

**"GUS" GRISSOM  
D H WHITE II  
B CHAFFEE**



**HD**  
High Definition

**Robert D. Cabana**  
Director, NASA Kennedy Space Center



1  
00:00:12,549 --> 00:00:10,950  
good morning

2  
00:00:15,190 --> 00:00:12,559  
i'm thad altman president of the

3  
00:00:16,630 --> 00:00:15,200  
astronaut memorial foundation welcome to

4  
00:00:19,189 --> 00:00:16,640  
the space mirror

5  
00:00:21,910 --> 00:00:19,199  
this majestic structure standing 42 feet

6  
00:00:24,070 --> 00:00:21,920  
tall and 50 feet wide made of mirror

7  
00:00:25,910 --> 00:00:24,080  
polished granite was designated by

8  
00:00:27,910 --> 00:00:25,920  
congress to be a national memorial to

9  
00:00:29,750 --> 00:00:27,920  
honor those astronauts who've made the

10  
00:00:32,229 --> 00:00:29,760  
ultimate sacrifice

11  
00:00:35,350 --> 00:00:32,239  
it's very fitting that we here gather

12  
00:00:38,229 --> 00:00:35,360  
here today to honor all of the 24

13  
00:00:40,310 --> 00:00:38,239

astronauts on the date of the 24th and

14

00:00:42,869 --> 00:00:40,320

the date of the 10th anniversary of the

15

00:00:44,549 --> 00:00:42,879

columbia accident

16

00:00:46,790 --> 00:00:44,559

today we celebrate those who have

17

00:00:49,029 --> 00:00:46,800

sacrificed to improve and empower our

18

00:00:50,150 --> 00:00:49,039

world with deeds recognized for

19

00:00:51,750 --> 00:00:50,160

commitment

20

00:00:53,750 --> 00:00:51,760

and courage

21

00:00:55,430 --> 00:00:53,760

but to truly honor these men and women

22

00:00:58,389 --> 00:00:55,440

requires something more

23

00:01:01,029 --> 00:00:58,399

something more from all of us that we

24

00:01:04,789 --> 00:01:01,039

carry and make their mission ours

25

00:01:08,550 --> 00:01:06,870

as we begin our ceremony please rise for

26

00:01:11,030 --> 00:01:08,560

the presentation of the colors by the

27

00:01:12,390 --> 00:01:11,040

patrick air force base guard followed by

28

00:01:28,310 --> 00:01:12,400

the national anthem

29

00:01:28,320 --> 00:01:58,149

okay

30

00:01:58,159 --> 00:02:28,790

oh

31

00:02:28,800 --> 00:02:36,790

so

32

00:02:40,710 --> 00:02:38,390

oh

33

00:02:45,910 --> 00:02:40,720

say

34

00:02:48,869 --> 00:02:47,309

by the

35

00:03:03,350 --> 00:02:48,879

dawns

36

00:03:06,710 --> 00:03:04,270

the

37

00:03:14,790 --> 00:03:06,720

twilight lights

38

00:03:23,750 --> 00:03:18,710

who's brought stripes

39

00:03:23,760 --> 00:03:44,470

through the pair

40

00:03:44,480 --> 00:03:52,869

least

41

00:03:57,670 --> 00:03:53,990

and

42

00:03:57,680 --> 00:04:06,390

red glaze

43

00:04:06,400 --> 00:04:14,710

is

44

00:04:14,720 --> 00:04:19,110

the night

45

00:04:39,830 --> 00:04:21,670

that our flag

46

00:04:39,840 --> 00:04:48,070

away

47

00:04:48,080 --> 00:04:57,830

for the land

48

00:04:57,840 --> 00:05:13,270

the home

49

00:05:13,280 --> 00:05:24,790

home of the grace

50

00:05:24,800 --> 00:05:44,790

huh

51  
00:05:44,800 --> 00:05:49,270  
wow thank you bb that was inspirational

52  
00:05:52,790 --> 00:05:51,029  
we will begin today's program with an

53  
00:05:54,950 --> 00:05:52,800  
invocation presented by the chairman of

54  
00:06:01,749 --> 00:05:54,960  
the amf board of trustees

55  
00:06:01,759 --> 00:06:08,550  
you may be seated

56  
00:06:13,029 --> 00:06:10,550  
our presence here today is simply a

57  
00:06:15,430 --> 00:06:13,039  
small reflection of the world's

58  
00:06:17,270 --> 00:06:15,440  
recognition and appreciation

59  
00:06:19,270 --> 00:06:17,280  
for the selfless service of seven men

60  
00:06:21,110 --> 00:06:19,280  
and women who lost their lives in the

61  
00:06:23,110 --> 00:06:21,120  
columbia accident

62  
00:06:25,430 --> 00:06:23,120  
their accomplishments were great and

63  
00:06:26,950 --> 00:06:25,440

they will continue to impact every human

64

00:06:28,870 --> 00:06:26,960

being on the face of this earth but i

65

00:06:31,189 --> 00:06:28,880

think even more importantly

66

00:06:33,510 --> 00:06:31,199

is the spirit in which they served

67

00:06:35,189 --> 00:06:33,520

which motivates us to maximize our own

68

00:06:37,270 --> 00:06:35,199

potential and use that in service to

69

00:06:40,790 --> 00:06:37,280

others as well would you join me in

70

00:06:43,990 --> 00:06:42,390

lord on this day we remember and

71

00:06:46,390 --> 00:06:44,000

celebrate

72

00:06:48,629 --> 00:06:46,400

the lives of seven brave men and women

73

00:06:50,230 --> 00:06:48,639

who have moved us to excel in so many

74

00:06:52,710 --> 00:06:50,240

ways

75

00:06:54,390 --> 00:06:52,720

we remember their qualities the tenacity

76

00:06:56,950 --> 00:06:54,400

the commitment

77

00:06:59,029 --> 00:06:56,960

the courage their conviction

78

00:07:00,710 --> 00:06:59,039

and yes their humility not only in their

79

00:07:02,870 --> 00:07:00,720

personal lives but their professional

80

00:07:05,589 --> 00:07:02,880

lives as well

81

00:07:07,510 --> 00:07:05,599

our father we acknowledge their families

82

00:07:09,350 --> 00:07:07,520

and the great sacrifice of releasing

83

00:07:11,270 --> 00:07:09,360

their loved ones to serve in such an

84

00:07:12,950 --> 00:07:11,280

intense profession

85

00:07:15,430 --> 00:07:12,960

in the hopes of bettering mankind and

86

00:07:18,629 --> 00:07:15,440

even the greater sacrifice

87

00:07:21,189 --> 00:07:18,639

of losing those they love so dearly

88

00:07:22,790 --> 00:07:21,199

the example of these seven strong

89

00:07:25,589 --> 00:07:22,800

individuals

90

00:07:28,150 --> 00:07:25,599

so relevant so inspirational

91

00:07:30,390 --> 00:07:28,160

and we memorialize their service

92

00:07:31,909 --> 00:07:30,400

and yet their voice is very much alive

93

00:07:33,830 --> 00:07:31,919

and is still making a difference even

94

00:07:35,749 --> 00:07:33,840

today

95

00:07:37,350 --> 00:07:35,759

their risks and their service

96

00:07:39,270 --> 00:07:37,360

were obvious

97

00:07:41,670 --> 00:07:39,280

they accepted those risks along with the

98

00:07:43,589 --> 00:07:41,680

promise of a better life

99

00:07:45,990 --> 00:07:43,599

so father we honor them today as ones

100

00:07:48,629 --> 00:07:46,000

whose selfless sacrifice model for us

101  
00:07:50,629 --> 00:07:48,639  
life at its highest level

102  
00:07:52,070 --> 00:07:50,639  
we're reminded by you that you do not

103  
00:07:54,230 --> 00:07:52,080  
forget

104  
00:07:56,390 --> 00:07:54,240  
and so neither do we

105  
00:07:57,909 --> 00:07:56,400  
we will keep their voice alive and

106  
00:07:59,990 --> 00:07:57,919  
active in teaching this current and

107  
00:08:01,749 --> 00:08:00,000  
future generations

108  
00:08:03,670 --> 00:08:01,759  
so father be with us today as we honor

109  
00:08:05,830 --> 00:08:03,680  
these servant leaders

110  
00:08:07,430 --> 00:08:05,840  
and continue to extend your grace to

111  
00:08:13,110 --> 00:08:07,440  
each one of us

112  
00:08:17,830 --> 00:08:15,430  
on this 10th anniversary of the columbia

113  
00:08:19,430 --> 00:08:17,840

accident we are honored to have with us

114

00:08:21,830 --> 00:08:19,440

our own board of directors for the

115

00:08:25,110 --> 00:08:21,840

astronaut memorial foundation astronauts

116

00:08:27,189 --> 00:08:25,120

government officials and nasa officials

117

00:08:28,550 --> 00:08:27,199

before we begin our ceremony i'd like to

118

00:08:31,029 --> 00:08:28,560

acknowledge a few of these special

119

00:08:33,269 --> 00:08:31,039

guests please hold your applause until

120

00:08:35,269 --> 00:08:33,279

we finish introducing those

121

00:08:38,070 --> 00:08:35,279

susan fernandez representing senator

122

00:08:40,790 --> 00:08:38,080

marco rubio a close friend of amf and a

123

00:08:42,870 --> 00:08:40,800

spa and the space community todd sykes

124

00:08:46,230 --> 00:08:42,880

regional director for the florida state

125

00:08:48,949 --> 00:08:46,240

chief financial officer jeff atwater

126

00:08:51,269 --> 00:08:48,959

commander of the 45th space wing general

127

00:08:52,790 --> 00:08:51,279

anthony cotton and chief master sergeant

128

00:08:55,350 --> 00:08:52,800

herman moyer

129

00:08:57,590 --> 00:08:55,360

former center director bill parsons

130

00:08:59,269 --> 00:08:57,600

past presidents or chairman of the

131

00:09:02,470 --> 00:08:59,279

astronaut memorial foundation board of

132

00:09:03,670 --> 00:09:02,480

directors alan hellman lee solid stephen

133

00:09:05,430 --> 00:09:03,680

feldman

134

00:09:06,389 --> 00:09:05,440

president of space florida frank de

135

00:09:08,550 --> 00:09:06,399

bello

136

00:09:12,389 --> 00:09:08,560

and a special guest jim kuzma who's the

137

00:09:15,190 --> 00:09:12,399

ceo of space florida jim was a classmate

138

00:09:17,670 --> 00:09:15,200

of the pilot of columbia willie mccoool

139

00:09:19,030 --> 00:09:17,680

at the u.s naval academy it's good to

140

00:09:20,949 --> 00:09:19,040

have you here

141

00:09:23,030 --> 00:09:20,959

dr anthony cantonese president of the

142

00:09:25,670 --> 00:09:23,040

florida institute of technology and with

143

00:09:27,910 --> 00:09:25,680

fit we have seven students florida tech

144

00:09:30,310 --> 00:09:27,920

named seven of its dorms it's new

145

00:09:32,470 --> 00:09:30,320

columbia village after each one of the

146

00:09:34,150 --> 00:09:32,480

columbia accidents

147

00:09:36,790 --> 00:09:34,160

we have those seven students here with

148

00:09:39,110 --> 00:09:36,800

us each each student representing each

149

00:09:40,389 --> 00:09:39,120

individual dorm named after a columbia

150

00:09:42,470 --> 00:09:40,399

astronaut

151

00:09:44,870 --> 00:09:42,480

we also have 44 students and three

152

00:09:45,829 --> 00:09:44,880

teachers from elon ramon's hometown in

153

00:09:47,670 --> 00:09:45,839

israel

154

00:09:49,269 --> 00:09:47,680

i think they win the award for being

155

00:09:50,949 --> 00:09:49,279

having traveled the longest to get here

156

00:09:52,870 --> 00:09:50,959

thank you for being here

157

00:09:54,790 --> 00:09:52,880

chief operating officer of delaware

158

00:09:56,949 --> 00:09:54,800

north bill moore

159

00:09:59,750 --> 00:09:56,959

as well as former astronauts eileen

160

00:10:02,829 --> 00:09:59,760

collins john mcbride bob cabana bob

161

00:10:05,750 --> 00:10:02,839

springer and winston scott

162

00:10:07,670 --> 00:10:05,760

finally and most importantly

163

00:10:09,910 --> 00:10:07,680

i would like to also acknowledge the

164

00:10:11,910 --> 00:10:09,920

family members who have taken their time

165

00:10:14,069 --> 00:10:11,920

and to join us here at this special

166

00:10:15,670 --> 00:10:14,079

place they have a very special place in

167

00:10:19,269 --> 00:10:15,680

our hearts

168

00:10:21,990 --> 00:10:19,279

evelyn husband thompson the widow of the

169

00:10:24,310 --> 00:10:22,000

columbia commander rick husband sandra

170

00:10:26,949 --> 00:10:24,320

anderson widow of columbia payload

171

00:10:29,430 --> 00:10:26,959

commander michael anderson

172

00:10:31,269 --> 00:10:29,440

laura and matthew husband the children

173

00:10:35,829 --> 00:10:31,279

of columbia commander rick husband and

