



1
00:00:11,669 --> 00:00:10,230
this week at nasa

2
00:00:15,669 --> 00:00:11,679
please give them your applause they've

3
00:00:18,630 --> 00:00:16,750
team

4
00:00:21,109 --> 00:00:18,640
pippistralusa.com of state college

5
00:00:23,230 --> 00:00:21,119
pennsylvania flew away with the largest

6
00:00:26,470 --> 00:00:23,240
prize in aviation history

7
00:00:28,230 --> 00:00:26,480
1.35 million dollars at nasa's green

8
00:00:29,669 --> 00:00:28,240
flight challenge in santa rosa

9
00:00:31,990 --> 00:00:29,679
california

10
00:00:34,709 --> 00:00:32,000
both pipistrel and second place winner e

11
00:00:37,990 --> 00:00:34,719
genius flew their all-electric aircraft

12
00:00:39,990 --> 00:00:38,000
200 miles in less than two hours using

13
00:00:42,069 --> 00:00:40,000

just over the equivalent of a half

14

00:00:44,229 --> 00:00:42,079

gallon of fuel per passenger

15

00:00:46,549 --> 00:00:44,239

that was twice the fuel efficiency

16

00:00:48,229 --> 00:00:46,559

requirement of the competition conducted

17

00:00:50,790 --> 00:00:48,239

by the comparative aircraft fuel

18

00:00:51,670 --> 00:00:50,800

efficiency foundation and sponsored by

19

00:00:53,910 --> 00:00:51,680

google

20

00:00:56,310 --> 00:00:53,920

it represents the dawn of a new era in

21

00:00:58,869 --> 00:00:56,320

efficient flight and is the first time

22

00:01:01,270 --> 00:00:58,879

that full-scale electric aircraft have

23

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

performed in competition electricity is

24

00:01:04,710 --> 00:01:03,039

not only a viable but in fact a

25

00:01:05,830 --> 00:01:04,720

beautiful way of powering these

26

00:01:10,550 --> 00:01:05,840

airplanes

27

00:01:13,350 --> 00:01:10,560

feet up we cannot hear them

28

00:01:15,510 --> 00:01:13,360

when they fly by they are no emissions

29

00:01:17,429 --> 00:01:15,520

the power to recharge our batteries came

30

00:01:19,350 --> 00:01:17,439

from a geothermal plant powered by

31

00:01:21,429 --> 00:01:19,360

geysers near santa rosa

32

00:01:23,990 --> 00:01:21,439

this is absolutely incredible the

33

00:01:26,630 --> 00:01:24,000

technologies demonstrated may end up in

34

00:01:28,950 --> 00:01:26,640

general aviation aircraft spawning new

35

00:01:29,990 --> 00:01:28,960

jobs and new industries for the 21st

36

00:01:31,990 --> 00:01:30,000

century

37

00:01:34,870 --> 00:01:32,000

this prize competition is part of the

38

00:01:37,590 --> 00:01:34,880

nasa centennial challenges program part

39
00:01:39,350 --> 00:01:37,600
of the space technology program managed

40
00:01:42,310 --> 00:01:39,360
by the nasa office of the chief

41
00:01:47,109 --> 00:01:45,030
the three-member expedition 29 crew of

42
00:01:49,670 --> 00:01:47,119
commander mike fossen and flight

43
00:01:52,149 --> 00:01:49,680
engineers satoshi furukawa and sergey

44
00:01:54,789 --> 00:01:52,159
volkov continues preparing for the

45
00:01:57,350 --> 00:01:54,799
october 29th undocking of the progress

46
00:01:59,910 --> 00:01:57,360
42 resupply craft from the international

47
00:02:02,789 --> 00:01:59,920
space station its replacement cargo

48
00:02:05,590 --> 00:02:02,799
vehicle progress 45 is scheduled to

49
00:02:07,670 --> 00:02:05,600
arrive at the iss on november 2nd

50
00:02:09,669 --> 00:02:07,680
carrying two and a half tons of food

51

00:02:12,309 --> 00:02:09,679

fuel and supplies

52

00:02:14,710 --> 00:02:12,319

expedition 29 is scheduled to expand to

53

00:02:16,630 --> 00:02:14,720

six crew members two weeks later with

54

00:02:19,910 --> 00:02:16,640

the arrival of flight engineers dan

55

00:02:22,470 --> 00:02:19,920

burbank anton shkaplerov and anatoly

56

00:02:24,949 --> 00:02:22,480

ivanishin on november 16th

57

