

SHIRT
MAINTENANCE
-DO NOT REMOVE
-TIPS



1
00:00:19,550 --> 00:00:17,090
good evening

2
00:00:21,170 --> 00:00:19,560
I'm Grace Douglas I'm the principal

3
00:00:24,410 --> 00:00:21,180
investigator of the crew health and

4
00:00:26,929 --> 00:00:24,420
performance exploration analog or tropia

5
00:00:29,089 --> 00:00:26,939
thank you all for joining us tonight as

6
00:00:30,769 --> 00:00:29,099
we send these Pioneers on this critical

7
00:00:33,530 --> 00:00:30,779
step towards Mars

8
00:00:36,350 --> 00:00:33,540
the knowledge we gain here will help

9
00:00:38,690 --> 00:00:36,360
enable us to send humans to Mars and

10
00:00:41,090 --> 00:00:38,700
bring them home safely

11
00:00:43,549 --> 00:00:41,100
I want to thank our entire team who made

12
00:00:44,750 --> 00:00:43,559
this Mission possible and many of their

13
00:00:48,529 --> 00:00:44,760

patches

14

00:00:56,450 --> 00:00:53,029

I also want to thank our crew

15

00:00:59,689 --> 00:00:56,460

Commander Kelly hasten medical officer

16

00:01:07,910 --> 00:01:02,389

flight engineer Ross Brockwell

17

00:01:13,429 --> 00:01:09,890

thank you all

18

00:01:17,030 --> 00:01:13,439

for your dedication to exploration

19

00:01:20,149 --> 00:01:17,040

our best wishes go with you as you begin

20

00:01:23,090 --> 00:01:20,159

this adventure of discovery

21

00:01:25,370 --> 00:01:23,100

I would now like to introduce the NASA

22

00:01:35,990 --> 00:01:25,380

Johnson Space Center Director Vanessa

23

00:01:41,870 --> 00:01:38,450

thank you thank you Grace so very much

24

00:01:46,310 --> 00:01:41,880

uh thank you all for joining us today as

25

00:01:50,149 --> 00:01:46,320

we are sending off our inaugural crew of

26

00:01:54,530 --> 00:01:50,159

chipia and these Brave individuals will

27

00:01:56,690 --> 00:01:54,540

be embarking on a one-year Journey so we

28

00:01:59,749 --> 00:01:56,700

want to thank the many teams as Grace

29

00:02:02,630 --> 00:01:59,759

said that work together tirelessly to

30

00:02:04,670 --> 00:02:02,640

pull this all together I love the fact

31

00:02:07,730 --> 00:02:04,680

that all of their plaques are here

32

00:02:11,270 --> 00:02:07,740

hanging beside the wall here but there

33

00:02:13,809 --> 00:02:11,280

were many many cross disciplines across

34

00:02:17,330 --> 00:02:13,819

the Johnson Space Center and outside

35

00:02:20,710 --> 00:02:17,340

working together to make this happen

36

00:02:24,050 --> 00:02:20,720

This Crew behind me of individuals

37

00:02:27,770 --> 00:02:24,060

volunteered to help us with getting

38

00:02:30,710 --> 00:02:27,780

ready for our missions to Mars and this

39

00:02:31,610 --> 00:02:30,720

simulated activity has been in the

40

00:02:34,910 --> 00:02:31,620

making

41

00:02:37,570 --> 00:02:34,920

this team has worked tirelessly to bring

42

00:02:41,150 --> 00:02:37,580

forth the habitat that you see behind us

43

00:02:44,869 --> 00:02:41,160

for many years and so the crew will go

44

00:02:47,570 --> 00:02:44,879

inside of this 3D printed habitat 1700

45

00:02:52,070 --> 00:02:47,580

square feet that they will have to bond

46

00:02:54,850 --> 00:02:52,080

together for 378 days I'm super excited

47

00:02:57,949 --> 00:02:54,860

about the science that will be obtained

48

00:03:00,350 --> 00:02:57,959

