



1
00:00:06,070 --> 00:00:04,309
hi i'm mike massimino for the past few

2
00:00:08,310 --> 00:00:06,080
shuttle flights we've taken you behind

3
00:00:09,910 --> 00:00:08,320
the scenes to meet the crews as they

4
00:00:11,669 --> 00:00:09,920
train for their flights and the people

5
00:00:13,589 --> 00:00:11,679
around the country who make those

6
00:00:15,509 --> 00:00:13,599
missions fly but there's a lot of

7
00:00:17,269 --> 00:00:15,519
footage that we haven't shown you yet so

8
00:00:19,349 --> 00:00:17,279
we'd like to take you back to some of

9
00:00:21,269 --> 00:00:19,359
our recent flights and introduce you to

10
00:00:24,230 --> 00:00:21,279
more of the people who do everything at

11
00:00:35,670 --> 00:00:24,240
nasa we hope you enjoy this episode of

12
00:00:39,910 --> 00:00:38,150
that's me as a young astronaut

13
00:00:41,990 --> 00:00:39,920

right and then there's and who's on top

14

00:00:43,590 --> 00:00:42,000

of it

15

00:00:45,430 --> 00:00:43,600

oh

16

00:00:46,869 --> 00:00:45,440

you're gonna have to fix it mario

17

00:00:49,110 --> 00:00:46,879

mark now you're in freddie you know the

18

00:00:50,150 --> 00:00:49,120

story here

19

00:00:51,910 --> 00:00:50,160

i don't know you know what this is your

20

00:00:52,869 --> 00:00:51,920

mandy patins down there

21

00:00:54,229 --> 00:00:52,879

have them tell you you haven't heard the

22

00:00:55,830 --> 00:00:54,239

mario andretti you got them in or you're

23

00:00:57,189 --> 00:00:55,840

busy with your training

24

00:00:58,790 --> 00:00:57,199

i'm going to tell you to marry her draw

25

00:01:00,069 --> 00:00:58,800

the mario andretti picture

26
00:01:02,150 --> 00:01:00,079
what happened was isa come and spend a

27
00:01:05,030 --> 00:01:02,160
lot of time here with dave we were doing

28
00:01:07,109 --> 00:01:05,040
some uh robotics display stuff here

29
00:01:08,789 --> 00:01:07,119
a long time ago but i told him the story

30
00:01:09,910 --> 00:01:08,799
that i went to this pizza parlor with my

31
00:01:21,109 --> 00:01:09,920
father-in-law are you paying attention

32
00:01:25,429 --> 00:01:23,270
i was home in new york right it was uh

33
00:01:27,350 --> 00:01:25,439
i've been an astronaut for many years so

34
00:01:29,350 --> 00:01:27,360
my father-in-law says come on let's go

35
00:01:31,350 --> 00:01:29,360
to philippo's you just opened up a new

36
00:01:32,310 --> 00:01:31,360
pizzeria around the corner so he tells

37
00:01:33,350 --> 00:01:32,320
me you know

38
00:01:34,789 --> 00:01:33,360

it's like it was like nine in the

39

00:01:36,390 --> 00:01:34,799

morning because the filippo offers your

40

00:01:38,630 --> 00:01:36,400

pizza you got eaten you know you can't

41

00:01:39,830 --> 00:01:38,640

again you know so we go there we go to

42

00:01:41,270 --> 00:01:39,840

flee we goes you want some pizza it's

43

00:01:42,550 --> 00:01:41,280

like nine in the morning yeah sure right

44

00:01:44,149 --> 00:01:42,560

so reading pizza

45

00:01:46,789 --> 00:01:44,159

and he looks and he just opened up this

46

00:01:49,030 --> 00:01:46,799

pizza place and right behind the counter

47

00:01:50,789 --> 00:01:49,040

is a picture of mario andretti you know

48

00:01:52,870 --> 00:01:50,799

some filippo best of luck with your new

49

00:01:54,069 --> 00:01:52,880

pizza place barry orange

50

00:01:55,749 --> 00:01:54,079

and so i was you know about a new

51
00:01:57,350 --> 00:01:55,759
astronaut and someone in my following

52
00:01:59,190 --> 00:01:57,360
that we get pictures and we hang them up

