



1  
00:00:31,750 --> 00:00:29,109  
NASA's John sees Stennis Space Center in

2  
00:00:34,750 --> 00:00:31,760  
South Mississippi has tested propulsion

3  
00:00:37,240 --> 00:00:34,760  
systems for over 30 years in the early

4  
00:00:39,610 --> 00:00:37,250  
60s tennis tested the first and second

5  
00:00:41,830 --> 00:00:39,620  
stages of the Saturn five rocket which

6  
00:00:45,010 --> 00:00:41,840  
later transported Americans to the moon

7  
00:00:47,260 --> 00:00:45,020  
in the late 70s the center was

8  
00:00:49,150 --> 00:00:47,270  
responsible for flight certifying the

9  
00:00:53,500 --> 00:00:49,160  
main propulsion system for the space

10  
00:00:55,450 --> 00:00:53,510  
shuttle today Stennis Space Center plays

11  
00:00:57,940 --> 00:00:55,460  
a significant role in one of NASA's

12  
00:01:00,160 --> 00:00:57,950  
principal enterprises to engage in the

13  
00:01:03,069 --> 00:01:00,170

human exploration and development of

14

00:01:05,439 --> 00:01:03,079

space the space shuttle is the backbone

15

00:01:07,900 --> 00:01:05,449

of this initiative and Stennis is

16

00:01:09,190 --> 00:01:07,910

responsible for all activities related

17

00:01:11,260 --> 00:01:09,200

to the development and flight

18

00:01:13,810 --> 00:01:11,270

certification testing for the Space

19

00:01:15,340 --> 00:01:13,820

Shuttle main engines which power the

20

00:01:19,389 --> 00:01:15,350

shuttle during its first eight and

21

00:01:21,029 --> 00:01:19,399

one-half minutes of flight located near

22

00:01:23,529 --> 00:01:21,039

the beautiful Mississippi Gulf Coast

23

00:01:26,680 --> 00:01:23,539

Stennis Space Center is one of NASA's

24

00:01:29,550 --> 00:01:26,690

for Space Flight centers the center

25

00:01:32,830 --> 00:01:29,560

offers experienced skilled personnel and

26

00:01:35,020 --> 00:01:32,840

state-of-the-art laboratories a seven

27

00:01:38,740 --> 00:01:35,030

and one-half mile man-made canal system

28

00:01:42,490 --> 00:01:38,750

and a 125 thousand acre buffer zone

29

00:01:44,260 --> 00:01:42,500

which is a national asset because of the

30

00:01:46,839 --> 00:01:44,270

center's excellent capabilities for

31

00:01:48,760 --> 00:01:46,849

testing it has been designated as NASA's

32

00:01:52,330 --> 00:01:48,770

center of excellence for large

33

00:01:54,609 --> 00:01:52,340

propulsion systems testing SSC is well

34

00:01:57,790 --> 00:01:54,619

prepared to test the propulsion systems

35

00:02:00,550 --> 00:01:57,800

hardware of the future the newly

36

00:02:02,800 --> 00:02:00,560

constructed high heat flux facility will

37

00:02:05,199 --> 00:02:02,810

perform high-temperature tests on

38

00:02:06,969 --> 00:02:05,209

materials for a hypersonic aircraft of

39

00:02:11,290 --> 00:02:06,979

the future such as the National

40

00:02:14,650 --> 00:02:11,300

aerospace plane program a joint NASA DoD

41

00:02:17,020 --> 00:02:14,660

effort nasp is a flight test vehicle

42

00:02:19,420 --> 00:02:17,030

that would take off like an airplane fly

43

00:02:22,150 --> 00:02:19,430

into orbit at speeds of up to Mach 25

44

00:02:26,080 --> 00:02:22,160

and return through the atmosphere to

45

00:02:28,540 --> 00:02:26,090

land on a runway as mankind continues to

46

00:02:30,910 --> 00:02:28,550

explore and develop space a new

47

00:02:33,280 --> 00:02:30,920