174

00:10:42,310 --> 00:10:36,949

roger

175

00:10:44,550 --> 00:10:42,320

and other members of the chaff

176

00:10:47,110 --> 00:10:44,560

family

177

00:10:49,350 --> 00:10:47,120

deborah kesseling and dale young and of

178

00:10:52,790 --> 00:10:49,360

course robert roger chaffee

179

00:10:54,310 --> 00:10:52,800

having perished on the apollo 1 pad fire

180

00:10:56,230 --> 00:10:54,320

thank all of you for joining us today

181

00:10:58,470 --> 00:10:56,240

and i'd like to introduce the chairman

182

00:11:00,470 --> 00:10:58,480

of the amf board a wonderful person

183

00:11:03,190 --> 00:11:00,480

who's a joy to work with is former

184

00:11:05,030 --> 00:11:03,200

astronaut john mcbride john is the only

185

00:11:07,110 --> 00:11:05,040

astronaut to have flown in space from

186

00:11:08,870 --> 00:11:07,120

west virginia

187

00:11:11,750 --> 00:11:08,880

we have a beautiful

188

00:11:13,750 --> 00:11:11,760

the nation of west virginia he mentions

189

00:11:15,750 --> 00:11:13,760

and he has a nasa center named after him

190

00:11:17,509 --> 00:11:15,760

it's a beautiful facility i've seen it

191

00:11:18,790 --> 00:11:17,519

it's the software testing and research

192

00:11:20,069 --> 00:11:18,800

laboratory

193

00:11:22,470 --> 00:11:20,079

it is a

194

00:11:25,110 --> 00:11:22,480

it's almost heaven there john

195

00:11:27,110 --> 00:11:25,120

john was pilot of sts-41g and was

196

00:11:30,350 --> 00:11:27,120

scheduled to fly the next mission in

197

00:11:32,150 --> 00:11:30,360

march of 1986 as the commander of

198

00:11:33,910 --> 00:11:32,160

sts-61e

199

00:11:36,150 --> 00:11:33,920

this flight was one of several flights

200

00:11:39,110 --> 00:11:36,160

deferred by nasa in the wake of the

201  
00:11:40,710 --> 00:11:39,120  
challenger accident in january of 1986

202  
00:11:42,389 --> 00:11:40,720  
and those of you who were here it was a

203  
00:11:45,190 --> 00:11:42,399  
day very much like today

204  
00:11:49,350 --> 00:11:45,200  
we hold those uh astronauts close to our

205  
00:11:53,750 --> 00:11:51,590  
thank you thad uh what a day thank you

206  
00:11:55,430 --> 00:11:53,760  
god for this beautiful weather and thank

207  
00:11:56,870 --> 00:11:55,440  
all each and every one of you for coming

208  
00:11:59,030 --> 00:11:56,880  
out here today i want to thank you thad

209  
00:12:00,470 --> 00:11:59,040  
for all the professionalism that you've

210  
00:12:02,550 --> 00:12:00,480  
shown us here in the last

211  
00:12:04,389 --> 00:12:02,560  
few weeks as we put this program

212  
00:12:05,750 --> 00:12:04,399  
together so thanks to you it's been a

213  
00:12:06,389 --> 00:12:05,760

pleasure for me to work with you during

214

00:12:08,069 --> 00:12:06,399

the

215

00:12:09,590 --> 00:12:08,079

first six months of his administration

216

00:12:10,870 --> 00:12:09,600

as the new president

217

00:12:13,030 --> 00:12:10,880

of amf

218

00:12:14,550 --> 00:12:13,040

with us is his predecessor dr stephen

219

00:12:16,069 --> 00:12:14,560

feldman who i had the pleasure working

220

00:12:17,190 --> 00:12:16,079

with too so thank you for laying the

221

00:12:18,710 --> 00:12:17,200

groundwork for all the things that we're

222

00:12:20,710 --> 00:12:18,720

doing he's he's had several of these

223

00:12:24,230 --> 00:12:20,720

this is thad's first so

224

00:12:25,750 --> 00:12:24,240

so thank you for being here

225

00:12:27,430 --> 00:12:25,760

i also

226

00:12:28,710 --> 00:12:27,440

want to thank thank kathy where's kathy

227

00:12:30,470 --> 00:12:28,720

gray i'll tell you what we couldn't do

228

00:12:32,150 --> 00:12:30,480

this without kathy so thank you very

229

00:12:34,629 --> 00:12:32,160

much for doing all your your hard work

230

00:12:36,389 --> 00:12:34,639

in the background all the folks at amf

231

00:12:37,110 --> 00:12:36,399

first of all i thank you the students

232

00:12:39,110 --> 00:12:37,120

from

233

00:12:41,269 --> 00:12:39,120

fit for coming up here thank you dr

234

00:12:43,590 --> 00:12:41,279

cantonese for bringing them with us so

235

00:12:45,190 --> 00:12:43,600

this is really about the youth so

236

00:12:47,590 --> 00:12:45,200

there's a youth element in the thread of

237

00:12:50,470 --> 00:12:47,600

this whole thing we're doing here today

238

00:12:52,629 --> 00:12:50,480

where are my friends from israel

239

00:12:54,389 --> 00:12:52,639

back here somewhere can i see you

240

00:12:56,550 --> 00:12:54,399

boca toff

241

00:12:57,829 --> 00:12:56,560

i spent almost two years in this israel

242

00:12:59,910 --> 00:12:57,839

there's only six people that speak

243

00:13:01,110 --> 00:12:59,920

hebrew and i'm i kind of understand the

244

00:13:02,710 --> 00:13:01,120

language so

245

00:13:04,949 --> 00:13:02,720

we're glad to have you here muslim card

246

00:13:07,269 --> 00:13:04,959

muslim mayor

247

00:13:10,389 --> 00:13:07,279

ah booker tough

248

00:13:11,190 --> 00:13:10,399

i'll see him back there toda

249

00:13:12,870 --> 00:13:11,200

uh

250

00:13:14,550 --> 00:13:12,880

shabbat shalom

251  
00:13:16,550 --> 00:13:14,560  
and literature

252  
00:13:18,870 --> 00:13:16,560  
okay

253  
00:13:20,550 --> 00:13:18,880  
thank you for bearing with me

254  
00:13:23,269 --> 00:13:20,560  
so we welcome the youngsters here today

255  
00:13:25,509 --> 00:13:23,279  
and also uh i get asked a lot

256  
00:13:27,590 --> 00:13:25,519  
during my career over the last uh

257  
00:13:30,150 --> 00:13:27,600  
several years john if you could go back

258  
00:13:31,590 --> 00:13:30,160  
at least in 1978 when you

259  
00:13:34,389 --> 00:13:31,600  
joined nasa in that first class of

260  
00:13:35,990 --> 00:13:34,399  
astronauts what would you change and i

261  
00:13:38,310 --> 00:13:36,000  
have to think of all but

262  
00:13:41,829 --> 00:13:38,320  
obviously if i had the power

263  
00:13:43,990 --> 00:13:41,839

and the strength to reverse the tragedy

264

00:13:45,590 --> 00:13:44,000

we've had since 1978

265

00:13:47,350 --> 00:13:45,600

you erase these names from this board

266

00:13:49,750 --> 00:13:47,360

obviously that's that would be my first

267

00:13:51,189 --> 00:13:49,760

choice i don't have that power none of

268

00:13:52,949 --> 00:13:51,199

us have that power

269

00:13:55,670 --> 00:13:52,959

there's only one higher being that has

270

00:13:57,910 --> 00:13:55,680

the power to do things like that but

271

00:13:59,430 --> 00:13:57,920

i'll tell you what and i'll guarantee

272

00:14:01,350 --> 00:13:59,440

you i think

273

00:14:03,269 --> 00:14:01,360

if i had my seven dear friends including

274

00:14:04,710 --> 00:14:03,279

classmates of mine here on my left from

275

00:14:05,670 --> 00:14:04,720

challenger

276

00:14:07,269 --> 00:14:05,680

and the

277

00:14:09,350 --> 00:14:07,279

seven members from columbia here on my

278

00:14:10,949 --> 00:14:09,360

right and anybody in this audience or on

279

00:14:12,710 --> 00:14:10,959

the web or on the

280

00:14:15,030 --> 00:14:12,720

network here today wanted to know if any

281

00:14:16,629 --> 00:14:15,040

of us would go back and do it again i'll

282

00:14:18,150 --> 00:14:16,639

guarantee you there would be 15 hands in

283

00:14:20,710 --> 00:14:18,160

the air

284

00:14:22,629 --> 00:14:20,720

mine and theirs that's because that's

285

00:14:24,790 --> 00:14:22,639

how strongly we believe in what we do

286

00:14:26,790 --> 00:14:24,800

and why we do it

287

00:14:28,710 --> 00:14:26,800

and it's for these young folks that came

288

00:14:30,470 --> 00:14:28,720

here today primarily we want them to be

289

00:14:32,150 --> 00:14:30,480

inspired by

290

00:14:35,189 --> 00:14:32,160

the folks like eileen collins and bob

291

00:14:37,189 --> 00:14:35,199

cabana and the folks we lost on these

292

00:14:39,430 --> 00:14:37,199

two tragic missions so that they'll

293

00:14:40,550 --> 00:14:39,440

follow in our footsteps like we got to

294

00:14:42,150 --> 00:14:40,560

follow in

295

00:14:43,509 --> 00:14:42,160

alan shepard and

296

00:14:44,949 --> 00:14:43,519

gus grissom

297

00:14:46,310 --> 00:14:44,959

neil armstrong and all those guys that

298

00:14:47,990 --> 00:14:46,320

came before us

299

00:14:50,150 --> 00:14:48,000

so

300

00:14:52,310 --> 00:14:50,160

it's to the youth that we dedicate a lot

301  
00:14:53,670 --> 00:14:52,320  
of this actions we're doing here today

302  
00:14:55,590 --> 00:14:53,680  
so

303  
00:14:57,590 --> 00:14:55,600  
having said that

304  
00:14:58,790 --> 00:14:57,600  
i would like to introduce our

305  
00:15:01,509 --> 00:14:58,800  
first

306  
00:15:03,509 --> 00:15:01,519  
speaker today a very special lady

307  
00:15:04,870 --> 00:15:03,519  
the widow of rick husman

308  
00:15:07,189 --> 00:15:04,880  
she's written a book called higher

309  
00:15:09,910 --> 00:15:07,199  
calling calling which really

310  
00:15:13,110 --> 00:15:09,920  
attests to the testament and the spirit

311  
00:15:15,430 --> 00:15:13,120  
the dedication of her husband rick

312  
00:15:17,829 --> 00:15:15,440  
who was a commander of

313  
00:15:19,350 --> 00:15:17,839

107 the loss of colombia 10 years ago

314

00:15:20,949 --> 00:15:19,360

today so

315

00:15:30,870 --> 00:15:20,959

evelyn husband thompson would you come

316

00:15:30,880 --> 00:15:35,910

good morning

317

00:15:39,350 --> 00:15:37,670

first of all i would like to thank the

318

00:15:41,509 --> 00:15:39,360

astronaut memorial foundation for

319

00:15:43,269 --> 00:15:41,519

honoring and memorializing the crew of

320

00:15:45,749 --> 00:15:43,279

sts-107

321

00:15:48,389 --> 00:15:45,759

who sacrificed their lives in pursuit of

322

00:15:51,269 --> 00:15:48,399

space exploration ten years ago

323

00:15:52,870 --> 00:15:51,279

this very morning

324

00:15:54,470 --> 00:15:52,880

although they've already been introduced

325

00:15:56,790 --> 00:15:54,480

i want to

326

00:15:58,389 --> 00:15:56,800

say a special welcome again to the

327

00:15:59,509 --> 00:15:58,399

family members that are here today first

328

00:16:01,829 --> 00:15:59,519

of all

329

00:16:04,629 --> 00:16:01,839

my husband bill

330

00:16:10,470 --> 00:16:04,639

my son matthew my daughter laura

331

00:16:13,749 --> 00:16:11,990

today we gather

332

00:16:15,189 --> 00:16:13,759

to honor and remember the special crew

333

00:16:18,069 --> 00:16:15,199

of colombia

334

00:16:19,910 --> 00:16:18,079

who are regarded as national heroes

335

00:16:21,509 --> 00:16:19,920

and we are not alone

336

00:16:23,430 --> 00:16:21,519

today in israel

337

00:16:24,550 --> 00:16:23,440

family members friends and nasa

338

00:16:27,030 --> 00:16:24,560

colleagues

339

00:16:29,110 --> 00:16:27,040

are gathered to remember the crew

340

00:16:31,509 --> 00:16:29,120

in east texas this morning

341

00:16:34,150 --> 00:16:31,519

where columbia and her crew found their

342

00:16:35,910 --> 00:16:34,160

final resting place

343

00:16:38,310 --> 00:16:35,920

tributes are being made in memorial

344

00:16:40,230 --> 00:16:38,320

services today we're being conducted by

345

00:16:43,269 --> 00:16:40,240

columbia family members

346