53
00:02:01,190 --> 00:01:59,200
so felipe goes on her back

54
00:02:02,310 --> 00:02:01,200
so my father-in-law says you know mike

55
00:02:03,590 --> 00:02:02,320
why don't you take a picture why don't

56
00:02:04,870 --> 00:02:03,600
you give philippe one of your pictures

57
00:02:06,230 --> 00:02:04,880
he can put it up in the water he's got

58
00:02:08,309 --> 00:02:06,240
mario andretti you can put your picture

59
00:02:09,910 --> 00:02:08,319
up there yeah sure why not so felipe

60
00:02:11,990 --> 00:02:09,920
comes back and always the movie stands

61
00:02:14,790 --> 00:02:12,000
like this and he's making pizza so he

62
00:02:16,309 --> 00:02:14,800
goes fleet well you got mario andretti

63
00:02:18,150 --> 00:02:16,319

you know fleetwood that's right that's

64

00:02:20,229 --> 00:02:18,160

mario andretti on the wall you see mario

65

00:02:22,070 --> 00:02:20,239

andretti he goes you know mike you know

66

00:02:23,910 --> 00:02:22,080

maybe he gives you a picture you put put

67

00:02:25,190 --> 00:02:23,920

on the one next tomorrow mike picks it

68

00:02:26,390 --> 00:02:25,200

next to mario andretti you got to be

69

00:02:28,470 --> 00:02:26,400

kidding me you're going to put us a

70

00:02:30,309 --> 00:02:28,480

picture in some of mario andretti pick a

71

00:02:31,670 --> 00:02:30,319

man you get around everybody

72

00:02:34,150 --> 00:02:31,680

there's a picture that's a mario kart

73

00:02:35,990 --> 00:02:34,160

it's very good

74

00:02:38,390 --> 00:02:36,000

he goes like this so i'm my father's

75

00:02:39,509 --> 00:02:38,400

like her in shock and i'm dying laughing

76

00:02:41,750 --> 00:02:39,519

it's like the funniest thing because of

77

00:02:43,190 --> 00:02:41,760

my father but so that's the story so i

78

00:02:45,830 --> 00:02:43,200

told these guys the story so what they

79

00:02:47,430 --> 00:02:45,840

do is they had my picture up there right

80

00:02:48,790 --> 00:02:47,440

yeah and then after i told them the

81

00:02:50,790 --> 00:02:48,800

story i come in here like a couple days

82

00:02:53,190 --> 00:02:50,800

later and you have mario andretti's

83

00:02:55,990 --> 00:02:53,200

picture like this

84

00:02:57,110 --> 00:02:56,000

plastered on top of mine

85

00:02:58,309 --> 00:02:57,120

of course so

86

00:03:01,030 --> 00:02:58,319

yeah that's about it

87

00:03:03,910 --> 00:03:01,040

that's mario andretti

88

00:03:05,670 --> 00:03:03,920

anyway so that's the story that's good

89

00:03:06,470 --> 00:03:05,680

we just got off at what level are we at

90

00:03:09,830 --> 00:03:06,480

now

91

00:03:10,949 --> 00:03:09,840

135 135 so we're 60 foot feet

92

00:03:12,470 --> 00:03:10,959

lower

93

00:03:14,949 --> 00:03:12,480

than we were

94

00:03:17,670 --> 00:03:14,959

a few minutes ago

95

00:03:19,110 --> 00:03:17,680

at the 195 foot level with it but look

96

00:03:20,869 --> 00:03:19,120

there's a shuttle wing right there with

97

00:03:23,350 --> 00:03:20,879

the nasa meatball

98

00:03:29,350 --> 00:03:23,360

right there that's awesome

99

00:03:34,229 --> 00:03:30,789

it's amazing this is like a miniature

100

00:03:37,430 --> 00:03:34,239

city around this thing with all these

101
00:03:38,710 --> 00:03:37,440
this launch pad is incredible

102
00:03:41,750 --> 00:03:38,720
look at this and there's the space

103
00:03:45,509 --> 00:03:43,110
look at that there's the wing all

104
00:03:49,670 --> 00:03:45,519
covered up with the structure which will

105
00:03:52,869 --> 00:03:49,680