generation of cost-effective commercial

48

00:02:35,979 --> 00:02:33,290

launch vehicles will be required

49

00:02:37,869 --> 00:02:35,989

Stennis Space Center will be prepared to

50

00:02:40,240 --> 00:02:37,879

test much of the advanced space

51  
00:02:44,470 --> 00:02:40,250  
propulsion hardware beginning at the

52  
00:02:46,809 --> 00:02:44,480  
major rocket engine component level SSC

53  
00:02:49,569 --> 00:02:46,819  
state-of-the-art component test facility

54  
00:02:52,569 --> 00:02:49,579  
is a flexible three celled ground test

55  
00:02:55,390 --> 00:02:52,579  
facility now in use performing tests on

56  
00:02:59,229 --> 00:02:55,400  
rocket engines hybrid rocket motors and

57  
00:03:01,479 --> 00:02:59,239  
space vehicle system components Stennis

58  
00:03:03,729 --> 00:03:01,489  
personnel are involved in a broad range

59  
00:03:06,129 --> 00:03:03,739  
of research and technology projects

60  
00:03:08,860 --> 00:03:06,139  
these activities include the development

61  
00:03:11,800 --> 00:03:08,870  
of remote sensing technology earth

62  
00:03:14,289 --> 00:03:11,810  
sciences research associated data

63  
00:03:18,009 --> 00:03:14,299

systems development and Technology

64

00:03:19,960 --> 00:03:18,019

Transfer Stennis Space Center is NASA's

65

00:03:22,449 --> 00:03:19,970

lead center for commercial remote

66

00:03:24,460 --> 00:03:22,459

sensing activities through such programs

67

00:03:26,710 --> 00:03:24,470

as the visiting investigator program

68

00:03:29,140 --> 00:03:26,720

earth observations commercial

69

00:03:31,569 --> 00:03:29,150

applications program Space Act

70

00:03:34,390 --> 00:03:31,579

agreements and the commercial remote

71

00:03:37,149 --> 00:03:34,400

sensing technology initiative these

72

00:03:39,729 --> 00:03:37,159

programs use a customer-focused approach

73

00:03:42,309 --> 00:03:39,739

to understand industry's need for remote

74

00:03:44,830 --> 00:03:42,319

sensing data related geographic

75

00:03:49,330 --> 00:03:44,840

information and advanced technologies to

76  
00:03:51,460 --> 00:03:49,340  
capture new information markets SSC also

77  
00:03:54,069 --> 00:03:51,470  
provides the bridge between the small

78  
00:03:56,589 --> 00:03:54,079  
satellite technology program and the

79  
00:03:59,170 --> 00:03:56,599  
private sector for commercial remote

80  
00:04:01,629 --> 00:03:59,180  
sensing applications Stennis personnel

81  
00:04:04,420 --> 00:04:01,639  
also work in a wide range of science

82  
00:04:07,119 --> 00:04:04,430  
projects to better understand our planet

83  
00:04:09,369 --> 00:04:07,129  
such as studying gases associated with

84  
00:04:12,390 --> 00:04:09,379  
the greenhouse effect and preserving

85  
00:04:15,759 --> 00:04:12,400  
tropical rainforests in Central America

86  
00:04:18,580 --> 00:04:15,769  
nearly 4,000 men and women make up the

87  
00:04:21,159 --> 00:04:18,590  
Stennis workforce which includes 1,600

88  
00:04:23,710 --> 00:04:21,169

scientists and engineers these highly

89

00:04:27,189 --> 00:04:23,720

skilled personnel are employed not only

90

00:04:31,499 --> 00:04:27,199

by nasa and its contractor team but also

91

00:04:34,510 --> 00:04:31,509

by 22 other resident agencies at Stennis

92

00:04:36,219 --> 00:04:34,520

the center is also unique in that all

93

00:04:39,610 --> 00:04:36,229