and one year from now when they come out

49

00:03:02,990 --> 00:03:00,360

with great success we will all be here

50

00:03:05,330 --> 00:03:03,000

waiting so that we can share in and

51
00:03:07,910 --> 00:03:05,340
thank you so very much for volunteering

52
00:03:10,070 --> 00:03:07,920
so thank you so very much to the crew

53
00:03:11,869 --> 00:03:10,080
and thank you to all the individuals

54
00:03:15,830 --> 00:03:11,879
that work together to make this happen

55
00:03:23,690 --> 00:03:15,840
thank you that's Teresa's best wishes

56
00:03:23,700 --> 00:03:32,570
okay

57
00:03:37,009 --> 00:03:35,089
thank you for having me here my name is

58
00:03:38,690 --> 00:03:37,019
Judy Hayes and I'm representing the

59
00:03:41,270 --> 00:03:38,700
human health and performance directorate

60
00:03:43,130 --> 00:03:41,280
as the chief science officer it's an

61
00:03:46,430 --> 00:03:43,140
honor to be here today as we celebrate

62
00:03:47,690 --> 00:03:46,440
the Ingress of chipia it's Ingress

63
00:03:50,509 --> 00:03:47,700

embodies

64

00:03:53,449 --> 00:03:50,519

the teamwork across the Johnson Space

65

00:03:56,210 --> 00:03:53,459

Center of Engineers and scientists and

66

00:03:58,970 --> 00:03:56,220

they built designed built certified and

67

00:04:00,110 --> 00:03:58,980

readied this Martian habitat and its

68

00:04:02,390 --> 00:04:00,120

crew

69

00:04:04,670 --> 00:04:02,400

this could not have been done without

70

00:04:07,430 --> 00:04:04,680

the strong partnership between the

71

00:04:09,050 --> 00:04:07,440

engineering directorate and between the

72

00:04:12,410 --> 00:04:09,060

human health and performance directorate

73

00:04:15,710 --> 00:04:12,420

this team is the best that NASA offers

74

00:04:18,610 --> 00:04:15,720

we especially thank this chipia crew of

75

00:04:20,689 --> 00:04:18,620

Specialists of medicine in medicine

76

00:04:23,390 --> 00:04:20,699

engineering and science

77

00:04:25,730 --> 00:04:23,400

and especially their families as they

78

00:04:26,990 --> 00:04:25,740

take on this personal commitment to this

79

00:04:29,570 --> 00:04:27,000

mission

80

00:04:31,730 --> 00:04:29,580

this they are about to embark on an

81

00:04:34,550 --> 00:04:31,740

analog mission that encompasses

82

00:04:36,770 --> 00:04:34,560

Operations Logistics and research of

83

00:04:38,629 --> 00:04:36,780

living and working on Mars the

84

00:04:41,870 --> 00:04:38,639

importance of this study cannot be

85

00:04:45,830 --> 00:04:43,730

as the journey unfolds as their Journey

86

00:04:47,749 --> 00:04:45,840

unfolds over the coming year it's

87

00:04:51,530 --> 00:04:47,759

through their stealth this Stellar crew

88

00:04:53,749 --> 00:04:51,540

that NASA scientists will learn critical

89

00:04:56,450 --> 00:04:53,759

insights on the physical and behavioral

90

00:04:59,990 --> 00:04:56,460

aspects of a mission on Mars so with

91

00:05:01,610 --> 00:05:00,000

that I say good luck and Godspeed and I

92

00:05:04,610 --> 00:05:01,620

hand it over to Julie Kramer white from

93

00:05:09,290 --> 00:05:06,590

foreign

94

00:05:11,450 --> 00:05:09,300

good evening I'm Julie Kramer white from

95

00:05:13,249 --> 00:05:11,460

engineering as Judy said our teams

96

00:05:15,070 --> 00:05:13,259

between engineering and Health and Human

97