all roll away before launch look at that

106
00:03:55,670 --> 00:03:54,070
look at that

107
00:03:57,350 --> 00:03:55,680
hey jack how's it going down here all

108
00:03:59,589 --> 00:03:57,360
right how you doing awesome man look at

109
00:04:01,910 --> 00:03:59,599
that oh there's a space shuttle

110
00:04:06,390 --> 00:04:01,920
look at that

111
00:04:08,949 --> 00:04:06,400
flag

112
00:04:13,750 --> 00:04:08,959
that's awesome

113
00:04:15,509 --> 00:04:13,760

there's our wing look at that door

114

00:04:17,430 --> 00:04:15,519

i was open the door they got closed out

115

00:04:18,550 --> 00:04:17,440

so we can't look look oh okay we'll go

116

00:04:20,229 --> 00:04:18,560

through the glass

117

00:04:21,990 --> 00:04:20,239

wow look at that what are we looking at

118

00:04:23,990 --> 00:04:22,000

that's the uh

119

00:04:25,270 --> 00:04:24,000

main propulsion system main propulsion

120

00:04:26,550 --> 00:04:25,280

system

121

00:04:27,670 --> 00:04:26,560

all right eight lines for the main

122

00:04:30,310 --> 00:04:27,680

engines

123

00:04:34,390 --> 00:04:32,469

all right and down here

124

00:04:35,990 --> 00:04:34,400

as well more of the shuttle

125

00:04:37,350 --> 00:04:36,000

all right that's the inside it's a

126
00:04:38,550 --> 00:04:37,360
little window to the inside of the

127
00:04:54,150 --> 00:04:38,560
spaceship

128
00:04:54,160 --> 00:04:58,629
thank you thanks for having me down here

129
00:05:06,550 --> 00:05:00,070
got a couple guys down here putting some

130
00:05:12,070 --> 00:05:07,830
and you called us this is the aft

131
00:05:35,909 --> 00:05:15,670
the business in the business

132
00:05:35,919 --> 00:05:41,270
vertical stabilizer

133
00:05:44,550 --> 00:05:43,350
of the spaceship

134
00:05:47,749 --> 00:05:44,560
look at that there's an engine down

135
00:05:50,469 --> 00:05:49,110
all right what they're doing is putting

136
00:05:55,270 --> 00:05:50,479
carrier panels on they just did all the

137
00:05:58,390 --> 00:05:56,469
all right

138
00:06:00,150 --> 00:05:58,400

and here we've got engines down there

139

00:06:01,270 --> 00:06:00,160

can we get down here down let's go down

140

00:06:03,189 --> 00:06:01,280

there

141

00:06:05,350 --> 00:06:03,199

so here we are walking around here more

142

00:06:07,590 --> 00:06:05,360

of the launch pad this is very exclusive

143

00:06:09,590 --> 00:06:07,600

access isn't it don you just can't walk

144

00:06:10,550 --> 00:06:09,600

off the street on the nasa tour say i

145

00:06:12,150 --> 00:06:10,560

want to go over here and put my head

146

00:06:22,629 --> 00:06:12,160

inside of an engine belt

147

00:06:26,309 --> 00:06:24,950

yeah more of the main engines there they

148

00:06:27,670 --> 00:06:26,319

are

149

00:06:28,710 --> 00:06:27,680

they're covered up

150

00:06:30,230 --> 00:06:28,720

yeah i think they don't get anything to

151

00:06:31,749 --> 00:06:30,240

go inside no birds or anything they

152

00:06:32,830 --> 00:06:31,759

gotta keep purge on them because they'll

153

00:06:34,710 --> 00:06:32,840

crude

154

00:06:36,309 --> 00:06:34,720

ah

155

00:06:37,990 --> 00:06:36,319

okay what do you mean by now you said

156

00:06:40,710 --> 00:06:38,000

keep the purge on them yeah they were

157

00:06:41,430 --> 00:06:40,720

just air birds yeah okay all right

158

00:06:42,550 --> 00:06:41,440

because you don't want anything to

159

00:06:44,150 --> 00:06:42,560

happen

160

00:06:45,430 --> 00:06:44,160

right

161

00:06:47,270 --> 00:06:45,440

okay

162