the agencies share common facilities

94

00:04:41,409 --> 00:04:39,620

services and capabilities so that each

95

00:04:44,379 --> 00:04:41,419

may accomplish its own mission at

96

00:04:47,450 --> 00:04:44,389

Stennis in a more cost-effective manner

97

00:04:49,969 --> 00:04:47,460

more oceanographers work at stennis than

98

00:04:53,360 --> 00:04:49,979

any other single location around the

99

00:04:55,670 --> 00:04:53,370

world the commander naval meteorology

100

00:04:58,310 --> 00:04:55,680

and oceanography command heads a

101  
00:05:01,370 --> 00:04:58,320  
worldwide organization providing

102  
00:05:04,430 --> 00:05:01,380  
oceanographic meteorological and mapping

103  
00:05:07,939 --> 00:05:04,440  
charting and geodetic services to fleet

104  
00:05:10,460 --> 00:05:07,949  
forces operating in all oceans every

105  
00:05:12,980 --> 00:05:10,470  
Navy ship submarine and aircraft

106  
00:05:15,610 --> 00:05:12,990  
receives products and support services

107  
00:05:17,750 --> 00:05:15,620  
from this command the naval

108  
00:05:20,480 --> 00:05:17,760  
oceanographic office is the commander's

109  
00:05:22,300 --> 00:05:20,490  
largest single element one of the

110  
00:05:24,620 --> 00:05:22,310  
world's most powerful crazed

111  
00:05:27,469 --> 00:05:24,630  
supercomputers is housed in their

112  
00:05:30,860 --> 00:05:27,479  
facilities at Stennis the Naval Research

113  
00:05:33,320 --> 00:05:30,870

Laboratory at SSC is the principal Navy

114

00:05:37,040 --> 00:05:33,330

laboratory performing oceanographic and

115

00:05:41,180 --> 00:05:37,050

atmospheric environmental research the

116

00:05:43,070 --> 00:05:41,190

national data buoy center or ND bc is an

117

00:05:45,920 --> 00:05:43,080

element of a national weather service

118

00:05:49,730 --> 00:05:45,930

under NOAA the National Oceanic and

119

00:05:53,300 --> 00:05:49,740

Atmospheric Administration ND bc at

120

00:05:55,670 --> 00:05:53,310

Stennis operates and maintains 104

121

00:05:58,339 --> 00:05:55,680

oceanographic and meteorological data

122

00:06:01,400 --> 00:05:58,349

collection stations from the Bering Sea

123

00:06:03,980 --> 00:06:01,410

to the South Pacific the data taken

124

00:06:06,230 --> 00:06:03,990

every hour are delivered to operational

125

00:06:09,290 --> 00:06:06,240

weather forecasters in less than 30

126  
00:06:10,990 --> 00:06:09,300  
minutes another element of NOAA the

127  
00:06:13,430 --> 00:06:11,000  
National Marine Fisheries Service

128  
00:06:15,620 --> 00:06:13,440  
develops instruments for monitoring

129  
00:06:18,320 --> 00:06:15,630  
underwater performance of nets and

130  
00:06:21,170 --> 00:06:18,330  
associated fish behavior the service

131  
00:06:24,050 --> 00:06:21,180  
also uses satellite technology to track

132  
00:06:25,969 --> 00:06:24,060  
endangered species and map environmental

133  
00:06:29,360 --> 00:06:25,979  
conditions in the Gulf of Mexico and

134  
00:06:31,969 --> 00:06:29,370  
elsewhere the Department of interior's

135  
00:06:34,939 --> 00:06:31,979  
u.s. geological survey provides federal

136  
00:06:37,730 --> 00:06:34,949  
agencies with hydrologic instrumentation

137  
00:06:40,430 --> 00:06:37,740  
service and support it also provides

138  
00:06:42,379 --> 00:06:40,440

water velocity meter calibrations for

139

00:06:43,840 --> 00:06:42,389