00:02:29,430 --> 00:02:24,959

fossum furukawa and volkov are scheduled

58

00:02:34,229 --> 00:02:31,350

new measurements from the herschel space

59

00:02:36,630 --> 00:02:34,239

observatory show that comet hartley 2

60

00:02:39,190 --> 00:02:36,640

which comes from the distant kuiper belt

61

00:02:40,869 --> 00:02:39,200

contains the same kind of water as

62

00:02:43,270 --> 00:02:40,879

earth's oceans

63

00:02:45,990 --> 00:02:43,280

scientists theorize earth started out

64

00:02:46,790 --> 00:02:46,000

hot and dry so that water critical for

65

00:02:48,390 --> 00:02:46,800

life

66

00:02:50,869 --> 00:02:48,400

must have been delivered millions of

67

00:02:52,070 --> 00:02:50,879

years later by asteroid and comet

68

00:02:54,710 --> 00:02:52,080

impacts

69

00:02:56,869 --> 00:02:54,720

until now none of the comets previously

70

00:02:59,589 --> 00:02:56,879

studied contained water with the same

71

00:03:01,990 --> 00:02:59,599

chemical signature as earth's however

72

00:03:04,309 --> 00:03:02,000

herschel's observations of hartley 2 the

73

00:03:06,710 --> 00:03:04,319

first in-depth look at water in a comet

74

00:03:09,190 --> 00:03:06,720

from the kuiper belt may help explain

75

00:03:11,750 --> 00:03:09,200

how earth's surface ended up covered in

76

00:03:16,550 --> 00:03:14,229

results from a nasa-led study shows

77

00:03:19,430 --> 00:03:16,560

unprecedented depletion of ozone

78

00:03:22,070 --> 00:03:19,440

protection in the area above the arctic

79

00:03:23,750 --> 00:03:22,080

prolonged unusually low temperatures in

80

00:03:25,030 --> 00:03:23,760

the stratosphere last winter are

81

00:03:27,030 --> 00:03:25,040

responsible

82

00:03:29,509 --> 00:03:27,040

the study also shows that ozone

83

00:03:32,149 --> 00:03:29,519

destruction in the arctic this year is

84

00:03:34,869 --> 00:03:32,159

comparable to that seen in the antarctic

85

00:03:37,509 --> 00:03:34,879

where an ozone hole has formed each

86

00:03:39,670 --> 00:03:37,519

spring since the mid 1980s the

87

00:03:40,470 --> 00:03:39,680

compliance with the montreal protocol

88

00:03:43,030 --> 00:03:40,480

has

89

00:03:45,589 --> 00:03:43,040

limited and really halted the increase

90

00:03:47,990 --> 00:03:45,599

in ozone-destroying substances those

91

00:03:50,309 --> 00:03:48,000

substances that destroy ozone have very

92

00:03:52,550 --> 00:03:50,319

very long lifetimes of many years it

93

00:03:55,030 --> 00:03:52,560

will be many years in the future before

94

00:03:57,270 --> 00:03:55,040

those go down to levels where we don't

95

00:04:00,070 --> 00:03:57,280

have a lot of ozone destruction

96

00:04:02,390 --> 00:04:00,080

the ozone layer encircles our planet

97

00:04:04,869 --> 00:04:02,400

extends some 10 to 20 miles above

98

00:04:07,350 --> 00:04:04,879

earth's surface and shields us from much

99

00:04:10,710 --> 00:04:07,360

of the harmful ultraviolet radiation

100

00:04:10,720 --> 00:04:16,310

and now centerpieces

101

00:04:19,990 --> 00:04:17,830

it's arguably one of the most

102

00:04:23,510 --> 00:04:20,000

prestigious awards that can be given to

103

00:04:24,950 --> 00:04:23,520

a scientist the nobel prize for physics

104

00:04:26,150 --> 00:04:24,960

people have mentioned that this is the

105

00:04:28,150 --> 00:04:26,160

kind of thing that could win the nobel

106

00:04:29,909 --> 00:04:28,160

prize but somehow i couldn't actually

107

00:04:32,070 --> 00:04:29,919

picture that happening

108

00:04:34,629 --> 00:04:32,080

dr adam reece from baltimore maryland

109

00:04:36,950 --> 00:04:34,639

space telescope science institute is now

110

00:04:39,590 --> 00:04:36,960

the latest in this long line of notable

111

00:04:42,550 --> 00:04:39,600