00:16:45,509 --> 00:16:43,279

friends and lots of nasa folks

347

00:16:46,629 --> 00:16:45,519

for many of us gathered here in florida

348

00:16:48,790 --> 00:16:46,639

today

349

00:16:52,310 --> 00:16:48,800

this commemoration is is not only

350

00:16:54,550 --> 00:16:52,320

historic it's it's also very personal

351  
00:16:57,030 --> 00:16:54,560  
we remember the columbia crew

352  
00:16:58,470 --> 00:16:57,040  
as colleagues his friends

353  
00:17:00,790 --> 00:16:58,480  
as parents

354  
00:17:02,710 --> 00:17:00,800  
and as spouses

355  
00:17:05,110 --> 00:17:02,720  
my husband rick was the commander of

356  
00:17:08,470 --> 00:17:05,120  
sts-107

357  
00:17:10,150 --> 00:17:08,480  
i will talk a bit more about him shortly

358  
00:17:11,189 --> 00:17:10,160  
but he was the kind and he was a good

359  
00:17:12,870 --> 00:17:11,199  
leader

360  
00:17:14,150 --> 00:17:12,880  
he was determined to see each crew

361  
00:17:17,590 --> 00:17:14,160  
member enjoy

362  
00:17:20,150 --> 00:17:17,600  
their full potential during the mission

363  
00:17:22,549 --> 00:17:20,160

willie was fun-loving and cheerful

364

00:17:24,949 --> 00:17:22,559

soft-spoken and hard-working

365

00:17:26,390 --> 00:17:24,959

as a commander in the navy he was good

366

00:17:28,150 --> 00:17:26,400

at everything he did

367

00:17:31,350 --> 00:17:28,160

and rick was very happy to share the

368

00:17:33,750 --> 00:17:31,360

cockpit with him as pilot

369

00:17:35,909 --> 00:17:33,760

he loved his wife lonnie intensely and

370

00:17:38,310 --> 00:17:35,919

their three sons

371

00:17:40,789 --> 00:17:38,320

kc was absolutely brilliant with a

372

00:17:42,950 --> 00:17:40,799

doctorate in aerospace engineering

373

00:17:45,029 --> 00:17:42,960

and she was very friendly sometimes not

374

00:17:47,990 --> 00:17:45,039

an easy combination

375

00:17:49,909 --> 00:17:48,000

she was thorough and detailed yet she

376

00:17:51,669 --> 00:17:49,919

greatly enjoyed nature and spending time

377

00:17:54,070 --> 00:17:51,679

with her husband jp

378

00:17:56,470 --> 00:17:54,080

her many friends and her family

379

00:17:58,150 --> 00:17:56,480

she had the gift of hospitality

380

00:17:59,669 --> 00:17:58,160

and made everyone feel welcome in her

381

00:18:01,430 --> 00:17:59,679

home

382

00:18:03,590 --> 00:18:01,440

laurel was a doctor

383

00:18:05,029 --> 00:18:03,600

a captain in the navy

384

00:18:07,350 --> 00:18:05,039

and a mom

385

00:18:09,750 --> 00:18:07,360

she had a sunny disposition in a desk

386

00:18:12,150 --> 00:18:09,760

area that was filled with flowers

387

00:18:13,510 --> 00:18:12,160

she was always ready with a kind word

388

00:18:15,909 --> 00:18:13,520

and a smile

389

00:18:17,909 --> 00:18:15,919

she loved her family tremendously and

390

00:18:19,990 --> 00:18:17,919

included her son everywhere possible in

391

00:18:22,630 --> 00:18:20,000

her training

392

00:18:24,549 --> 00:18:22,640

mike had a smile that lit up the room

393

00:18:26,310 --> 00:18:24,559

he and his wife sandra were very close

394

00:18:28,070 --> 00:18:26,320

friends to rick and i

395

00:18:31,029 --> 00:18:28,080

he was a lieutenant colonel in the air

396

00:18:33,669 --> 00:18:31,039

force and the payload commander

397

00:18:35,270 --> 00:18:33,679

his competency was tremendous

398

00:18:36,310 --> 00:18:35,280

mike was the father of two beautiful

399

00:18:38,630 --> 00:18:36,320

girls

400

00:18:39,590 --> 00:18:38,640

his christian faith was very important

401  
00:18:41,990 --> 00:18:39,600  
to him

402  
00:18:44,630 --> 00:18:42,000  
and was manifested in a quiet confidence

403  
00:18:46,789 --> 00:18:44,640  
that was highly respected

404  
00:18:48,789 --> 00:18:46,799  
dave was a super achiever

405  
00:18:50,630 --> 00:18:48,799  
he was a captain in the navy

406  
00:18:52,150 --> 00:18:50,640  
a medical doctor

407  
00:18:53,909 --> 00:18:52,160  
a pilot

408  
00:18:56,789 --> 00:18:53,919  
a gymnast

409  
00:18:59,029 --> 00:18:56,799  
including being an acrobat unicyclist

410  
00:19:01,830 --> 00:18:59,039  
and a stilt walker for a circus while he

411  
00:19:04,230 --> 00:19:01,840  
was in college seriously

412  
00:19:06,710 --> 00:19:04,240  
he was also a videographer

413  
00:19:08,150 --> 00:19:06,720

and he filmed the crew during training

414

00:19:11,350 --> 00:19:08,160

and their flight

415

00:19:14,950 --> 00:19:11,360

he loved his family and his dog duggans

416

00:19:18,470 --> 00:19:14,960

dearly and they meant the world to him

417

00:19:20,789 --> 00:19:18,480

elon was a tremendously gifted pilot and

418

00:19:23,110 --> 00:19:20,799

a colonel in the israeli air force

419

00:19:25,029 --> 00:19:23,120

he served as the payload specialist he

420

00:19:28,310 --> 00:19:25,039

managed to balance a serious attention

421

00:19:30,630 --> 00:19:28,320

to detail with a very playful side

422

00:19:32,150 --> 00:19:30,640

he humbly understood his unique place in

423

00:19:34,230 --> 00:19:32,160

history

424

00:19:36,390 --> 00:19:34,240

as israel's first astronaut and he was

425

00:19:38,549 --> 00:19:36,400

keenly aware of the significance of

426

00:19:41,110 --> 00:19:38,559

items that he flew in space

427

00:19:44,070 --> 00:19:41,120

each with a profound story

428

00:19:46,390 --> 00:19:44,080

he adored his wife and four children

429

00:19:48,390 --> 00:19:46,400

he and his family blessed all of us

430

00:19:52,310 --> 00:19:48,400

with teaching us jewish traditions and

431

00:19:54,789 --> 00:19:52,320

serving us extremely delicious food

432

00:19:57,110 --> 00:19:54,799

just as nasa has pursued lessons learned

433

00:19:59,430 --> 00:19:57,120

from the tragedies listed behind me

434

00:20:01,669 --> 00:19:59,440

on the space mirror we have all

435

00:20:03,270 --> 00:20:01,679

had personal journeys to walk

436

00:20:06,630 --> 00:20:03,280

there have been lessons learned from all

437

00:20:07,830 --> 00:20:06,640

of our experiences as well for a brief

438

00:20:09,669 --> 00:20:07,840

few minutes

439

00:20:13,430 --> 00:20:09,679

please allow me to share some thoughts

440

00:20:15,590 --> 00:20:13,440

and insights from the past 10 years

441

00:20:17,270 --> 00:20:15,600

the night before they flew

442

00:20:19,669 --> 00:20:17,280

we said our goodbyes

443

00:20:20,950 --> 00:20:19,679

and rick talked to the crew and to the

444

00:20:23,270 --> 00:20:20,960

spouses

445

00:20:25,990 --> 00:20:23,280

he shared a little bit about his faith

446

00:20:28,710 --> 00:20:26,000

and its importance to him in his life

447

00:20:31,430 --> 00:20:28,720

and he quoted a passage first out of

448

00:20:33,750 --> 00:20:31,440

joshua 1 6-9

449

00:20:34,789 --> 00:20:33,760

it concludes with have i not commanded

450

00:20:36,789 --> 00:20:34,799

you

451

00:20:38,789 --> 00:20:36,799

be strong and courageous

452

00:20:41,350 --> 00:20:38,799

do not be terrified

453

00:20:45,350 --> 00:20:41,360

do not be discouraged for the lord your

454

00:20:47,750 --> 00:20:45,360

god will be with you wherever you go

455

00:20:49,990 --> 00:20:47,760

colombia's 16-day mission in space

456

00:20:52,710 --> 00:20:50,000

accomplished over 80 experiments by the

457

00:20:54,950 --> 00:20:52,720

crew on a 24-7 schedule

458

00:20:57,430 --> 00:20:54,960

they worked so well together

459

00:20:59,029 --> 00:20:57,440

the mission was a tremendous success

460

00:21:00,950 --> 00:20:59,039

with great results being obtained

461

00:21:03,510 --> 00:21:00,960

throughout the mission

462

00:21:05,590 --> 00:21:03,520

our families were very proud of the crew

463

00:21:07,669 --> 00:21:05,600

and arrived here in florida the evening

464

00:21:09,990 --> 00:21:07,679

before the landing day

465

00:21:11,669 --> 00:21:10,000

we all shared a meal together at a local

466

00:21:13,750 --> 00:21:11,679

restaurant

467

00:21:15,669 --> 00:21:13,760

i went to bed with the nasa channel left

468

00:21:16,710 --> 00:21:15,679

on quietly in the background and i fell

469

00:21:18,950 --> 00:21:16,720

asleep

470

00:21:20,870 --> 00:21:18,960

thanking god for the great mission

471

00:21:23,029 --> 00:21:20,880

and i was so excited for the reunion

472

00:21:25,110 --> 00:21:23,039

with my husband

473

00:21:26,950 --> 00:21:25,120

that morning we woke up early and

474

00:21:28,070 --> 00:21:26,960

quickly prepared to head to the landing

475

00:21:30,470 --> 00:21:28,080

site

476  
00:21:32,870 --> 00:21:30,480  
before departing the hotel my children

477  
00:21:34,710 --> 00:21:32,880  
each watched their recorded video

478  
00:21:37,190 --> 00:21:34,720  
that rick had made for them to view each

479  
00:21:39,430 --> 00:21:37,200  
day that he was in space

480  
00:21:41,110 --> 00:21:39,440  
he read devotionals to them

481  
00:21:42,630 --> 00:21:41,120  
talked to them about his faith and he

482  
00:21:44,149 --> 00:21:42,640  
prayed with them

483  
00:21:45,909 --> 00:21:44,159  
he also warned them that the weather

484  
00:21:48,230 --> 00:21:45,919  
wasn't just right they might have to

485  
00:21:50,149 --> 00:21:48,240  
stay in orbit a day or two longer

486  
00:21:51,669 --> 00:21:50,159  
but he reassured them that it wouldn't

487  
00:21:53,669 --> 00:21:51,679  
be too long before we would all be

488  
00:21:57,510 --> 00:21:53,679

reunited

489

00:21:59,590 --> 00:21:57,520

february 1st 2003 became a traumatic

490

00:22:02,070 --> 00:21:59,600

shocking day

491

00:22:03,110 --> 00:22:02,080

anticipating a joyful homecoming of our

492

00:22:05,669 --> 00:22:03,120

crew

493

00:22:08,149 --> 00:22:05,679

we were jolted in the viewing area into

494

00:22:10,549 --> 00:22:08,159

a nightmarish stroll of fear

495

00:22:12,710 --> 00:22:10,559

uncertainty and horror

496

00:22:16,310 --> 00:22:12,720

that led to a crushing announcement that

497

00:22:18,070 --> 00:22:16,320

the crew had perished during reentry

498

00:22:20,230 --> 00:22:18,080

words of sorrow

499

00:22:23,430 --> 00:22:20,240

efforts to comfort

500

00:22:26,470 --> 00:22:23,440

even fathoming the magnitude of loss

501  
00:22:28,630 --> 00:22:26,480  
was overwhelming that day looks of

502  
00:22:31,909 --> 00:22:28,640  
disbelief from one family member to

503  
00:22:34,710 --> 00:22:31,919  
another brought little comfort

504  
00:22:37,350 --> 00:22:34,720  
the shock was so intense that even tears

505  
00:22:38,630 --> 00:22:37,360  
were not freely able to fall

506  
00:22:41,350 --> 00:22:38,640  
they would come

507  
00:22:43,909 --> 00:22:41,360  
in the weeks months and years to follow

508  
00:22:46,310 --> 00:22:43,919  
in waves and in buckets

509  
00:22:47,990 --> 00:22:46,320  
rick and i shared together a belief in

510  
00:22:50,149 --> 00:22:48,000  
jesus christ

511  
00:22:52,390 --> 00:22:50,159  
rick was not one to proselytize those

512  
00:22:55,029 --> 00:22:52,400  
around him but his actions and words

513  
00:22:56,789 --> 00:22:55,039

revealed a devout christ follower

514

00:22:59,510 --> 00:22:56,799

his favorite verse that he signed on his

515

00:23:00,710 --> 00:22:59,520

astronaut pictures was proverbs 3 5 and

516

00:23:02,870 --> 00:23:00,720

6.