00:06:48,629 --> 00:06:47,280

do we get closer up in there or is that

163

00:06:55,830 --> 00:06:48,639

this is supposed to get yeah they don't

164

00:07:00,469 --> 00:06:57,589

they usually have a sign here oh do they

165

00:07:06,870 --> 00:07:00,479

no sign we can go

166

00:07:13,909 --> 00:07:10,150

watch your head thank you

167

00:07:17,110 --> 00:07:15,189

they're all covered but here are the

168

00:07:19,430 --> 00:07:17,120

engines of the all three of the show

169

00:07:21,510 --> 00:07:19,440

look at that

170

00:07:24,710 --> 00:07:21,520

all three engines big three main engines

171

00:07:25,990 --> 00:07:24,720

so as you said this is the business end

172

00:07:28,309 --> 00:07:26,000

here we have what is they got an home

173

00:07:38,710 --> 00:07:28,319

spot is this the own spot here that is a

174

00:07:42,070 --> 00:07:40,550

yeah

175

00:07:44,230 --> 00:07:42,080

so more rockets

176
00:07:45,749 --> 00:07:44,240
but these are the big guys that launch

177
00:07:47,029 --> 00:07:45,759
you these other things help you once you

178
00:07:49,589 --> 00:07:47,039
get there

179
00:07:50,950 --> 00:07:49,599
move around in space but

180
00:07:52,309 --> 00:07:50,960
these are the ones the big ones that get

181
00:07:54,390 --> 00:07:52,319
you

182
00:07:56,390 --> 00:07:54,400
right there this is this is awesome

183
00:07:58,869 --> 00:07:56,400
isn't it so we got a solid rocket right

184
00:08:00,150 --> 00:07:58,879
isn't it

185
00:08:02,469 --> 00:08:00,160
you ever get like tired of looking at

186
00:08:03,749 --> 00:08:02,479
this stuff this is so cool there's a

187
00:08:05,830 --> 00:08:03,759
bottom of it and look at there's your

188
00:08:07,189 --> 00:08:05,840

solid rockets right there one there and

189

00:08:08,790 --> 00:08:07,199

one there let's go out there yeah if you

190

00:08:13,350 --> 00:08:08,800

got time let's go do that the good

191

00:08:13,360 --> 00:08:17,909

solid rockets external tank

192

00:08:22,309 --> 00:08:19,270

shuttle attached to all this stuff of

193

00:08:23,909 --> 00:08:22,319

course and next the uh the solid rockets

194

00:08:25,270 --> 00:08:23,919

here are held down the whole stack is

195

00:08:26,869 --> 00:08:25,280

held down by a couple bolts right isn't

196

00:08:28,230 --> 00:08:26,879

that what it is but they're pretty big

197

00:08:29,510 --> 00:08:28,240

bolts i mean there's

198

00:08:31,110 --> 00:08:29,520

there's one of them right there

199

00:08:32,709 --> 00:08:31,120

underneath that dog that's big yeah so

200

00:08:34,149 --> 00:08:32,719

it's four on each you're saying that

201
00:08:35,509 --> 00:08:34,159
hold this whole thing and those things

202
00:08:38,870 --> 00:08:35,519
blow and

203
00:08:42,790 --> 00:08:41,269
then the thing takes off

204
00:08:44,230 --> 00:08:42,800
now we're standing right here one month

205
00:08:45,910 --> 00:08:44,240
from now

206
00:08:46,790 --> 00:08:45,920
this thing will be going somewhere

207
00:08:50,389 --> 00:08:46,800
yeah

208
00:08:54,710 --> 00:08:50,399
around this way we get another view of

209
00:08:57,829 --> 00:08:56,070
and you were talking telling me earlier

210
00:08:59,829 --> 00:08:57,839
about the water suppression that's the

211
00:09:03,590 --> 00:08:59,839
water tank there isn't it all right over

212
00:09:08,389 --> 00:09:05,590
rain birds

213
00:09:10,949 --> 00:09:08,399

and there it is right there

214

00:09:13,910 --> 00:09:10,959

how awesome is that isn't that great

215

00:09:15,910 --> 00:09:13,920

that's fantastic hello