to consider careers
in the STEM fields of science, technology,

419
00:30:32,409 --> 00:30:34,809
engineering and math.

420
00:30:34,809 --> 00:30:38,789
NASA spinoffs are the subject of two new Public
Service Announcements airing on

421
00:30:38,789 --> 00:30:39,789
NASA TV.

422
00:30:39,789 --> 00:30:44,799
“Speaking of space technology, did you know

that space is hidden all around you?”

423
00:30:44,799 --> 00:30:51,370
The first features Elf 6409EF from Sony Pictures
new film, “Arthur Christmas.”

424
00:30:51,370 --> 00:30:54,880
Our
animated protagonist illustrates how NASA-developed

425
00:30:54,880 --> 00:30:58,610
space technologies are making
our lives better here on Earth.

426
00:30:58,610 --> 00:31:01,549
“Hi, I’m Norah Jones … and I’m Piers
Sellers.

427
00:31:01,549 --> 00:31:06,730
And, Grammy-winning singer/songwriter Norah
Jones teams up with astronaut Piers

428
00:31:06,730 --> 00:31:07,830
Sellers on the second PSA.

429
00:31:07,830 --> 00:31:10,390
Jones and Sellers recorded their message in
the NASA TV

430
00:31:10,390 --> 00:31:11,390
studio in Washington.

431
00:31:11,390 --> 00:31:17,179
NASA’s 2011 included remembrances of milestones
past, among them: the 50th

432
00:31:17,179 --> 00:31:21,830
anniversary of the flight of the first American
in space, Alan Shepard…

433
00:31:21,830 --> 00:31:25,960
“The first time we ever put anybody into
space, and Al was a great person to represent

434
00:31:25,960 --> 00:31:27,279
us on that.”

435
00:31:27,279 --> 00:31:32,669
“He was outstanding and he deserved it.”

436
00:31:32,669 --> 00:31:34,509
“We were always proud of him.”

437
00:31:34,509 --> 00:31:36,009
“Roger, Two G.”

438
00:31:36,009 --> 00:31:41,370
…the tenth anniversary of 9-11 and the unique
perspective then offered us by

439
00:31:41,370 --> 00:31:46,309
NASA astronaut and Expedition 3 commander,
Frank Culbertson, aboard the

440
00:31:46,309 --> 00:31:47,750
International Space Station…

441
00:31:47,750 --> 00:31:49,650
“I realized our country was under attack.

442
00:31:49,650 --> 00:31:54,820
I was, ironically, half-way through a Tom
Clancy novel about a similar situation, at

443
00:31:54,820 --> 00:31:57,409
the time, and it almost put me inside the
novel

444

00:31:57,409 --> 00:31:58,880
which was a very strange feeling.

445
00:31:58,880 --> 00:32:02,509
And then once I saw it out the window, and
we took

446
00:32:02,509 --> 00:32:07,960
video as the second tower was collapsing,
I didn't know exactly what was happening,

447
00:32:07,960 --> 00:32:12,429
but I knew it was really bad because there
was a big cloud of debris covering Manhattan.

448
00:32:12,429 --> 00:32:18,899
That's when it really became painful, because
it was like seeing a wound in the side of

449
00:32:18,899 --> 00:32:20,009
your country."

450
00:32:20,009 --> 00:32:25,330
…and, as marked by the award of the Congressional
Gold Medal, the contributions

451
00:32:25,330 --> 00:32:28,779
of John Glenn and the crew of Apollo 11.

452
00:32:28,779 --> 00:32:31,169
"Thank you all very, very much.

453
00:32:31,169 --> 00:32:33,600
We must consider ourselves among the most
fortunate

454
00:32:33,600 --> 00:32:39,289
of all generations, for we have lived at a
time when the dream became a reality.

455
00:32:39,289 --> 00:32:42,080
When
we finally could travel above the atmosphere

456
00:32:42,080 --> 00:32:50,100
around the earth, where we could establish
laboratories in space and do research, and

457
00:32:50,100 --> 00:32:54,350
for the very first time in history, leave
human

458
00:32:54,350 --> 00:32:57,539
footprints on some place other than Earth."