517

00:23:04,230 --> 00:23:02,880

trust in the lord with all your heart

518

00:23:05,510 --> 00:23:04,240

and do not lean on your own

519

00:23:07,909 --> 00:23:05,520

understanding

520

00:23:10,149 --> 00:23:07,919

in all your ways acknowledge him and he

521

00:23:12,390 --> 00:23:10,159

will direct your paths

522

00:23:14,470 --> 00:23:12,400

that morning i clearly remember looking

523

00:23:16,390 --> 00:23:14,480

at the sky in disbelief

524

00:23:17,990 --> 00:23:16,400

that my beloved was not going to pop

525

00:23:19,110 --> 00:23:18,000

through a thin layer of clouds any

526  
00:23:21,350 --> 00:23:19,120  
moment

527  
00:23:23,909 --> 00:23:21,360  
and remove the panic and the fear that

528  
00:23:26,149 --> 00:23:23,919  
was rising in my heart

529  
00:23:28,710 --> 00:23:26,159  
i needed to trust

530  
00:23:30,549 --> 00:23:28,720  
even though no one understood what was

531  
00:23:32,310 --> 00:23:30,559  
happening

532  
00:23:33,909 --> 00:23:32,320  
in the middle of all that

533  
00:23:36,950 --> 00:23:33,919  
we didn't know

534  
00:23:38,710 --> 00:23:36,960  
all that i didn't know i knew that god

535  
00:23:40,230 --> 00:23:38,720  
was sovereign meaning that he's in

536  
00:23:42,549 --> 00:23:40,240  
control

537  
00:23:45,029 --> 00:23:42,559  
had rick and his crew really given the

538  
00:23:47,669 --> 00:23:45,039

ultimate sacrifice

539

00:23:48,950 --> 00:23:47,679

as moments rolled into days and days

540

00:23:51,590 --> 00:23:48,960

into years

541

00:23:54,310 --> 00:23:51,600

the grief journey has been difficult

542

00:23:56,549 --> 00:23:54,320

complicated and surprising

543

00:23:59,190 --> 00:23:56,559

it has been a front row viewing

544

00:24:02,070 --> 00:23:59,200

rubber meets the road experience

545

00:24:05,350 --> 00:24:02,080

the sorrow and impact of the tragedy of

546

00:24:07,350 --> 00:24:05,360

all of our families has been extreme

547

00:24:09,669 --> 00:24:07,360

but just as a forest fire reduces

548

00:24:11,430 --> 00:24:09,679

beautiful foliage into ashes

549

00:24:13,190 --> 00:24:11,440

those ashes ultimately become

550

00:24:14,789 --> 00:24:13,200

nourishment for new

551  
00:24:16,630 --> 00:24:14,799  
healthy growth

552  
00:24:19,190 --> 00:24:16,640  
there are indeed small green shoots of

553  
00:24:21,990 --> 00:24:19,200  
hope that are springing up in our lives

554  
00:24:24,149 --> 00:24:22,000  
the human spirit created by god began to

555  
00:24:26,070 --> 00:24:24,159  
minister to my family

556  
00:24:28,549 --> 00:24:26,080  
the determination of the folks in east

557  
00:24:30,710 --> 00:24:28,559  
texas to do it right and to do it with

558  
00:24:31,830 --> 00:24:30,720  
honor was a reflection of the best of

559  
00:24:33,990 --> 00:24:31,840  
the best

560  
00:24:36,870 --> 00:24:34,000  
as they tackled the tsunami of accident

561  
00:24:38,710 --> 00:24:36,880  
debris over hundreds of miles

562  
00:24:40,789 --> 00:24:38,720  
and accommodated the invasion of the

563  
00:24:42,710 --> 00:24:40,799

thousands who came to help with the

564

00:24:44,710 --> 00:24:42,720

recovery process

565

00:24:49,350 --> 00:24:44,720

their graciousness and hospitality will

566

00:24:52,470 --> 00:24:49,360

be forever appreciated and remembered

567

00:24:55,029 --> 00:24:52,480

friends and family cared for us

568

00:24:57,269 --> 00:24:55,039

and countless thousands

569

00:25:02,870 --> 00:24:57,279

of others prayed for us

570

00:25:06,149 --> 00:25:04,870

our hearts were devastated

571

00:25:08,549 --> 00:25:06,159

wounded

572

00:25:11,669 --> 00:25:08,559

psalm 147 3 says that god heals the

573

00:25:15,430 --> 00:25:11,679

brokenhearted and binds up their wounds

574

00:25:17,669 --> 00:25:15,440

it takes time to heal lots of time

575

00:25:19,430 --> 00:25:17,679

but healing is possible

576  
00:25:21,750 --> 00:25:19,440  
i mentioned earlier that the journey has

577  
00:25:23,510 --> 00:25:21,760  
been difficult complicated and

578  
00:25:25,430 --> 00:25:23,520  
surprising

579  
00:25:27,669 --> 00:25:25,440  
sudden loss triggers a tidal wave of

580  
00:25:29,029 --> 00:25:27,679  
reaction that seems to take a lifetime

581  
00:25:30,789 --> 00:25:29,039  
to untangle

582  
00:25:32,230 --> 00:25:30,799  
and to resolve

583  
00:25:34,630 --> 00:25:32,240  
but i have personally been really

584  
00:25:36,789 --> 00:25:34,640  
surprised with blessings that come

585  
00:25:38,789 --> 00:25:36,799  
from such hardship

586  
00:25:41,990 --> 00:25:38,799  
the old testament book of isaiah talks

587  
00:25:44,070 --> 00:25:42,000  
in chapter 61 about those who grieve

588  
00:25:45,029 --> 00:25:44,080

receiving a crown of beauty instead of

589

00:25:46,470 --> 00:25:45,039

ashes

590

00:25:48,070 --> 00:25:46,480

the oil of joy

591

00:25:50,470 --> 00:25:48,080

instead of mourning

592

00:25:52,549 --> 00:25:50,480

and a garment of praise instead of a

593

00:25:54,789 --> 00:25:52,559

spirit of despair

594

00:25:57,029 --> 00:25:54,799

beauty from ashes is a walk away from

595

00:25:59,990 --> 00:25:57,039

death into life

596

00:26:02,789 --> 00:26:00,000

it is experiencing joy pouring over you

597

00:26:04,630 --> 00:26:02,799

replacing the chokehold of grief

598

00:26:05,830 --> 00:26:04,640

and it is the lord filling our hearts

599

00:26:09,190 --> 00:26:05,840

with praise

600

00:26:11,590 --> 00:26:09,200

instead of devastation and sorrow

601  
00:26:13,350 --> 00:26:11,600  
for some the beauty has become a desire

602  
00:26:14,549 --> 00:26:13,360  
to continue the visions our crew

603  
00:26:16,870 --> 00:26:14,559  
embraced

604  
00:26:19,269 --> 00:26:16,880  
some have pursued quality and strong

605  
00:26:21,350 --> 00:26:19,279  
educational opportunities for future

606  
00:26:23,269 --> 00:26:21,360  
generations that will produce scientists

607  
00:26:25,669 --> 00:26:23,279  
and engineers and explorers that will

608  
00:26:28,789 --> 00:26:25,679  
benefit all of mankind

609  
00:26:31,510 --> 00:26:28,799  
multiple scholarships schools exhibits

610  
00:26:33,029 --> 00:26:31,520  
museums endowment funds and archives

611  
00:26:35,430 --> 00:26:33,039  
have been dedicated

612  
00:26:37,830 --> 00:26:35,440  
in the columbia cruise memory

613  
00:26:39,669 --> 00:26:37,840

every time i fly into my hometown of

614

00:26:41,590 --> 00:26:39,679

amarillo texas

615

00:26:42,950 --> 00:26:41,600

i land at the rick husband international

616

00:26:44,870 --> 00:26:42,960

airport

617

00:26:47,510 --> 00:26:44,880

i spend some quiet time with the lord at

618

00:26:48,710 --> 00:26:47,520

our local ea smith ymca chapel in

619

00:26:51,750 --> 00:26:48,720

houston

620

00:26:53,990 --> 00:26:51,760

dedicated now to the columbia crew

621

00:26:56,149 --> 00:26:54,000

beauty from ashes

622

00:26:57,190 --> 00:26:56,159

joy instead of mourning

623

00:26:59,269 --> 00:26:57,200

praise

624

00:27:00,950 --> 00:26:59,279

instead of despair

625

00:27:02,950 --> 00:27:00,960

as rick shared with the crew and their

626  
00:27:04,310 --> 00:27:02,960  
spouses in an intimate setting the night

627  
00:27:06,789 --> 00:27:04,320  
before launch

628  
00:27:08,870 --> 00:27:06,799  
the lord your god will be with you

629  
00:27:11,590 --> 00:27:08,880  
wherever you go

630  
00:27:13,669 --> 00:27:11,600  
found in joshua 1 9 and that's a promise

631  
00:27:15,750 --> 00:27:13,679  
that he relied on

632  
00:27:18,070 --> 00:27:15,760  
our family has relied on

633  
00:27:20,389 --> 00:27:18,080  
and that we rejoice in on behalf of all

634  
00:27:22,789 --> 00:27:20,399  
of those who are so graciously gathered

635  
00:27:24,789 --> 00:27:22,799  
here and around the world today

636  
00:27:28,710 --> 00:27:24,799  
for this occasion

637  
00:27:31,590 --> 00:27:28,720  
god bless the families of sds 107

638  
00:27:33,750 --> 00:27:31,600

may our broken hearts continue to heal

639

00:27:36,470 --> 00:27:33,760

and may beauty continue

640

00:27:44,789 --> 00:27:36,480

to replace the ashes god bless you thank

641

00:27:49,190 --> 00:27:47,029

thank you evelyn

642

00:27:51,669 --> 00:27:49,200

we've got a young man here uh his name

643

00:27:52,950 --> 00:27:51,679

was kyle breeze who uh had an uncle

644

00:27:54,870 --> 00:27:52,960

worked here at nasa and he was walking

645

00:27:56,230 --> 00:27:54,880

with his uncle one day and said i wrote

646

00:27:58,310 --> 00:27:56,240

a song

647

00:28:00,389 --> 00:27:58,320

about the columbia and his uncle got a

648

00:28:02,630 --> 00:28:00,399

hold of thad myself and

649

00:28:04,230 --> 00:28:02,640

asked us if we would listen to this song

650

00:28:05,510 --> 00:28:04,240

and see what we thought

651  
00:28:07,750 --> 00:28:05,520  
and that we listened to it thought it

652  
00:28:09,510 --> 00:28:07,760  
was very appropriate it's

653  
00:28:12,630 --> 00:28:09,520  
written by kyle and he's going to be the

654  
00:28:14,470 --> 00:28:12,640  
song is going to be sung by joey beasley

655  
00:28:16,710 --> 00:28:14,480  
and kyle will kind of back him up on the

656  
00:28:18,950 --> 00:28:16,720  
keyboard bibi before we go any further

657  
00:28:22,230 --> 00:28:18,960  
thank you my friend it was a

658  
00:28:25,909 --> 00:28:22,240  
my heart about jumped out of my chest

659  
00:28:28,710 --> 00:28:27,269  
so kyle

660  
00:28:31,110 --> 00:28:28,720  
if you enjoy you would please come up

661  
00:28:42,549 --> 00:28:31,120  
here and perform 16

662  
00:28:42,559 --> 00:28:54,149  
thank you

663  
00:29:07,269 --> 00:28:55,470

how

664

00:29:21,830 --> 00:29:09,590

find out the

665

00:29:28,389 --> 00:29:24,950

just remember

666

00:29:31,669 --> 00:29:28,399

stay until be

667

00:29:34,669 --> 00:29:33,350

when you're

668

00:29:37,990 --> 00:29:34,679

just

669

00:29:38,950 --> 00:29:38,000

16 minutes from home

670

00:29:42,870 --> 00:29:38,960

no

671

00:29:43,750 --> 00:29:42,880

with us you are never alone

672

00:29:47,510 --> 00:29:43,760

we

673

00:30:02,870 --> 00:29:47,520

will always remember the ones

674

00:30:02,880 --> 00:30:19,269

steps into the unknown

675

00:30:31,990 --> 00:30:20,630

it may

676  
00:31:02,070 --> 00:30:34,789  
will again be

677  
00:31:08,710 --> 00:31:05,190  
heroes in life with the strength to

678  
00:31:11,269 --> 00:31:08,720  
believe you set sail for the stars where

679  
00:31:14,470 --> 00:31:11,279  
you dreamed us to be

680  
00:31:29,830 --> 00:31:14,480  
for thoughts you were lost just to find

681  
00:31:29,840 --> 00:31:44,830  
and i know

682  
00:31:53,029 --> 00:31:49,190  
16 minutes from home

683  
00:31:53,990 --> 00:31:53,039  
with us you are never alone

684  
00:32:33,590 --> 00:31:54,000  
we

685  
00:32:33,600 --> 00:32:51,269  
you are

686  
00:33:00,310 --> 00:32:56,230  
thank you

687  
00:33:02,389 --> 00:33:00,320  
do appreciate that

688  
00:33:04,070 --> 00:33:02,399

uh the next person i have the privilege

689

00:33:06,470 --> 00:33:04,080

of introducing hardly needs any

690

00:33:08,470 --> 00:33:06,480

introduction at all as a matter of fact

691

00:33:09,430 --> 00:33:08,480