00:05:19,370 --> 00:05:15,080

Performance have been working since 2019

98

00:05:21,469 --> 00:05:19,380

to bring this Vision to life this 3D

99

00:05:23,330 --> 00:05:21,479

everything from the 3D printed habitat

100

00:05:25,610 --> 00:05:23,340

by icon to all the significant

101
00:05:27,830 --> 00:05:25,620
modifications to the utilities in this

102
00:05:30,050 --> 00:05:27,840
building in order to support these folks

103
00:05:32,930 --> 00:05:30,060
and yet still preserve the illusion of

104
00:05:36,290 --> 00:05:32,940
being on Mars we have folks that have

105
00:05:38,330 --> 00:05:36,300
provided airlocks and provided laundry

106
00:05:39,650 --> 00:05:38,340
and trash management trying to still be

107
00:05:42,469 --> 00:05:39,660
authentic to the environment that

108
00:05:45,529 --> 00:05:42,479
they'll see on Mars RFID tracking

109
00:05:46,670 --> 00:05:45,539
technology and VR for the Eva that

110
00:05:48,409 --> 00:05:46,680
they're going to be doing outside the

111
00:05:50,390 --> 00:05:48,419
habitat those are all products provided

112
00:05:52,909 --> 00:05:50,400
by engineering

113
00:05:55,510 --> 00:05:52,919

it's really been a team effort to create

114

00:05:58,310 --> 00:05:55,520

the authentic experience between sa

115

00:06:00,230 --> 00:05:58,320

Health and Human Performance and the

116

00:06:02,270 --> 00:06:00,240

Food Systems design but even what

117

00:06:04,010 --> 00:06:02,280

engineering has learned about storage

118

00:06:05,629 --> 00:06:04,020

and volume and mass and things that will

119

00:06:07,730 --> 00:06:05,639

definitely help us as we think about

120

00:06:10,370 --> 00:06:07,740

missions to Mars and how we support our

121

00:06:12,650 --> 00:06:10,380

crews along the way these long-duration

122

00:06:15,110 --> 00:06:12,660

Mission simulations really bring Mars

123

00:06:16,790 --> 00:06:15,120

closer to us they help us realize that

124

00:06:18,590 --> 00:06:16,800

Mars is within our reach as we try to

125

00:06:20,090 --> 00:06:18,600

address the issues and challenges that

126

00:06:22,370 --> 00:06:20,100

will face us on these long missions

127

00:06:23,749 --> 00:06:22,380

whether it's food hardware systems or

128

00:06:25,909 --> 00:06:23,759

Health and Human Performance systems or

129

00:06:27,590 --> 00:06:25,919

just the engineering challenges I just

130

00:06:29,689 --> 00:06:27,600

want to thank you all I want to thank

131

00:06:31,610 --> 00:06:29,699

our folks in sa that work on this

132

00:06:33,350 --> 00:06:31,620

collaboration with us thank you for the

133

00:06:35,470 --> 00:06:33,360

opportunity to bring NASA One Step

134

00:06:42,890 --> 00:06:35,480

Closer To Mars

135

00:06:47,749 --> 00:06:44,749

thank you so much for all the well

136

00:06:49,550 --> 00:06:47,759

wishes and for taking time out of your

137

00:06:52,610 --> 00:06:49,560

day for so many important people to come

138

00:06:56,570 --> 00:06:54,830

space flight and exploration exemplifies

139

00:06:58,430 --> 00:06:56,580

some of the best qualities of humankind

140

00:06:59,749 --> 00:06:58,440

including Innovation daring and

141

00:07:01,610 --> 00:06:59,759

execution

142

00:07:03,529 --> 00:07:01,620

for space exploration these elements

143

00:07:05,390 --> 00:07:03,539

come together to safely send humans away