recipients his work along with two

112

00:04:44,870 --> 00:04:42,560

others changed our view of the universe

113

00:04:47,590 --> 00:04:44,880

how it's not only getting larger but

114

00:04:49,590 --> 00:04:47,600

it's doing so at a faster and faster

115

00:04:51,990 --> 00:04:49,600

rate we learn that we don't really

116

00:04:53,510 --> 00:04:52,000

understand gravity that basic phenomenon

117

00:04:55,749 --> 00:04:53,520

that you take a ball you throw it up in

118

00:04:57,830 --> 00:04:55,759

the air it's supposed to fall back down

119

00:04:59,909 --> 00:04:57,840

in this case it went back up reese's

120

00:05:02,390 --> 00:04:59,919

research used nasa's hubble space

121

00:05:04,950 --> 00:05:02,400

telescope and other observatories to

122

00:05:07,430 --> 00:05:04,960

make this cosmo shattering discovery

123

00:05:10,230 --> 00:05:07,440

that there's a different force at work a

124

00:05:12,469 --> 00:05:10,240

mystery still being unraveled called

125

00:05:15,029 --> 00:05:12,479

dark energy the fact they've kept this

126
00:05:17,029 --> 00:05:15,039
telescope going for 20 years meant that

127
00:05:19,110 --> 00:05:17,039
that adam was able to track the history

128
00:05:21,189 --> 00:05:19,120
of the universe using the successive

129
00:05:22,390 --> 00:05:21,199
upgrades from one servicing mission to

130
00:05:24,550 --> 00:05:22,400
the next

131
00:05:26,790 --> 00:05:24,560
that's why we have the nobel prize adam

132
00:05:28,710 --> 00:05:26,800
reeses and his team's nobel prize you

133
00:05:30,710 --> 00:05:28,720
know validated you know my feelings that

134
00:05:32,150 --> 00:05:30,720
it's worth risking our lives to put in

135
00:05:34,550 --> 00:05:32,160
these great scientific instruments on

136
00:05:36,790 --> 00:05:34,560
hubble but even with the nobel prize

137
00:05:39,830 --> 00:05:36,800
under his belt reece says there is still

138
00:05:42,150 --> 00:05:39,840

much more to learn hopefully use new

139

00:05:45,189 --> 00:05:42,160

space telescopes maybe the james webb

140

00:05:47,510 --> 00:05:45,199

space telescope the new survey telescope

141

00:05:49,189 --> 00:05:47,520

from the decadal survey and using these

142

00:05:51,110 --> 00:05:49,199

together we hope to learn more about the

143

00:05:53,270 --> 00:05:51,120

nature of dark energy and it's that

144

00:05:55,270 --> 00:05:53,280

nature that will keep scientists like

145

00:06:02,309 --> 00:05:55,280

reese looking to the edge of the

146

00:06:06,710 --> 00:06:04,629

a new space act agreement revives a

147

00:06:08,790 --> 00:06:06,720

commitment to economic development aimed

148

00:06:11,430 --> 00:06:08,800

at supporting nasa's current and future

149

00:06:13,830 --> 00:06:11,440

missions kennedy's space center director

150

00:06:16,150 --> 00:06:13,840

robert cabana and linda weatherman

151
00:06:18,309 --> 00:06:16,160
president and ceo of the economic

152
00:06:21,110 --> 00:06:18,319
development commission of florida space

153
00:06:24,550 --> 00:06:21,120
coast signed the new five-year space act

154
00:06:26,150 --> 00:06:24,560
agreement october 3rd at kennedy

155
00:06:28,070 --> 00:06:26,160
the new agreement highlights a

156
00:06:31,110 --> 00:06:28,080
continuing partnership that also

157
00:06:32,629 --> 00:06:31,120
benefits ksc's surrounding communities

158
00:06:34,629 --> 00:06:32,639
we've had a great partnership over the

159
00:06:35,909 --> 00:06:34,639
years and i think working together to

160
00:06:38,309 --> 00:06:35,919
bring

161
00:06:40,629 --> 00:06:38,319
jobs and the right kind of work here to

162
00:06:42,790 --> 00:06:40,639
the space coast is really important

163
00:06:45,270 --> 00:06:42,800

the two agencies will explore new

164