she not she might not remember this back

692

00:33:11,350 --> 00:33:09,440

in the

693

00:33:13,269 --> 00:33:11,360

early 90s during her first flight i used

694

00:33:15,669 --> 00:33:13,279

to get a daily phone call from i think

695

00:33:17,750 --> 00:33:15,679

corny newspaper up in new york and tell

696

00:33:19,430 --> 00:33:17,760

us what you think eileen's doing today

697

00:33:21,269 --> 00:33:19,440

so i had flown just a few years earlier

698

00:33:22,710 --> 00:33:21,279

and i was recounting every

699

00:33:24,470 --> 00:33:22,720

step that the pilot would be doing

700

00:33:25,269 --> 00:33:24,480

during that mission every day and so it

701  
00:33:26,389 --> 00:33:25,279  
was

702  
00:33:28,070 --> 00:33:26,399  
kind of how i got to know her

703  
00:33:30,630 --> 00:33:28,080  
surreptitiously

704  
00:33:33,029 --> 00:33:30,640  
never really having met her until just

705  
00:33:35,110 --> 00:33:33,039  
last few years but she's a great lady

706  
00:33:37,029 --> 00:33:35,120  
she'll be inducted into our astronaut

707  
00:33:39,909 --> 00:33:37,039  
hall of fame this year she's the first

708  
00:33:41,909 --> 00:33:39,919  
american woman to pilot

709  
00:33:53,029 --> 00:33:41,919  
and command the space shuttle please

710  
00:33:57,110 --> 00:33:54,950  
well good morning

711  
00:33:58,870 --> 00:33:57,120  
and thank you kyle and joey

712  
00:34:00,870 --> 00:33:58,880  
very nice

713  
00:34:01,909 --> 00:34:00,880

and thank you evelyn for those beautiful

714

00:34:02,789 --> 00:34:01,919

remarks

715

00:34:08,710 --> 00:34:02,799

and

716

00:34:10,869 --> 00:34:08,720

feldman for inviting me to be here

717

00:34:12,869 --> 00:34:10,879

today

718

00:34:14,710 --> 00:34:12,879

usually when someone asks me

719

00:34:16,069 --> 00:34:14,720

i'd say well let me go check my schedule

720

00:34:17,750 --> 00:34:16,079

and

721

00:34:20,550 --> 00:34:17,760

see if i

722

00:34:22,790 --> 00:34:20,560

i can attend the event but in this case

723

00:34:26,710 --> 00:34:22,800

i told him yes on the spot

724

00:34:31,990 --> 00:34:30,230

today is a day of remembrance

725

00:34:34,310 --> 00:34:32,000

we remember the astronauts who took the

726  
00:34:36,869 --> 00:34:34,320  
daring step of accepting the challenge

727  
00:34:39,430 --> 00:34:36,879  
of space flight

728  
00:34:42,710 --> 00:34:39,440  
and for the columbia crew their mission

729  
00:34:46,230 --> 00:34:42,720  
was a fulfillment of their dreams

730  
00:34:51,829 --> 00:34:48,470  
to visit microgravity to live and work

731  
00:34:53,589 --> 00:34:51,839  
in a new and unusual environment

732  
00:34:57,910 --> 00:34:53,599  
and to experience a feeling that you

733  
00:34:59,829 --> 00:34:57,920  
can't possibly simulate on the surface

734  
00:35:02,310 --> 00:34:59,839  
it's a type of freedom to look down on

735  
00:35:04,470 --> 00:35:02,320  
our beautiful planet

736  
00:35:05,430 --> 00:35:04,480  
and to push hard to achieve the mission

737  
00:35:07,190 --> 00:35:05,440  
goals

738  
00:35:09,829 --> 00:35:07,200

and

739

00:35:13,589 --> 00:35:09,839

to be part of a team with a meaningful

740

00:35:17,109 --> 00:35:15,430

that vision is understanding the

741

00:35:19,750 --> 00:35:17,119

universe that we live in

742

00:35:22,230 --> 00:35:19,760

the human body the possibilities of new

743

00:35:24,069 --> 00:35:22,240

technologies the earth's natural

744

00:35:26,550 --> 00:35:24,079

processes

745

00:35:29,670 --> 00:35:26,560

the secrets of nearby planets

746

00:35:32,710 --> 00:35:29,680

in the universe beyond

747

00:35:35,270 --> 00:35:32,720

the columbia crew was taking baby steps

748

00:35:38,870 --> 00:35:35,280

but great missions begin with baby steps

749

00:35:41,829 --> 00:35:38,880

small steps learning steps

750

00:35:43,030 --> 00:35:41,839

they were passionate about this mission

751  
00:35:45,670 --> 00:35:43,040  
they knew

752  
00:35:50,310 --> 00:35:45,680  
that passion and risk are part of any

753  
00:35:54,550 --> 00:35:52,390  
i'd like to share

754  
00:35:56,550 --> 00:35:54,560  
a personal brief reflection of each of

755  
00:36:00,790 --> 00:35:56,560  
the columbia astronauts

756  
00:36:04,470 --> 00:36:02,390  
it's difficult for us that they're not

757  
00:36:05,990 --> 00:36:04,480  
physically here with us but our memories

758  
00:36:07,829 --> 00:36:06,000  
are still strong

759  
00:36:09,670 --> 00:36:07,839  
i remember

760  
00:36:11,910 --> 00:36:09,680  
rick who had such a beautiful singing

761  
00:36:13,670 --> 00:36:11,920  
voice the first time i heard him sing

762  
00:36:16,710 --> 00:36:13,680  
was at paddy robertson's memorial

763  
00:36:19,750 --> 00:36:16,720

service at ellington field

764

00:36:22,950 --> 00:36:19,760

his voice was so powerful and beautiful

765

00:36:26,950 --> 00:36:24,630

i remember the day that willie stopped

766

00:36:28,710 --> 00:36:26,960

in my office to show me

767

00:36:32,950 --> 00:36:28,720

his son's artwork

768

00:36:36,310 --> 00:36:34,870

i remember the times that laurel and i

769

00:36:39,750 --> 00:36:36,320

talked about what it was like to be a

770

00:36:41,190 --> 00:36:39,760

mom and an astronaut

771

00:36:43,109 --> 00:36:41,200

casey and i worked together in the

772

00:36:45,030 --> 00:36:43,119

simulator trying to solve the sneaky

773

00:36:46,630 --> 00:36:45,040

problems that the

774

00:36:49,109 --> 00:36:46,640

instructors in the training team

775

00:36:52,630 --> 00:36:49,119

presented to us and she had such a calm

776

00:36:56,710 --> 00:36:55,030

elon twice asked me to fly with him in

777

00:37:00,710 --> 00:36:56,720

the t-38

778

00:37:04,069 --> 00:37:02,390

i really wish i

779

00:37:07,190 --> 00:37:04,079

had gotten to know him better it was

780

00:37:09,510 --> 00:37:07,200

such a blessing to have him here

781

00:37:11,030 --> 00:37:09,520

dave was an optimist

782

00:37:12,630 --> 00:37:11,040

while working together on a difficult

783

00:37:14,630 --> 00:37:12,640

problem in a project we were both

784

00:37:18,230 --> 00:37:14,640

assigned to i observed that dave was a

785

00:37:21,270 --> 00:37:18,240

man of ideas and solutions

786

00:37:23,589 --> 00:37:21,280

and mike was always so cool and calm i

787

00:37:25,349 --> 00:37:23,599

don't think anything bothered him and he

788

00:37:29,430 --> 00:37:25,359

always had a big smile on his face when

789

00:37:34,150 --> 00:37:31,510

each of these memories and many more of

790

00:37:38,390 --> 00:37:34,160

them stay with me and i hope that you

791

00:37:44,069 --> 00:37:41,270

this crew and astronauts in general

792

00:37:47,190 --> 00:37:44,079

have an understandable characteristic

793

00:37:48,550 --> 00:37:47,200

astronauts love to explore

794

00:37:50,870 --> 00:37:48,560

and they feel

795

00:37:53,109 --> 00:37:50,880

we feel very confident focused and

796

00:37:55,349 --> 00:37:53,119

determined about it

797

00:37:58,390 --> 00:37:55,359

astronauts want adventure

798

00:38:00,870 --> 00:37:58,400

i don't think that'll change

799

00:38:02,550 --> 00:38:00,880

i often tell my children what my parents

800

00:38:05,829 --> 00:38:02,560

told me

801  
00:38:08,870 --> 00:38:05,839  
generations pass in centuries past

802  
00:38:10,870 --> 00:38:08,880  
but people don't change

803  
00:38:12,870 --> 00:38:10,880  
i think really it seems to me that the

804  
00:38:15,109 --> 00:38:12,880  
sense of curiosity in people doesn't

805  
00:38:17,990 --> 00:38:15,119  
change we still have it sure the

806  
00:38:20,790 --> 00:38:18,000  
environment changes technology changes

807  
00:38:22,630 --> 00:38:20,800  
but people are still human

808  
00:38:24,550 --> 00:38:22,640  
we still carry the spirit in the

809  
00:38:27,109 --> 00:38:24,560  
adventure of the people that we read

810  
00:38:29,990 --> 00:38:27,119  
about in history for example in the

811  
00:38:32,790 --> 00:38:30,000  
bible in the greek plays the discoveries

812  
00:38:34,790 --> 00:38:32,800  
made by columbus and other explorers and

813  
00:38:39,589 --> 00:38:34,800

the people who populated and founded the

814

00:38:44,710 --> 00:38:41,910

i i often laughed that sometime i seem

815

00:38:47,030 --> 00:38:44,720

to be turning into my mother

816

00:38:49,030 --> 00:38:47,040

and so i believe that exploring and

817

00:38:51,430 --> 00:38:49,040

risk-taking will be around for a long

818

00:38:55,270 --> 00:38:51,440

time regardless of what you might read

819

00:38:58,230 --> 00:38:56,790

and it's also important that i make a

820

00:39:00,870 --> 00:38:58,240

few comments about the space shuttle

821

00:39:03,990 --> 00:39:00,880

which was an amazing and versatile ship

822

00:39:06,390 --> 00:39:04,000

despite its tragedies its successes are

823

00:39:07,670 --> 00:39:06,400

also a part of history

824

00:39:10,150 --> 00:39:07,680

the shuttle

825

00:39:12,310 --> 00:39:10,160

was an engineering wonder

826

00:39:15,270 --> 00:39:12,320

my respect and thanks go out to those

827

00:39:16,950 --> 00:39:15,280

who designed and built it operated and

828

00:39:19,430 --> 00:39:16,960

maintained it

829

00:39:21,430 --> 00:39:19,440

the shuttle was a test program but it

830

00:39:24,870 --> 00:39:21,440

achieved its ultimate goal the

831

00:39:26,950 --> 00:39:24,880

international space station

832

00:39:29,829 --> 00:39:26,960

we learned from the shuttle and how the

833

00:39:32,710 --> 00:39:29,839

shuttle interacted with its environment

834

00:39:35,270 --> 00:39:32,720

what we learned has led to new designs

835

00:39:38,150 --> 00:39:35,280

in spacecraft

836

00:39:39,829 --> 00:39:38,160

which are safer and less expensive

837

00:39:41,990 --> 00:39:39,839

we've also learned much on the shuttle

838

00:39:44,870 --> 00:39:42,000

about the human body new technologies

839

00:39:46,950 --> 00:39:44,880

are planet earth and deep space

840

00:39:49,349 --> 00:39:46,960

expensive satellites like hubble and

841

00:39:51,030 --> 00:39:49,359

chandra had astronauts nearby to fix

842

00:39:52,870 --> 00:39:51,040

potential problems that might develop

843

00:39:54,390 --> 00:39:52,880

before they were deployed into their

844

00:39:56,310 --> 00:39:54,400

orbits

845

00:39:57,829 --> 00:39:56,320

we've come to live and work very well

846

00:40:00,069 --> 00:39:57,839

with other countries

847

00:40:04,230 --> 00:40:00,079

on many different levels

848

00:40:06,069 --> 00:40:04,240

and we have inspired over 30 years

849

00:40:09,270 --> 00:40:06,079

of school children to study math and

850

00:40:12,309 --> 00:40:11,270

people of very diverse backgrounds came

851  
00:40:14,309 --> 00:40:12,319  
together

852  
00:40:17,349 --> 00:40:14,319  
on the shuttle missions

853  
00:40:20,150 --> 00:40:17,359  
our columbia crew was one of diversity

854  
00:40:22,790 --> 00:40:20,160  
we can relate to them

855  
00:40:25,829 --> 00:40:22,800  
their lives were exciting and dramatic

856  
00:40:28,950 --> 00:40:25,839  
it takes your breath away to think about

857  
00:40:31,670 --> 00:40:28,960  
what they have done in their lives

858  
00:40:33,109 --> 00:40:31,680  