459
00:32:57,539 --> 00:33:06,100
"The Apollo 11 crew is honored to receive
the Congressional Gold Medal and accept on

460
00:33:06,100 --> 00:33:13,360
behalf of our fellow Apollo teammates – all
of those who've played a role in expanding

461
00:33:13,360 --> 00:33:16,690
the human presence outward from earth.

462
00:33:16,690 --> 00:33:23,810
But 2011 also established new milestones for
our future, including: NASA's Green

463
00:33:23,810 --> 00:33:31,130
Flight Challenge produced the world's most
fuel-efficient aircraft.

464
00:33:31,130 --> 00:33:36,990
In the skies above Santa Rosa, Calif., three
flight teams competed in the CAFÉ Green

465
00:33:36,990 --> 00:33:42,580

Flight Challenge for the title of most fuel-efficient aircraft in the world.

466
00:33:42,580 --> 00:33:45,900
The NASA-
provided purse for this accomplishment -- $1.65

467
00:33:45,900 --> 00:33:50,900
million, the largest aviation prize ever
offered.

468
00:33:50,900 --> 00:33:56,419
The challenge: to fly 200 miles in less than
two hours, using less than one

469
00:33:56,419 --> 00:34:01,149
gallon of fuel per occupant, or an equivalent
amount of electricity.

470
00:34:01,149 --> 00:34:06,399
The appeal to our next generation of explorers
with a new, NASA-powered radio

471
00:34:06,399 --> 00:34:08,340
channel on the Internet…

472
00:34:08,340 --> 00:34:12,950
“Welcome to Third Rock – Radio – powered
with NASA”

473
00:34:12,950 --> 00:34:18,510
“We focus on S.T.E.M., and we’ve all learned
that STEM is the science and technology

474
00:34:18,510 --> 00:34:26,179
and engineering and math, to remind young
adults that a career in that direction is

475
00:34:26,179 --> 00:34:29,050
a

great way to have a wonderful life – possibly

476
00:34:29,050 --> 00:34:31,379
end up with a career at NASA.”

477
00:34:31,379 --> 00:34:36,560
And, the non-profit Center for the Advancement
of Science in Space, CASIS, was

478
00:34:36,560 --> 00:34:41,500
selected by NASA to manage the U.S. national
laboratory aboard the International

479
00:34:41,500 --> 00:34:46,679
Space Station – and all the promise of new
discoveries it holds for the benefit of all

480
00:34:46,679 --> 00:34:48,339
humankind.

481
00:34:48,339 --> 00:34:53,100
Located in the Space Life Sciences Laboratory
at the Kennedy Space Center in Florida,

482
00:34:53,100 --> 00:34:58,010
the independent, nonprofit research management
organization will help ensure the

483
00:34:58,010 --> 00:35:02,910
station’s unique capabilities are available
to the broadest possible cross-section of

484
00:35:02,910 --> 00:35:06,730
the
U.S. scientific, technological and industrial

485
00:35:06,730 --> 00:35:13,290
communities.

486

00:35:13,290 --> 00:35:18,180
And on that note provided by Cady Coleman
and Jethro Tull founder Ian

487
00:35:18,180 --> 00:35:25,099
Anderson, we say goodbye to 2011

488
00:35:25,099 --> 00:35:30,810
From understanding our Earth, to new clues
about possible life elsewhere.

489
00:35:30,810 --> 00:35:36,339
From fostering life-changing research in space,
to sharing our vision of the future

490
00:35:36,339 --> 00:35:39,260
with those destined to journey there.

491
00:35:39,260 --> 00:35:44,160
From the end of one monumental mission, to
the beginning of a new era in the

492
00:35:44,160 --> 00:35:47,130
human exploration of our solar system.

493
00:35:47,130 --> 00:35:50,560
That was “This Year @NASA!”

494
00:35:50,560 --> 00:35:58,190
For more on these and other stories, log onto:
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