00:06:50,070 --> 00:06:45,280

opportunities and space-related economic

165

00:06:53,270 --> 00:06:51,670

visitors to the virginia air and space

166

00:06:56,629 --> 00:06:53,280

center in hampton on a recent friday

167

00:06:58,870 --> 00:06:56,639

night were greeted by an ice sculpture a

168

00:06:59,830 --> 00:06:58,880

stunning crystal and likeness of a space

169

00:07:02,230 --> 00:06:59,840

shuttle

170

00:07:03,990 --> 00:07:02,240

the occasion a special celebration to

171

00:07:06,870 --> 00:07:04,000

honor nasa langley research center's

172

00:07:09,189 --> 00:07:06,880

role in the space shuttle program holy

173

00:07:11,110 --> 00:07:09,199

cow as far as i can see there are people

174

00:07:13,029 --> 00:07:11,120

that is wonderful

175

00:07:15,670 --> 00:07:13,039

many in the crowd of more than 600 had

176

00:07:17,909 --> 00:07:15,680

contributed to the shuttle's success

177

00:07:20,150 --> 00:07:17,919

those contributions started early more

178

00:07:24,469 --> 00:07:20,160

than 10 years before the first orbiter

179

00:07:28,070 --> 00:07:26,150

in fact langley research helped

180

00:07:29,189 --> 00:07:28,080

determine exactly what the shuttle would

181

00:07:30,710 --> 00:07:29,199

look like

182

00:07:32,469 --> 00:07:30,720

langley staff

183

00:07:34,629 --> 00:07:32,479

quickly determined the straight wing

184

00:07:36,550 --> 00:07:34,639

orbiter

185

00:07:38,550 --> 00:07:36,560

wouldn't fly

186

00:07:40,390 --> 00:07:38,560

so began more than a dozen years of

187

00:07:42,950 --> 00:07:40,400

testing here at langley

188

00:07:45,350 --> 00:07:42,960

over 60 000 hours of testing in over a

189

00:07:47,430 --> 00:07:45,360

dozen of your wind tunnels to be exact

190

00:07:49,749 --> 00:07:47,440

nasa administrator and four-time shuttle

191

00:07:52,070 --> 00:07:49,759

astronaut charles bolden was an honored

192

00:07:53,990 --> 00:07:52,080

guest and speaker at the celebration

193

00:07:55,990 --> 00:07:54,000

he commanded two missions

194

00:07:58,230 --> 00:07:56,000

so did one of the other speakers chris

195

00:08:00,950 --> 00:07:58,240

ferguson ferguson was the commander of

196

00:08:04,309 --> 00:08:00,960

atlantis for sts-135

197

00:08:05,749 --> 00:08:04,319

the shuttle's last flight before that i

198

00:08:08,150 --> 00:08:05,759

am ever going to be

199

00:08:10,309 --> 00:08:08,160

eternally proud to represent you and for

200

00:08:12,469 --> 00:08:10,319

your role in what you've done over the

201
00:08:13,909 --> 00:08:12,479
course of the last uh

202
00:08:15,510 --> 00:08:13,919
30 years

203
00:08:17,670 --> 00:08:15,520
to pull the space shuttle program

204
00:08:18,469 --> 00:08:17,680
together and keep it running and support

205
00:08:20,629 --> 00:08:18,479
it

206
00:08:24,309 --> 00:08:20,639
you should be enormously proud also

207
00:08:25,830 --> 00:08:24,319
proud and surprised was robbie kearns

208
00:08:27,189 --> 00:08:25,840
langley's space shuttle operations

209
00:08:29,189 --> 00:08:27,199
liaison

210
00:08:32,149 --> 00:08:29,199
he was presented with a special flight

211
00:08:34,230 --> 00:08:32,159
awareness award

212
00:08:36,070 --> 00:08:34,240
hi my name is eric aguilar and i'm the

213
00:08:38,070 --> 00:08:36,080

system integration and test lead for the

214

00:08:40,550 --> 00:08:38,080

mars science laboratory project here at

215

00:08:42,709 --> 00:08:40,560

jpl i've worked on three different

216

00:08:44,630 --> 00:08:42,719

flight missions mer spirit and

217

00:08:46,310 --> 00:08:44,640

opportunity

218

00:08:47,750 --> 00:08:46,320

don

219

00:08:49,910 --> 00:08:47,760

and now

220

00:08:51,750 --> 00:08:49,920

msl with the curiosity

221

00:08:53,430 --> 00:08:51,760