they are adventurers explorers and role

859  
00:40:34,870 --> 00:40:33,119  
models

860  
00:40:36,630 --> 00:40:34,880  
how fortunate they were to have had the

861  
00:40:38,470 --> 00:40:36,640  
experience to

862  
00:40:42,150 --> 00:40:38,480  
the opportunity to experience a whole

863  
00:40:46,870 --> 00:40:45,109

to our friends from mission sts 107 here

864

00:40:48,630 --> 00:40:46,880

we are 10 years later

865

00:40:51,190 --> 00:40:48,640

we still love you

866

00:40:52,710 --> 00:40:51,200

we still miss you

867

00:40:55,190 --> 00:40:52,720

how can we ever thank you for your

868

00:40:59,829 --> 00:40:55,200

contributions to the great journey of

869

00:41:05,190 --> 00:41:02,230

proverbs 3 verse 5

870

00:41:16,870 --> 00:41:05,200

trust in the lord with all your heart

871

00:41:20,550 --> 00:41:19,190

thank you eileen uh there's some good

872

00:41:23,190 --> 00:41:20,560

and bad about being around a space

873

00:41:25,670 --> 00:41:23,200

program for 35 years i guess a good part

874

00:41:27,750 --> 00:41:25,680

is i've been around for 35 years

875

00:41:29,510 --> 00:41:27,760

uh the bad part is that i've been about

876

00:41:31,430 --> 00:41:29,520

around for 35 years it's been a

877

00:41:33,030 --> 00:41:31,440

wonderful ride for me and

878

00:41:34,230 --> 00:41:33,040

got a lot of folks

879

00:41:35,510 --> 00:41:34,240

when you've been around that long i

880

00:41:36,710 --> 00:41:35,520

recognize just about everybody in the

881

00:41:38,150 --> 00:41:36,720

audience and certainly most of people

882

00:41:40,390 --> 00:41:38,160

here on the stage and the next gentleman

883

00:41:42,069 --> 00:41:40,400

i have the opportunity to introduce is

884

00:41:43,750 --> 00:41:42,079

no stranger to space either he's been

885

00:41:45,349 --> 00:41:43,760

around just a little bit

886

00:41:47,510 --> 00:41:45,359

less than i have but

887

00:41:49,109 --> 00:41:47,520

everybody knows this gentleman he's uh

888

00:41:50,630 --> 00:41:49,119

was deputy director of johnson space

889

00:41:52,950 --> 00:41:50,640

center director of the

890

00:41:55,030 --> 00:41:52,960

space center up in uh stennis and now

891

00:41:57,270 --> 00:41:55,040

he's our current director here at the

892

00:41:59,589 --> 00:41:57,280

kennedy space center second astronaut to

893

00:42:02,309 --> 00:41:59,599

do that he flew four times in

894

00:42:04,069 --> 00:42:02,319

space as twice his commander he's just a

895

00:42:06,390 --> 00:42:04,079

outstanding man who's also a member of

896

00:42:08,630 --> 00:42:06,400

our astronaut hall of fame

897

00:42:15,430 --> 00:42:08,640

without further ado bob cabana come on

898

00:42:19,910 --> 00:42:17,670

thank you john uh good morning everyone

899

00:42:22,550 --> 00:42:19,920

sandy uh evelyn eileen it's so good to

900

00:42:23,589 --> 00:42:22,560

see so many friends

901  
00:42:25,510 --> 00:42:23,599  
uh

902  
00:42:26,790 --> 00:42:25,520  
ten years ago this morning

903  
00:42:28,390 --> 00:42:26,800  
i was the director of flight crew

904  
00:42:30,230 --> 00:42:28,400  
operations standing out at the middle of

905  
00:42:32,950 --> 00:42:30,240  
the shuttle landing facility waiting for

906  
00:42:35,589 --> 00:42:32,960  
a spaceship to come home to florida with

907  
00:42:37,910 --> 00:42:35,599  
seven of my friends on board

908  
00:42:40,550 --> 00:42:37,920  
but they never came home and soon it

909  
00:42:42,710 --> 00:42:40,560  
became very obvious that something very

910  
00:42:43,990 --> 00:42:42,720  
bad had happened

911  
00:42:46,390 --> 00:42:44,000  
and that was the beginning of a very

912  
00:42:48,790 --> 00:42:46,400  
difficult time for their families their

913  
00:42:51,030 --> 00:42:48,800

friends the shuttle program

914

00:42:52,870 --> 00:42:51,040

and our agency

915

00:42:55,430 --> 00:42:52,880

many tours were shed

916

00:42:57,190 --> 00:42:55,440

the nation mourned their loss

917

00:42:59,430 --> 00:42:57,200

and then we got about the business of

918

00:43:01,030 --> 00:42:59,440

picking up the pieces correcting our

919

00:43:04,470 --> 00:43:01,040

deficiencies

920

00:43:09,750 --> 00:43:04,480

and continuing our quest to explore

921

00:43:13,910 --> 00:43:11,270

in looking back

922

00:43:16,150 --> 00:43:13,920

there was no malicious intent by any

923

00:43:17,109 --> 00:43:16,160

engineer manager in the decisions they

924

00:43:19,030 --> 00:43:17,119

made

925

00:43:20,309 --> 00:43:19,040

that led to the loss of colombian or

926  
00:43:22,630 --> 00:43:20,319  
crew

927  
00:43:25,030 --> 00:43:22,640  
they were doing their very best to be

928  
00:43:27,589 --> 00:43:25,040  
successful

929  
00:43:29,589 --> 00:43:27,599  
but we are human

930  
00:43:30,550 --> 00:43:29,599  
and often times when lacking sufficient

931  
00:43:33,109 --> 00:43:30,560  
data

932  
00:43:35,670 --> 00:43:33,119  
we make poor decisions

933  
00:43:39,030 --> 00:43:35,680  
and that results in events like apollo 1

934  
00:43:40,710 --> 00:43:39,040  
challenger and columbia

935  
00:43:42,309 --> 00:43:40,720  
i've always felt that the true measure

936  
00:43:44,790 --> 00:43:42,319  
of a person

937  
00:43:46,069 --> 00:43:44,800  
is not in the mistakes that he or she

938  
00:43:47,670 --> 00:43:46,079

makes

939

00:43:49,430 --> 00:43:47,680

but in how they respond to those

940

00:43:52,470 --> 00:43:49,440

mistakes

941

00:43:54,870 --> 00:43:52,480

do they allow them to drag them down

942

00:43:58,150 --> 00:43:54,880

or do they rise above them and go on to

943

00:44:00,550 --> 00:43:58,160

even greater accomplishments

944

00:44:02,470 --> 00:44:00,560

i believe we have learned from ours

945

00:44:04,790 --> 00:44:02,480

we have risen above them

946

00:44:07,430 --> 00:44:04,800

and we are going on to even greater

947

00:44:09,190 --> 00:44:07,440

accomplishments

948

00:44:12,069 --> 00:44:09,200

but we must never forget the hard

949

00:44:15,109 --> 00:44:12,079

lessons that we've learned in the past

950

00:44:17,030 --> 00:44:15,119

it's important that we pause to remember

951  
00:44:19,589 --> 00:44:17,040  
and reflect

952  
00:44:21,750 --> 00:44:19,599  
we must do our very best

953  
00:44:23,190 --> 00:44:21,760  
to prevent something like that from ever

954  
00:44:26,069 --> 00:44:23,200  
happening again

955  
00:44:28,230 --> 00:44:26,079  
too much is at stake

956  
00:44:29,430 --> 00:44:28,240  
so thank you rick

957  
00:44:30,470 --> 00:44:29,440  
willie

958  
00:44:31,670 --> 00:44:30,480  
mike

959  
00:44:33,030 --> 00:44:31,680  
kaltner

960  
00:44:38,069 --> 00:44:33,040  
dave

961  
00:44:42,790 --> 00:44:40,230  
we promise to continue your thirst for

962  
00:44:44,870 --> 00:44:42,800  
knowledge to learn from our mistakes to

963  
00:44:46,870 --> 00:44:44,880

rise above our failings

964

00:44:48,309 --> 00:44:46,880

and to one day lead the way beyond our

965

00:44:52,069 --> 00:44:48,319

home planet

966

00:44:55,190 --> 00:44:52,079

in our never-ending quest to explore

967

00:45:00,950 --> 00:44:55,200

we remember and we will never forget

968

00:45:05,109 --> 00:45:02,950

thank you bob

969

00:45:06,950 --> 00:45:05,119

uh next gentleman goes back a ways too

970

00:45:08,630 --> 00:45:06,960

you know he seems like we we all know

971

00:45:10,390 --> 00:45:08,640

each other here and uh

972

00:45:12,550 --> 00:45:10,400

william h gerstenmaier's associate

973

00:45:16,150 --> 00:45:12,560

administrator up in our headquarters

974

00:45:17,349 --> 00:45:16,160

office up in washington dc uh for human

975

00:45:22,069 --> 00:45:17,359

operations

976

00:45:23,670 --> 00:45:22,079

gerstey as we call him and i and bob and

977

00:45:24,630 --> 00:45:23,680

all of us go back a long ways as a

978

00:45:27,030 --> 00:45:24,640

matter of fact he was a flight

979

00:45:28,630 --> 00:45:27,040

controller on my mission back in

980

00:45:30,069 --> 00:45:28,640

the early days of the space shuttle

981

00:45:31,589 --> 00:45:30,079

program so

982

00:45:33,190 --> 00:45:31,599

without further ado

983

00:45:34,710 --> 00:45:33,200

william h gerstenmaier gerstein would

984

00:45:40,630 --> 00:45:34,720

you come up and say a few words to us

985

00:45:44,630 --> 00:45:42,790

thank you john and thank you all for the

986

00:45:46,630 --> 00:45:44,640

wonderful words that we've heard this

987

00:45:48,550 --> 00:45:46,640

morning and the thoughts

988

00:45:51,109 --> 00:45:48,560

it's my honor to be here today to speak

989

00:45:53,430 --> 00:45:51,119

to you on behalf of everyone who works

990

00:45:55,829 --> 00:45:53,440

in the endeavor of human space flight

991

00:45:57,829 --> 00:45:55,839

the teams that i represent

992

00:45:59,589 --> 00:45:57,839

recognize that it's a special privilege

993

00:46:02,630 --> 00:45:59,599

to do the work of pioneering new

994

00:46:05,030 --> 00:46:02,640

frontiers in the solar system

995

00:46:06,870 --> 00:46:05,040

flying people in space is a tremendous

996

00:46:09,990 --> 00:46:06,880

responsibility

997

00:46:11,190 --> 00:46:10,000

as an agency and a family nasa has been

998

00:46:13,670 --> 00:46:11,200

part of some of the greatest

999

00:46:15,430 --> 00:46:13,680

accomplishments in human achievement

1000

00:46:17,510 --> 00:46:15,440

but attaining these achievements has

1001  
00:46:20,870 --> 00:46:17,520  
also reminded us that our work does not

1002  
00:46:23,670 --> 00:46:20,880  
come without tremendous risk and tragedy

1003  
00:46:26,390 --> 00:46:23,680  
our failures are cause for reflection

1004  
00:46:29,270 --> 00:46:26,400  
today's anniversary of colombia like the

1005  
00:46:30,710 --> 00:46:29,280  
anniversaries of apollo 1 and challenger

1006  
00:46:33,670 --> 00:46:30,720  
last week

1007  
00:46:35,589 --> 00:46:33,680  
are a call to rededicate ourselves

1008  
00:46:38,230 --> 00:46:35,599  
to the mission to which

1009  
00:46:41,349 --> 00:46:38,240  
so many of us have given so much

1010  
00:46:44,069 --> 00:46:41,359  
and a few have given all

1011  
00:46:46,230 --> 00:46:44,079  
i'd like each of you to reflect today in

1012  
00:46:49,109 --> 00:46:46,240  
three different ways and reflect

1013  
00:46:51,270 --> 00:46:49,119

personally of your own thoughts

1014

00:46:53,030 --> 00:46:51,280

first remember where you were ten years

1015

00:46:57,670 --> 00:46:53,040

ago

1016

00:46:59,589 --> 00:46:57,680

in a russian living on a half-finished

1017

00:47:01,670 --> 00:46:59,599

international space station

1018

00:47:04,150 --> 00:47:01,680

with parts from 15 countries still

1019

00:47:05,589 --> 00:47:04,160

underground awaiting a ride on the space

1020

00:47:07,270 --> 00:47:05,599

shuttle

1021

00:47:09,990 --> 00:47:07,280

as the international space station

1022

00:47:11,990 --> 00:47:10,000

program manager it was my job to call

1023

00:47:14,230 --> 00:47:12,000

the international partners and let them

1024

00:47:17,030 --> 00:47:14,240

know we had a problem

1025

00:47:18,790 --> 00:47:17,040

those of us in the space station program

1026  
00:47:21,910 --> 00:47:18,800  
had to separate ourselves from the