federal agencies and the private and

140

00:06:46,939 --> 00:06:43,850

public sectors

141

00:06:49,879 --> 00:06:46,949

the USGS is Earth Science Information

142

00:06:51,310 --> 00:06:49,889

Center offers the public access to

143

00:06:54,469 --> 00:06:51,320

millions of aerial and satellite

144

00:06:57,260 --> 00:06:54,479

photographs maps and earth science

145

00:06:59,180 --> 00:06:57,270

publications the Environmental

146

00:07:02,029 --> 00:06:59,190

Protection Agency's environmental

147

00:07:03,969 --> 00:07:02,039

chemistry laboratory provides data to

148

00:07:06,290 --> 00:07:03,979

assist in monitoring and regulating

149

00:07:10,249 --> 00:07:06,300

America's pesticide use in the

150

00:07:12,439 --> 00:07:10,259

environment the Gulf of Mexico program

151  
00:07:14,390 --> 00:07:12,449  
combines the efforts of federal and

152  
00:07:16,939 --> 00:07:14,400  
state agencies with industry and

153  
00:07:19,960 --> 00:07:16,949  
environmental representatives to develop

154  
00:07:25,550 --> 00:07:19,970  
a plan to protect restore and maintain

155  
00:07:27,350 --> 00:07:25,560  
the health of the Gulf the space remote

156  
00:07:29,150 --> 00:07:27,360  
sensing center is dedicated to the

157  
00:07:31,400 --> 00:07:29,160  
development and commercialization of

158  
00:07:34,040 --> 00:07:31,410  
remote sensing and geographic

159  
00:07:37,790 --> 00:07:34,050  
information system technologies into the

160  
00:07:39,350 --> 00:07:37,800  
private and public sectors also located

161  
00:07:41,860 --> 00:07:39,360  
at Stennis is the deactivated

162  
00:07:44,390 --> 00:07:41,870  
Mississippi Army Ammunition Plant

163  
00:07:46,279 --> 00:07:44,400

another integral part of the Stennis

164

00:07:48,830 --> 00:07:46,289

community is the center of higher

165

00:07:52,689 --> 00:07:48,840

learning which offers employees and

166

00:07:54,830 --> 00:07:52,699

local residents academic degree programs

167

00:07:56,899 --> 00:07:54,840

participating institutions include

168

00:07:59,330 --> 00:07:56,909

Mississippi State University the

169

00:08:01,670 --> 00:07:59,340

University of Southern Mississippi along

170

00:08:03,920 --> 00:08:01,680

with its center for marine science the

171

00:08:07,640 --> 00:08:03,930

University of New Orleans and Pearl

172

00:08:09,800 --> 00:08:07,650

River Community College NASA's teacher

173

00:08:12,320 --> 00:08:09,810

resource center at Stennis offers

174

00:08:15,020 --> 00:08:12,330

hands-on workshops and a vast collection

175

00:08:18,279 --> 00:08:15,030

of free materials for K through 12

176

00:08:21,249 --> 00:08:18,289

educators including video tapes slides

177

00:08:25,159 --> 00:08:21,259

computer software lesson plans and

178

00:08:27,950 --> 00:08:25,169

publications Stennis Space Center also

179

00:08:30,830 --> 00:08:27,960

manages NASA's tri-state education

180

00:08:33,550 --> 00:08:30,840

initiative a demonstration project in

181

00:08:36,019 --> 00:08:33,560

support of the national education goals

182

00:08:38,420 --> 00:08:36,029

plans are to replicate this NASA

183

00:08:41,709 --> 00:08:38,430

education initiative with specialized

184

00:08:44,269 --> 00:08:41,719

programs tailored for other communities

185

00:08:46,370 --> 00:08:44,279

transferring NASA developed technology

186

00:08:48,819 --> 00:08:46,380