so one of the things we may do is we may

222

00:08:55,590 --> 00:08:53,440

actually simulate a launch

223

00:08:59,910 --> 00:08:55,600

scenario

224

00:08:59,920 --> 00:09:03,910

run through entry descent and landing

225

00:09:08,790 --> 00:09:06,550

and of course surface operations

226

00:09:10,630 --> 00:09:08,800

we work through all various portions of

227

00:09:12,710 --> 00:09:10,640

the mission phase and we do all the

228

00:09:14,070 --> 00:09:12,720

testing for that within the software and

229

00:09:16,070 --> 00:09:14,080

the hardware we make sure everything

230

00:09:17,110 --> 00:09:16,080

interacts and works

231

00:09:18,550 --> 00:09:17,120

properly

232

00:09:21,430 --> 00:09:18,560

went to school at arizona state

233

00:09:23,750 --> 00:09:21,440

university i received my bachelor's in

234

00:09:25,509 --> 00:09:23,760

electrical engineering

235

00:09:27,509 --> 00:09:25,519

take the time to enjoy

236

00:09:29,269 --> 00:09:27,519

where you're at you know in other words

237

00:09:30,790 --> 00:09:29,279

live in the moment that you're in in

238

00:09:32,790 --> 00:09:30,800

high school you know don't take it too

239

00:09:34,630 --> 00:09:32,800

serious i mean obviously get serious get

240

00:09:37,430 --> 00:09:34,640

good grades you want to get into college

241

00:09:40,230 --> 00:09:37,440

but enjoy it

242

00:09:43,030 --> 00:09:40,240

large fires burning throughout australia

243

00:09:45,269 --> 00:09:43,040

dust plumes over the mediterranean sea

244

00:09:46,870 --> 00:09:45,279

both have been captured by nasa's busy

245

00:09:48,630 --> 00:09:46,880

moderate resolution imaging

246

00:09:51,430 --> 00:09:48,640

spectroradiometers

247

00:09:53,509 --> 00:09:51,440

the modis aboard nasa's aqua satellite

248

00:09:55,990 --> 00:09:53,519

took this image of fires raging through

249

00:09:57,829 --> 00:09:56,000

thick grass in remote areas of northern

250

00:10:00,389 --> 00:09:57,839

and central australia

251
00:10:02,870 --> 00:10:00,399
fires have burned through nearly 58 000

252
00:10:04,949 --> 00:10:02,880
square miles of land and what's proving

253
00:10:06,870 --> 00:10:04,959
to be one of australia's most extreme

254
00:10:09,269 --> 00:10:06,880
fire seasons in years

255
00:10:11,430 --> 00:10:09,279
from aboard nasa's terra satellite its

256
00:10:13,670 --> 00:10:11,440
modus has produced this picture of dust

257
00:10:16,550 --> 00:10:13,680
plumes in the eastern mediterranean

258
00:10:18,710 --> 00:10:16,560
ringing the island of cyprus the dust

259
00:10:25,350 --> 00:10:18,720
extends far enough to reach the southern

260
00:10:29,829 --> 00:10:27,590
37 teachers from across the country

261
00:10:32,710 --> 00:10:29,839
recently participated in two three-day

262
00:10:35,590 --> 00:10:32,720
workshops in palmdale california as part

263
00:10:38,630 --> 00:10:35,600

of nasa's airborne research experiences

264

00:10:40,630 --> 00:10:38,640

for educators program aries

265

00:10:42,790 --> 00:10:40,640

the program targets sixth through ninth

266

00:10:45,190 --> 00:10:42,800

grade educators of science technology

267

00:10:47,269 --> 00:10:45,200

engineering and mathematics as well as

268

00:10:49,190 --> 00:10:47,279

college students currently enrolled in

269

00:10:50,389 --> 00:10:49,200

an accredited teacher credentialing

270

00:10:52,710 --> 00:10:50,399

curriculum

271

00:10:55,430 --> 00:10:52,720

they worked with and heard from nasa

272

00:10:57,829 --> 00:10:55,440

engineers and a scientist involved in

273

00:10:59,670 --> 00:10:57,839

airborne science and flight research

274

00:11:01,430 --> 00:10:59,680

it's a black and white image saying how

275

00:11:02,790 --> 00:11:01,440

bright it is that this frequency band

276