144

00:07:08,029 --> 00:07:05,400

from Earth to explore and study the most

145

00:07:09,590 --> 00:07:08,039

foreign environments imaginable and this

146

00:07:11,450 --> 00:07:09,600

enables new learnings and the potential

147

00:07:13,189 --> 00:07:11,460

for humans to survive and thrive on

148

00:07:14,450 --> 00:07:13,199

other planets such as Mars and I really

149

00:07:16,670 --> 00:07:14,460

don't have to tell this group but that

150

00:07:17,990 --> 00:07:16,680

is a huge Endeavor the Japan mission

151
00:07:19,550 --> 00:07:18,000
that we celebrate today is a great

152
00:07:21,589 --> 00:07:19,560
example of this tackling difficult

153
00:07:23,990 --> 00:07:21,599
technical challenges to create the most

154
00:07:25,850 --> 00:07:24,000
Mars realistic simulation possible

155
00:07:28,010 --> 00:07:25,860
the crew has worked so hard this month

156
00:07:29,870 --> 00:07:28,020
to get ready for this Mission it has

157
00:07:31,309 --> 00:07:29,880
been very special to be a part of such a

158
00:07:32,809 --> 00:07:31,319
tremendous group of scientists and

159
00:07:34,670 --> 00:07:32,819
Specialists from a diverse set of

160
00:07:36,650 --> 00:07:34,680
backgrounds working together to bearing

161
00:07:39,469 --> 00:07:36,660
to po1 the first of three missions to

162
00:07:41,689 --> 00:07:39,479
reality and the crew mirrors the other

163
00:07:43,490 --> 00:07:41,699

teams it is an amazing group of

164

00:07:45,230 --> 00:07:43,500

dedicated individuals who feel very

165

00:07:47,089 --> 00:07:45,240

passionate about space exploration and

166

00:07:48,950 --> 00:07:47,099

Science and we are determined to produce

167

00:07:50,930 --> 00:07:48,960

the best possible data for the teams

168

00:07:52,790 --> 00:07:50,940

that have poured their hard work and

169

00:07:54,830 --> 00:07:52,800

spirit into this project

170

00:07:57,589 --> 00:07:54,840

we hope to honor that effort with strong

171

00:07:59,749 --> 00:07:57,599

execution and completion of this mission

172

00:08:01,670 --> 00:07:59,759

for myself I feel incredibly lucky and

173

00:08:03,890 --> 00:08:01,680

blessed to be part of this crew

174

00:08:05,570 --> 00:08:03,900

and the mission it is a career and

175

00:08:07,490 --> 00:08:05,580

personal highlight to be both scientist

176

00:08:09,350 --> 00:08:07,500

and test subject and produce data that

177

00:08:11,689 --> 00:08:09,360

may enable new methods and safer space

178

00:08:13,909 --> 00:08:11,699

travel and habitation one day

179

00:08:15,170 --> 00:08:13,919

I once again want to thank the multitude

180

00:08:17,689 --> 00:08:15,180

of people that have helped us prepare

181

00:08:19,430 --> 00:08:17,699

ourselves and our families and finally I

182

00:08:20,869 --> 00:08:19,440

wish to thank my friends and family and

183

00:08:22,610 --> 00:08:20,879

my partner e

184

00:08:24,350 --> 00:08:22,620

you are the umbilicus that keeps my

185

00:08:27,050 --> 00:08:24,360

heart connected and synced to the Earth

186

00:08:28,969 --> 00:08:27,060

while I'm away on Mars and I thank you

187

00:08:30,230 --> 00:08:28,979

so deeply for supporting me in this

188

00:08:31,410 --> 00:08:30,240

crazy adventure

189

00:08:36,529 --> 00:08:31,420

thank you

190

00:08:39,230 --> 00:08:36,539

[Applause]