is another primary focus of the Space

187

00:08:51,890 --> 00:08:48,829

Agency both Mississippi and Louisiana

188

00:08:52,990 --> 00:08:51,900

have technology transfer offices at

189

00:08:58,490 --> 00:08:53,000

Stennis

190

00:09:00,139 --> 00:08:58,500

has been a powerful partner in the

191

00:09:02,720 --> 00:09:00,149

economic development of Southern

192

00:09:04,870 --> 00:09:02,730

Mississippi and Louisiana the

193

00:09:07,879 --> 00:09:04,880

multi-agency center creates jobs

194

00:09:09,889 --> 00:09:07,889

increases local and state tax bases and

195

00:09:12,860 --> 00:09:09,899

enhances business development

196

00:09:14,389 --> 00:09:12,870

opportunities equally significant are

197

00:09:17,240 --> 00:09:14,399

the center's efforts to be a good

198

00:09:18,860 --> 00:09:17,250

corporate citizen special emphasis has

199

00:09:21,949 --> 00:09:18,870

been placed on activities that support

200

00:09:24,290 --> 00:09:21,959

education in addition to sponsoring

201  
00:09:26,689 --> 00:09:24,300  
Special Olympics charity campaigns and

202  
00:09:28,790 --> 00:09:26,699  
blood drives Stennis employees have

203  
00:09:31,639 --> 00:09:28,800  
always enthusiastically served in their

204  
00:09:33,740 --> 00:09:31,649  
hometowns as scoutmasters Sunday School

205  
00:09:36,800 --> 00:09:33,750  
teachers chamber board members and so

206  
00:09:39,110 --> 00:09:36,810  
forth the doors to Stennis are always

207  
00:09:40,850 --> 00:09:39,120  
open to the public the visitors center

208  
00:09:43,100 --> 00:09:40,860  
is a leading tourist attraction in the

209  
00:09:46,910 --> 00:09:43,110  
area offering indoor and outdoor

210  
00:09:49,009 --> 00:09:46,920  
exhibits tour guide presentations movies

211  
00:09:52,610 --> 00:09:49,019  
& buster's of the Space Shuttle main

212  
00:09:54,470 --> 00:09:52,620  
engine test complex today some of the

213  
00:09:56,389 --> 00:09:54,480

most powerful rocket engines and

214

00:09:59,449 --> 00:09:56,399

components are tested at Stennis Space

215

00:10:02,090 --> 00:09:59,459

Center flight certification of Space

216

00:10:05,329 --> 00:10:02,100

Shuttle main engines will continue to be

217

00:10:07,069 --> 00:10:05,339

the centerpiece of SSC's mission because

218

00:10:09,410 --> 00:10:07,079

the shuttle is the most capable and

219

00:10:12,680 --> 00:10:09,420

efficient human transportation system to

220

00:10:15,920 --> 00:10:12,690

space available on earth and a great

221

00:10:18,199 --> 00:10:15,930

source of national pride the shuttle is

222

00:10:20,870 --> 00:10:18,209

also NASA's workhorse to deploy the

223

00:10:23,420 --> 00:10:20,880

space station the space station will

224

00:10:25,630 --> 00:10:23,430

serve as a permanent laboratory where

225

00:10:28,550 --> 00:10:25,640

humans will pursue cutting-edge science

226

00:10:32,930 --> 00:10:28,560

that will ultimately enhance life on

227

00:10:35,300 --> 00:10:32,940

Earth for future generations as our

228

00:10:39,019 --> 00:10:35,310

country's leaders chart the future of

229

00:10:42,410 --> 00:10:39,029

our nation's space program NASA's jhansi

230

00:10:44,150 --> 00:10:42,420

stennis space center stands ready to

231

00:10:47,180 --> 00:10:44,160

continue making significant

232

00:10:49,480 --> 00:10:47,190

contributions to those goals and to