1027  
00:47:24,470 --> 00:47:21,920  
tragedy that affected many of us deeply

1028  
00:47:28,390 --> 00:47:24,480  
in personal ways and make sure that our

1029  
00:47:30,710 --> 00:47:28,400  
crew on the space station would be safe

1030  
00:47:32,790 --> 00:47:30,720  
i'd also like you to think about

1031  
00:47:35,829 --> 00:47:32,800  
what we've learned and can still learn

1032  
00:47:37,829 --> 00:47:35,839  
from the lessons of a decade ago

1033  
00:47:40,950 --> 00:47:37,839  
the accident wasn't caused by a single

1034  
00:47:43,430 --> 00:47:40,960  
event or a single person but by a series

1035  
00:47:45,349 --> 00:47:43,440  
of technical and cultural missteps

1036  
00:47:47,910 --> 00:47:45,359  
stemming all the way back to the first

1037  
00:47:49,990 --> 00:47:47,920  
shuttle launch in 1981

1038  
00:47:53,109 --> 00:47:50,000

when ice and foam first struck the

1039

00:47:55,109 --> 00:47:53,119

orbital maneuvering system ohms pods

1040

00:47:56,870 --> 00:47:55,119

this was a first indication we had a

1041

00:47:59,109 --> 00:47:56,880

design problem

1042

00:48:01,430 --> 00:47:59,119

but we continued to fly without fully

1043

00:48:02,950 --> 00:48:01,440

investigating the consequences of foam

1044

00:48:05,030 --> 00:48:02,960

hitting the orbiter

1045

00:48:07,589 --> 00:48:05,040

we continue to lose foam on many

1046

00:48:09,589 --> 00:48:07,599

missions and this reinforced the idea

1047

00:48:11,670 --> 00:48:09,599

that all was well

1048

00:48:13,430 --> 00:48:11,680

we did not stay hungry

1049

00:48:15,750 --> 00:48:13,440

and we didn't deeply analyze the

1050

00:48:17,829 --> 00:48:15,760

implications of foam being released at

1051

00:48:19,910 --> 00:48:17,839

precisely the wrong moment

1052

00:48:23,270 --> 00:48:19,920

we continued our work on the space

1053

00:48:25,030 --> 00:48:23,280

station and to build the next generation

1054

00:48:27,190 --> 00:48:25,040

of spacecraft

1055

00:48:29,670 --> 00:48:27,200

as we do these things we need to stay

1056

00:48:32,390 --> 00:48:29,680

vigilant and recognize that even the

1057

00:48:35,589 --> 00:48:32,400

smallest potential flaw can become a big

1058

00:48:37,750 --> 00:48:35,599

problem we need to keep asking questions

1059

00:48:39,750 --> 00:48:37,760

and looking beyond that initial close

1060

00:48:43,030 --> 00:48:39,760

call we need to learn from these

1061

00:48:45,349 --> 00:48:43,040

seemingly small inconsequential events

1062

00:48:47,270 --> 00:48:45,359

in the honor of the columbia crew it is

1063

00:48:49,349 --> 00:48:47,280

our job to be aware of the technical

1064

00:48:51,510 --> 00:48:49,359

subtleties and be creative about

1065

00:48:54,390 --> 00:48:51,520

understanding them and the underlying

1066

00:48:56,950 --> 00:48:54,400

problems even small problems can surface

1067

00:48:59,430 --> 00:48:56,960

as major failures

1068

00:49:01,349 --> 00:48:59,440

lastly i also want you to think about

1069

00:49:03,670 --> 00:49:01,359

how we can ensure that this accident

1070

00:49:06,470 --> 00:49:03,680

changes us in ways that pays tribute to

1071

00:49:08,549 --> 00:49:06,480

the sacrifice of the colombia's crews

1072

00:49:10,950 --> 00:49:08,559

one of the legacies rooted in a tragedy

1073

00:49:12,150 --> 00:49:10,960

of 10 years ago is the space station

1074

00:49:14,390 --> 00:49:12,160

itself

1075

00:49:16,470 --> 00:49:14,400

beautifully orbiting our planet

1076

00:49:18,470 --> 00:49:16,480

completed safely thanks to the hard

1077

00:49:21,030 --> 00:49:18,480

lessons we've learned throughout nasa's

1078

00:49:22,790 --> 00:49:21,040

history we continue building this but we

1079

00:49:24,630 --> 00:49:22,800

continued building the space station

1080

00:49:27,190 --> 00:49:24,640

with the memory of the columbia crew in

1081

00:49:29,430 --> 00:49:27,200

our minds their mission was one of pure

1082

00:49:33,750 --> 00:49:29,440

science and we are carrying that

1083

00:49:38,069 --> 00:49:35,670

ten years ago it would have been easy to

1084

00:49:40,390 --> 00:49:38,079

pull back from the frontier of space and

1085

00:49:43,190 --> 00:49:40,400

say it was too risky to pursue

1086

00:49:45,750 --> 00:49:43,200

instead we rededicated ourselves to

1087

00:49:48,069 --> 00:49:45,760

improving how we push the boundaries of

1088

00:49:50,230 --> 00:49:48,079

space exploration and we vowed to

1089

00:49:52,710 --> 00:49:50,240

continue with our eyes open

1090

00:49:55,430 --> 00:49:52,720

we cannot be afraid of risk

1091

00:49:57,589 --> 00:49:55,440

and we cannot be ignorant of it either

1092

00:50:00,790 --> 00:49:57,599

our lasting tribute to those we have

1093

00:50:02,950 --> 00:50:00,800

lost is to carry on with the cause of

1094

00:50:05,510 --> 00:50:02,960

that they believed was worth the

1095

00:50:14,150 --> 00:50:05,520

ultimate sacrifice it is our mission

1096

00:50:18,470 --> 00:50:16,710

thank you gerstee and our uh final

1097

00:50:20,710 --> 00:50:18,480

speaker we'll hear from today came to us

1098

00:50:22,790 --> 00:50:20,720

from washington dc today

1099

00:50:24,230 --> 00:50:22,800

mr robert lightfoot came down he's our

1100

00:50:26,230 --> 00:50:24,240

one of our senior guys up there the

1101

00:50:27,430 --> 00:50:26,240

associate administrator to charlie

1102

00:50:29,589 --> 00:50:27,440

bolden in

1103

00:50:31,190 --> 00:50:29,599

washington dc he was the uh director of

1104

00:50:33,430 --> 00:50:31,200

the marshall space flight center and i

1105

00:50:36,470 --> 00:50:33,440

guess back in 2003 for a couple years he

1106

00:50:38,069 --> 00:50:36,480

did the return to flight oversight so

1107

00:50:43,109 --> 00:50:38,079

robert would you say a few words to us

1108

00:50:46,230 --> 00:50:44,630

thank you john and and thank you to the

1109

00:50:47,510 --> 00:50:46,240

columbia family for being here it's

1110

00:50:48,790 --> 00:50:47,520

great to have you here and great remarks

1111

00:50:50,069 --> 00:50:48,800

alvin thank you so much for sharing

1112

00:50:51,910 --> 00:50:50,079

those with us

1113

00:50:53,430 --> 00:50:51,920

today is a very meaningful day for the

1114

00:50:55,670 --> 00:50:53,440

nasa family

1115

00:50:57,349 --> 00:50:55,680

10 years ago many of us here on the

1116

00:50:59,349 --> 00:50:57,359

front lines of the space shuttle program

1117

00:51:01,589 --> 00:50:59,359

maybe even as we've as we've heard at

1118

00:51:03,190 --> 00:51:01,599

the landing site awaiting columbia's

1119

00:51:05,030 --> 00:51:03,200

return

1120

00:51:06,390 --> 00:51:05,040

realized the extent

1121

00:51:08,150 --> 00:51:06,400

of the tragedy

1122

00:51:10,790 --> 00:51:08,160

and that we knew the world would never

1123

00:51:12,470 --> 00:51:10,800

be the same again for us

1124

00:51:14,549 --> 00:51:12,480

this time each year we remember and

1125

00:51:16,950 --> 00:51:14,559

honor the columbia crew

1126  
00:51:19,829 --> 00:51:16,960  
and all those who've lost their lives

1127  
00:51:21,030 --> 00:51:19,839  
in this great endeavor of space

1128  
00:51:23,829 --> 00:51:21,040  
exploration

1129  
00:51:27,030 --> 00:51:23,839  
the challenger crew apollo 1

1130  
00:51:28,549 --> 00:51:27,040  
mike adams the x-15 pilot

1131  
00:51:32,069 --> 00:51:28,559  
these brave men and women and their

1132  
00:51:34,230 --> 00:51:32,079  
families have our deepest gratitude

1133  
00:51:36,549 --> 00:51:34,240  
we work every day to build on that

1134  
00:51:38,710 --> 00:51:36,559  
legacy and to infuse the life and

1135  
00:51:41,030 --> 00:51:38,720  
vitality that they had that they shared

1136  
00:51:43,910 --> 00:51:41,040  
with us into the work that we do as we

1137  
00:51:45,990 --> 00:51:43,920  
move forward forward

1138  
00:51:47,270 --> 00:51:46,000

it was an honor for me to stand aside

1139

00:51:49,430 --> 00:51:47,280

the team

1140

00:51:51,589 --> 00:51:49,440

as we began to recover

1141

00:51:56,069 --> 00:51:51,599

from the columbia accident

1142

00:51:57,990 --> 00:51:56,079

what i saw was a dedicated focused team

1143

00:51:59,990 --> 00:51:58,000

pushing hard a team completely

1144

00:52:02,470 --> 00:52:00,000

devastated by the loss

1145

00:52:04,950 --> 00:52:02,480

but completely resolved to getting us

1146

00:52:07,750 --> 00:52:04,960

back to flying again

1147

00:52:10,470 --> 00:52:07,760

with the memory of the crew

1148

00:52:12,309 --> 00:52:10,480

right in front of us every day

1149

00:52:14,710 --> 00:52:12,319

it will go down for me personally as the

1150

00:52:16,710 --> 00:52:14,720

most gratifying time of my career

1151  
00:52:18,630 --> 00:52:16,720  
to see that team come together to pull

1152  
00:52:20,230 --> 00:52:18,640  
us back from such a tragedy

1153  
00:52:22,630 --> 00:52:20,240  
the emotions of seeing the shuttle leave

1154  
00:52:25,030 --> 00:52:22,640  
off the pad with eileen collins at

1155  
00:52:27,750 --> 00:52:25,040  
command and return to flight

1156  
00:52:29,349 --> 00:52:27,760  
it's hard to explain

1157  
00:52:32,950 --> 00:52:29,359  
the congruence of the hard work to get

1158  
00:52:35,270 --> 00:52:32,960  
there the memory of the columbia crew

1159  
00:52:36,390 --> 00:52:35,280  
and then the dream realized of flying

1160  
00:52:39,270 --> 00:52:36,400  
again

1161  
00:52:40,710 --> 00:52:39,280  
all bundled up in one amazing moment

1162  
00:52:42,790 --> 00:52:40,720  
we not only returned to flight after

1163  
00:52:44,309 --> 00:52:42,800

columbia we established better policies

1164

00:52:46,150 --> 00:52:44,319

better procedures and worked on our

1165

00:52:48,069 --> 00:52:46,160

culture to ensure this wasn't going to

1166

00:52:51,030 --> 00:52:48,079

happen again

1167

00:52:54,870 --> 00:52:51,040

all because the legacy of this crew and

1168

00:52:56,549 --> 00:52:54,880

their dedication to space exploration

1169

00:52:58,230 --> 00:52:56,559

in the years after we returned to flight

1170

00:53:00,150 --> 00:52:58,240

we completed the engineering marvel that

1171

00:53:03,190 --> 00:53:00,160

gerst talked about this international

1172

00:53:05,670 --> 00:53:03,200

space station flying above us today

1173

00:53:07,510 --> 00:53:05,680

an unparalleled and unique orbiting

1174

00:53:09,510 --> 00:53:07,520

laboratory that's going to return

1175

00:53:11,750 --> 00:53:09,520

amazing things for us

1176

00:53:13,430 --> 00:53:11,760

for years to come

1177

00:53:15,589 --> 00:53:13,440

nasa administrator charlie bolden just

1178

00:53:18,069 --> 00:53:15,599

attended the alan ramon symposium in

1179

00:53:19,670 --> 00:53:18,079

israel where he's where he celebrated

1180

00:53:21,910 --> 00:53:19,680

the life of elon

1181

00:53:23,430 --> 00:53:21,920

and extended again our dedication to

1182

00:53:26,470 --> 00:53:23,440

international partnership in this

1183

00:53:27,910 --> 00:53:26,480

journey of space exploration

1184

00:53:29,990 --> 00:53:27,920

i believe we flew out the remainder of

1185

00:53:31,990 --> 00:53:30,000

the shuttle program safely

1186

00:53:34,230 --> 00:53:32,000

based on the lessons we learned