191

00:08:40,449 --> 00:08:39,240

Humanity yearns to reach higher than

192

00:08:43,190 --> 00:08:40,459

ever before

193

00:08:46,130 --> 00:08:43,200

metaphorically and physically we seek to

194

00:08:49,670 --> 00:08:46,140

climb the highest of mountains

195

00:08:51,590 --> 00:08:49,680

so we set our sights on a distant

196

00:08:54,170 --> 00:08:51,600

tomorrow when we might stand upon

197

00:08:56,269 --> 00:08:54,180

mountains such a path such as Olympus

198

00:08:59,150 --> 00:08:56,279

Mons which is the tallest mountain in

199

00:09:02,030 --> 00:08:59,160

our solar system as far as I'm aware

200

00:09:04,070 --> 00:09:02,040

that is a mountain on Mars

201
00:09:06,829 --> 00:09:04,080
but I believe that tomorrow will only be

202
00:09:08,509 --> 00:09:06,839
possible because we step into Mars Dune

203
00:09:10,790 --> 00:09:08,519
Alpha today

204
00:09:12,470 --> 00:09:10,800
and with that in mind I also want to

205
00:09:14,329 --> 00:09:12,480
take a moment to sincerely thank the

206
00:09:17,150 --> 00:09:14,339
great many people who've worked

207
00:09:19,430 --> 00:09:17,160
tirelessly and so many countless hours

208
00:09:22,130 --> 00:09:19,440
to get us to this point

209
00:09:23,930 --> 00:09:22,140
thank you and thank you NASA for the

210
00:09:25,730 --> 00:09:23,940
profound trust that you've put in us as

211
00:09:27,710 --> 00:09:25,740
a crew

212
00:09:29,690 --> 00:09:27,720
also thank you to our families and

213
00:09:32,930 --> 00:09:29,700

friends for their sacrifices

214

00:09:34,550 --> 00:09:32,940

we see we know those sacrifices

215

00:09:37,550 --> 00:09:34,560

we couldn't be here without your love

216

00:09:37,560 --> 00:09:43,490

sorry

217

00:09:46,550 --> 00:09:45,230

to my wife

218

00:09:49,730 --> 00:09:46,560

and kids

219

00:09:52,100 --> 00:09:49,740

I love you the moon I'm sorry Mars

220

00:10:06,949 --> 00:09:52,110

and back thank you

221

00:10:10,790 --> 00:10:09,650

so I'm incredibly honored and excited to

222

00:10:12,470 --> 00:10:10,800

be able to be a part of this project

223

00:10:14,690 --> 00:10:12,480

this program

224

00:10:15,410 --> 00:10:14,700

I'd like to say thanks to my mom to my

225

00:10:17,690 --> 00:10:15,420

dad

226
00:10:19,130 --> 00:10:17,700
for being such great parents I'd like to

227
00:10:20,269 --> 00:10:19,140
say thanks to Shannon for the love and

228
00:10:22,430 --> 00:10:20,279
support

229
00:10:23,810 --> 00:10:22,440
I'd like to say thanks to NASA

230
00:10:25,790 --> 00:10:23,820
and to Grace

231
00:10:27,110 --> 00:10:25,800
and to all these amazing people that

232
00:10:29,150 --> 00:10:27,120
have you know helped put this project

233
00:10:31,070 --> 00:10:29,160
together to work so hard

234
00:10:33,590 --> 00:10:31,080
done such an incredible job of not only

235
00:10:34,910 --> 00:10:33,600
making the science so strong so that we

236
00:10:35,990 --> 00:10:34,920
can get as much out of this Mission as

237
00:10:38,090 --> 00:10:36,000
possible

238
00:10:39,230 --> 00:10:38,100

but that making it so interesting and so

239

00:10:41,930 --> 00:10:39,240

fun for us

240

00:10:43,130 --> 00:10:41,940

we really appreciate it thank you so

241

00:10:45,170 --> 00:10:43,140

much

242

00:10:47,210 --> 00:10:45,180