00:11:05,190 --> 00:11:02,800

just it's just black and white image

277

00:11:07,190 --> 00:11:05,200

saying it's bright here not bright here

278

00:11:09,750 --> 00:11:07,200

the groups also toured nasa science

279

00:11:11,910 --> 00:11:09,760

aircraft including the sofia airborne

280

00:11:14,949 --> 00:11:11,920

observatory at the dryden aircraft

281

00:11:17,190 --> 00:11:14,959

operations facility and participated in

282

00:11:19,030 --> 00:11:17,200

an innovative teacher-student challenge

283

00:11:20,949 --> 00:11:19,040

to plan a flight mission to improve

284

00:11:22,710 --> 00:11:20,959

earthquake monitoring

285

00:11:24,630 --> 00:11:22,720

the events were sponsored in part by

286

00:11:27,509 --> 00:11:24,640

dryden flight research center's office

287

00:11:31,190 --> 00:11:27,519

of education and the teaching from space

288

00:11:34,550 --> 00:11:31,200

program at the johnson space center

289

00:11:36,550 --> 00:11:34,560

yeah let's go in that little area place

290

00:11:39,269 --> 00:11:36,560

this unique corn maze in lathrop

291

00:11:41,750 --> 00:11:39,279

california is one of seven at so-called

292

00:11:44,310 --> 00:11:41,760

space farms across the country honoring

293

00:11:45,990 --> 00:11:44,320

nasa and the 50th anniversary of human

294

00:11:49,430 --> 00:11:46,000

space flight the central valley in

295

00:11:51,509 --> 00:11:49,440

california is not near any nasa center

296

00:11:53,509 --> 00:11:51,519

and so being able to outreach here in

297

00:11:55,269 --> 00:11:53,519

kind of a non-traditional way to

298

00:11:56,389 --> 00:11:55,279

non-traditional communities is really

299

00:11:58,629 --> 00:11:56,399

important to us

300

00:12:01,350 --> 00:11:58,639

operated by the del oso family and

301

00:12:03,350 --> 00:12:01,360

sponsored by nasa this 20-acre maze

302

00:12:05,350 --> 00:12:03,360

features the discoveries and images of

303

00:12:07,670 --> 00:12:05,360

the agency's kepler mission

304

00:12:10,150 --> 00:12:07,680

kepler is the first spacecraft capable

305

00:12:12,790 --> 00:12:10,160

of finding earth-sized planets in or

306

00:12:14,949 --> 00:12:12,800

near the habitable zone the region and a

307

00:12:20,150 --> 00:12:14,959

planetary system believes suitable to

308

00:12:26,310 --> 00:12:22,629

visitors also had access to an aerial

309

00:12:29,030 --> 00:12:26,320

ropes course zip lines rides and more

310

00:12:31,509 --> 00:12:29,040

the space farm 7 maze project combines

311

00:12:33,590 --> 00:12:31,519

the thrill of space with the intrigue of

312

00:12:35,590 --> 00:12:33,600

finding your way out of a maze this is a

313

00:12:38,389 --> 00:12:35,600

brazilian feed corn it grows about 10

314

00:12:40,150 --> 00:12:38,399

feet tall and we plant the maize we just

315

00:12:41,750 --> 00:12:40,160

do one solid planting and carve it out

316

00:12:43,430 --> 00:12:41,760

when the corn is really small some

317

00:12:44,790 --> 00:12:43,440

people wonder if we take the stalks out

318

00:12:45,829 --> 00:12:44,800

when they're 10 feet which is obviously

319

00:12:47,190 --> 00:12:45,839

not going to happen because that'd be

320

00:12:48,870 --> 00:12:47,200

very very difficult and then when we're

321

00:12:51,190 --> 00:12:48,880

done for the season we plow it under and

322

00:12:53,110 --> 00:12:51,200

we feed it to cattle each farm selected

323

00:12:55,509 --> 00:12:53,120

a theme highlighting that region's

324

00:12:58,310 --> 00:12:55,519

particular nasa field center and its

325

00:13:00,230 --> 00:12:58,320

contribution to the agency you can vote

326

00:13:06,150 --> 00:13:00,240

for your favorite nasa themed maze

327

00:13:10,310 --> 00:13:08,310

and that's this week at nasa