I believe wholeheartedly that

243

00:10:49,190 --> 00:10:47,220

humankind's exploration the moon and

244

00:10:51,230 --> 00:10:49,200

Mars worlds Beyond

245

00:10:53,210 --> 00:10:51,240

will teach us about ourselves

246

00:10:55,130 --> 00:10:53,220

it will inspire us to take care of each

247

00:10:56,750 --> 00:10:55,140

other and take care of this beautiful

248

00:10:58,550 --> 00:10:56,760

and wonderful planet

249

00:10:59,750 --> 00:10:58,560

this wonderful world that will always be

250

00:11:01,730 --> 00:10:59,760

our home

251

00:11:04,069 --> 00:11:01,740

I'm honored and I'm grateful

252

00:11:06,230 --> 00:11:04,079

I'm super excited to be part of this

253

00:11:07,970 --> 00:11:06,240

and part of this great crew

254

00:11:09,769 --> 00:11:07,980

and to help make a contribution to put

255

00:11:10,990 --> 00:11:09,779

us on the path to Mars so thank you all

256

00:11:16,430 --> 00:11:11,000

very much

257

00:11:19,370 --> 00:11:16,440

[Applause]

258

00:11:20,150 --> 00:11:19,380

I just can't believe that I'm here

259

00:11:22,310 --> 00:11:20,160

um

260

00:11:25,370 --> 00:11:22,320

I want to thank you

261

00:11:28,370 --> 00:11:25,380

thank you NASA for creating this

262

00:11:31,009 --> 00:11:28,380

opportunity and for being there for the

263

00:11:35,810 --> 00:11:31,019

human Spirit you exemplify everything

264

00:11:38,870 --> 00:11:35,820

that we want to be and the the tip of

265

00:11:41,269 --> 00:11:38,880

our mental capacities and I want to

266

00:11:44,030 --> 00:11:41,279

thank the Navy for making me a strong

267

00:11:46,550 --> 00:11:44,040

resilient person that I've didn't even

268

00:11:49,430 --> 00:11:46,560

think of being five years ago

269

00:11:52,130 --> 00:11:49,440

and I want to thank my friends who

270

00:11:53,710 --> 00:11:52,140

traveled the world just to come to bring

271

00:11:57,590 --> 00:11:53,720

me my papers

272

00:12:00,230 --> 00:11:57,600

and and I want to thank my friends and

273

00:12:04,069 --> 00:12:00,240

family for always supporting me even

274

00:12:04,870 --> 00:12:04,079

when I sounded a little bit crazy and I

275

00:12:09,110 --> 00:12:04,880

am

276

00:12:11,930 --> 00:12:09,120

grateful and honored to be part of the

277

00:12:17,030 --> 00:12:11,940

crew that will

278

00:12:19,490 --> 00:12:17,040

make the mission to Mars possible I want

279

00:12:21,530 --> 00:12:19,500

to this I dedicate

280

00:12:25,970 --> 00:12:21,540

to

281

00:12:29,950 --> 00:12:25,980

those four six people who will step on

282

00:12:44,449 --> 00:12:29,960

actual Martian soil thank you

283

00:12:50,870 --> 00:12:47,449

now we are going to have the crew sign

284

00:12:54,530 --> 00:12:50,880

their flag before they enter the habitat

285

00:12:56,329 --> 00:12:54,540

we're going to put this flag on the

286

00:13:20,150 --> 00:12:56,339

front of the Mars Dune Alpha for the

287

00:13:20,160 --> 00:14:11,329

foreign

288

00:14:15,650 --> 00:14:13,069

please join me

289

00:14:18,630 --> 00:14:15,660

and a round of applause as we wish our

290

00:14:42,360 --> 00:14:18,640

crew well and they enter the habitat

291

00:14:48,450 --> 00:14:45,009

[Laughter]

292

00:15:19,790 --> 00:14:48,460

chipia mission one is a go