1187

00:53:36,230 --> 00:53:34,240

and based on our

1188

00:53:37,910 --> 00:53:36,240

complete and total commitment to making

1189

00:53:39,510 --> 00:53:37,920

sure it didn't happen again

1190

00:53:40,870 --> 00:53:39,520

i heard many people say and i believe it

1191

00:53:42,309 --> 00:53:40,880

because i was there with them that the

1192

00:53:43,430 --> 00:53:42,319

last flight was the safest flight we

1193

00:53:45,670 --> 00:53:43,440

ever flew

1194

00:53:46,950 --> 00:53:45,680

because of what the team did

1195

00:53:48,710 --> 00:53:46,960

now the shuttles have completed their

1196

00:53:50,950 --> 00:53:48,720

missions and they will inspire millions

1197

00:53:52,549 --> 00:53:50,960

of folks as they sit in museums and

1198

00:53:54,829 --> 00:53:52,559

science centers around the country

1199

00:53:56,630 --> 00:53:54,839

including right here in

1200

00:53:57,990 --> 00:53:56,640

florida

1201

00:54:00,790 --> 00:53:58,000

they'll ignite a spark in that next

1202

00:54:03,109 --> 00:54:00,800

generation of explorers that we

1203

00:54:04,950 --> 00:54:03,119

that we hope come along behind us

1204

00:54:06,870 --> 00:54:04,960

some of them perhaps back here today in

1205

00:54:08,150 --> 00:54:06,880

the crowd

1206

00:54:09,589 --> 00:54:08,160

but what we want to do is we want to

1207

00:54:12,390 --> 00:54:09,599

make sure that that next generation

1208

00:54:13,750 --> 00:54:12,400

knows the legacy that's there

1209

00:54:15,750 --> 00:54:13,760

so while this is nasa's day of

1210

00:54:17,750 --> 00:54:15,760

remembrance in part a time of sadness

1211

00:54:19,670 --> 00:54:17,760

it's also a time of reflection time to

1212

00:54:20,870 --> 00:54:19,680

reflect on what we can do better

1213

00:54:22,950 --> 00:54:20,880

and how we can

1214

00:54:24,630 --> 00:54:22,960

move on and move forward

1215

00:54:26,069 --> 00:54:24,640

so we call it a day of remembrance but

1216

00:54:27,750 --> 00:54:26,079

what i hope you will all do is commit to

1217

00:54:29,670 --> 00:54:27,760

remembering every day

1218

00:54:31,430 --> 00:54:29,680

the legacy and the memory of the

1219

00:54:33,589 --> 00:54:31,440

columbia crew and all those that came

1220

00:54:35,030 --> 00:54:33,599

before them as we continue this

1221

00:54:42,549 --> 00:54:35,040

tremendous journey

1222

00:54:47,109 --> 00:54:44,630

wow thank you robert that's perfect

1223

00:54:48,870 --> 00:54:47,119

timing because we have a very special

1224

00:54:50,950 --> 00:54:48,880

treat for you

1225

00:54:52,870 --> 00:54:50,960

we've got uh several of our astronauts

1226

00:54:54,230 --> 00:54:52,880

who flew down from houston

1227

00:55:05,109 --> 00:54:54,240

and they're going to fly right overhead

1228

00:55:05,119 --> 00:55:08,549

how was that for timing

1229

00:55:13,190 --> 00:55:10,710

thank you robert

1230

00:55:14,630 --> 00:55:13,200

i uh

1231

00:55:16,309 --> 00:55:14,640

dad you want to

1232

00:55:20,789 --> 00:55:16,319

introduce our special guest one more

1233

00:55:25,270 --> 00:55:23,030

human exploration inspires

1234

00:55:28,549 --> 00:55:25,280

inspires us to be americans

1235

00:55:31,829 --> 00:55:28,559

it inspires us to work and be productive

1236

00:55:33,589 --> 00:55:31,839

it inspires us in music and film and art

1237

00:55:35,030 --> 00:55:33,599

it really really contributes to the

1238

00:55:38,150 --> 00:55:35,040

quality of life it's a part of our

1239

00:55:39,990 --> 00:55:38,160

nature as human beings

1240

00:55:41,670 --> 00:55:40,000

bibi winans is a six-time grammy

1241

00:55:43,430 --> 00:55:41,680

award-winning

1242

00:55:45,190 --> 00:55:43,440

winner he resides in nashville and he

1243

00:55:48,150 --> 00:55:45,200

could write an album

1244

00:55:50,230 --> 00:55:48,160

or a song about anything he wanted to

1245

00:55:52,390 --> 00:55:50,240

but his latest album america america is

1246

00:55:55,589 --> 00:55:52,400

about america and what it means to be

1247

00:55:57,750 --> 00:55:55,599

america and his song ultimate sacrifice

1248

00:56:00,069 --> 00:55:57,760

is inspired by those who have given the

1249

00:56:02,470 --> 00:56:00,079

ultimate sacrifice and service

1250

00:56:04,470 --> 00:56:02,480

of our country it's a fitting song to

1251  
00:56:07,510 --> 00:56:04,480  
honor the astronauts who have given

1252  
00:56:09,349 --> 00:56:07,520  
their lives for human space flight

1253  
00:56:10,630 --> 00:56:09,359  
maybe a remarkable thing happened as i

1254  
00:56:12,710 --> 00:56:10,640  
was walking over

1255  
00:56:16,150 --> 00:56:12,720  
to the memorial this morning

1256  
00:56:17,829 --> 00:56:16,160  
santa sandra anderson and i were talking

1257  
00:56:19,589 --> 00:56:17,839  
turned out to be that

1258  
00:56:24,870 --> 00:56:19,599  
columbia payload commander michael

1259  
00:56:28,789 --> 00:56:27,190  
16 minutes from home

1260  
00:56:31,510 --> 00:56:28,799  
the shuttle columbia broke up over the

1261  
00:56:34,549 --> 00:56:31,520  
state of texas a thousand miles away but

1262  
00:56:36,950 --> 00:56:34,559  
only 16 minutes from home

1263  
00:56:38,789 --> 00:56:36,960

and then as all those folks who went out

1264

00:56:40,870 --> 00:56:38,799

there to help pick up the pieces and to

1265

00:56:42,950 --> 00:56:40,880

figure out what happened they found

1266

00:56:47,589 --> 00:56:42,960

certain personal items that made it to

1267

00:56:49,670 --> 00:56:47,599

earth and one was an album a cd

1268

00:56:50,950 --> 00:56:49,680

that michael anderson took and flew on

1269

00:56:52,950 --> 00:56:50,960

the columbia

1270

00:56:54,789 --> 00:56:52,960

it was a winan's island it was it was

1271

00:56:56,549 --> 00:56:54,799

cc's album

1272

00:56:58,789 --> 00:56:56,559

and sandra still has that album and now

1273

00:57:02,309 --> 00:56:58,799

10 years later

1274

00:57:05,349 --> 00:57:02,319

sandra is sitting next to bb winans

1275

00:57:09,670 --> 00:57:07,990

bb winans ultimate sacrifice thank you

1276

00:57:11,750 --> 00:57:09,680

for being here bibi

1277

00:57:13,349 --> 00:57:11,760

and thank you for

1278

00:57:14,309 --> 00:57:13,359

for helping us remember those very

1279

00:57:23,190 --> 00:57:14,319

special

1280

00:57:27,030 --> 00:57:24,630

wow you should have told me that

1281

00:57:30,870 --> 00:57:27,040

afterwards

1282

00:57:36,950 --> 00:57:35,270

wow you know i i as i said there i

1283

00:57:39,510 --> 00:57:36,960

i um

1284

00:57:41,670 --> 00:57:39,520

confirmed within myself that

1285

00:57:45,910 --> 00:57:41,680

it's a calling

1286

00:57:48,630 --> 00:57:45,920

we all have in our lives to do what we

1287

00:57:51,109 --> 00:57:48,640

were called to do and i knew

1288

00:57:54,230 --> 00:57:51,119

at a young age that my calling was to

1289

00:57:58,390 --> 00:57:54,240

sing and to write songs

1290

00:58:01,349 --> 00:57:58,400

i never even faked being an astronaut

1291

00:58:03,430 --> 00:58:01,359

because i knew that was not what god

1292

00:58:06,390 --> 00:58:03,440

called me to do but i

1293

00:58:08,789 --> 00:58:06,400

i honor you today i really do honor the

1294

00:58:12,230 --> 00:58:08,799

families and those who have

1295

00:58:14,150 --> 00:58:12,240

given the ultimate sacrifice i was in

1296

00:58:16,870 --> 00:58:14,160

um

1297

00:58:19,670 --> 00:58:16,880

kuwait singing for our troops

1298

00:58:22,230 --> 00:58:19,680

when this song was inspired by a young

1299

00:58:23,910 --> 00:58:22,240

man who gave me a

1300

00:58:25,670 --> 00:58:23,920

piece of paper and said read this when

1301

00:58:28,789 --> 00:58:25,680

you get home

1302

00:58:30,710 --> 00:58:28,799

and when i got home i read it and it was

1303

00:58:33,030 --> 00:58:30,720

he asked me to call his mother and tell

1304

00:58:36,549 --> 00:58:33,040

his mother that i saw him and he was

1305

00:58:40,150 --> 00:58:36,559

okay he was her only child

1306

00:58:41,910 --> 00:58:40,160

and not knowing what the future held for

1307

00:58:44,950 --> 00:58:41,920

that young man i wrote this song and

1308

00:58:47,349 --> 00:58:44,960

today i dedicate it to

1309

00:58:52,150 --> 00:58:47,359

the families and to those

1310

00:58:52,160 --> 00:58:58,710

and thank you for inviting me

1311

00:59:09,349 --> 00:59:01,030

can you bring the mic up a little more

1312

00:59:17,750 --> 00:59:12,230

so far away

1313

00:59:25,750 --> 00:59:19,990

uncertainty

1314

00:59:31,510 --> 00:59:28,789

thinking about you i say

1315

00:59:33,829 --> 00:59:32,549

and over

1316

00:59:35,589 --> 00:59:33,839

i

1317

00:59:40,309 --> 00:59:35,599

want you to know

1318

00:59:44,549 --> 00:59:42,789

and how can i say

1319

00:59:48,870 --> 00:59:44,559

thank you

1320

00:59:52,870 --> 00:59:48,880

how can i let you know

1321

00:59:56,630 --> 00:59:52,880

the way i feel about you

1322

00:59:58,549 --> 00:59:56,640

but certainly a hero

1323

01:00:00,549 --> 00:59:58,559

just wanted to say

1324

01:00:04,870 --> 01:00:00,559

thank you

1325

01:00:10,150 --> 01:00:04,880

the wind may have caused your life

1326  
01:00:19,670 --> 01:00:14,069  
yet willing to make the ultimate

1327  
01:00:27,190 --> 01:00:21,910  
days and nights

1328  
01:00:35,109 --> 01:00:29,670  
convince your heart

1329  
01:00:40,789 --> 01:00:37,670  
we're not here to judge

1330  
01:00:43,190 --> 01:00:40,799  
who's right who's wrong

1331  
01:00:52,390 --> 01:00:48,470  
but from my heart i i sing this song

1332  
01:00:56,470 --> 01:00:52,400  
just wanting to say thank you

1333  
01:01:00,750 --> 01:00:56,480  
how can i let you know

1334  
01:01:04,390 --> 01:01:00,760  
the way i feel about you

1335  
01:01:06,470 --> 01:01:04,400  
certainly a hero

1336  
01:01:08,150 --> 01:01:06,480  
just wanted to say

1337  
01:01:12,390 --> 01:01:08,160  
thank you

1338  
01:01:16,630 --> 01:01:12,400

the wind may have caused your life

1339

01:01:18,390 --> 01:01:16,640

did you ever once think twice

1340

01:01:20,390 --> 01:01:18,400

think twice

1341

01:01:26,710 --> 01:01:20,400

yet willing to make

1342

01:01:34,710 --> 01:01:31,109

men and women from different races

1343

01:01:50,710 --> 01:01:34,720

all around this world

1344

01:02:00,710 --> 01:01:54,390

giving them the chance

1345

01:02:30,710 --> 01:02:02,150

thank you

1346

01:02:30,720 --> 01:02:35,589

ultimate sacrifice

1347

01:02:40,309 --> 01:02:36,789

oh

1348

01:02:43,750 --> 01:02:40,319

just willing to make

1349

01:03:01,670 --> 01:02:43,760

the ultimate time

1350

01:03:06,230 --> 01:03:03,430

thank you sir

1351

01:03:08,390 --> 01:03:06,240

god bless thank you very much

1352

01:03:10,309 --> 01:03:08,400

microphone there we go

1353

01:03:12,710 --> 01:03:10,319

i would like for evelyn uh

1354

01:03:13,750 --> 01:03:12,720

sandra gerste and bob if you would go

1355

01:03:15,670 --> 01:03:13,760

down and

1356

01:03:23,750 --> 01:03:15,680

pick up our wreath here at the front

1357

01:03:26,470 --> 01:03:25,349

once they've gotten that done i would

1358

01:03:29,910 --> 01:03:26,480

like to

1359

01:03:31,910 --> 01:03:29,920

close our program by reading the 24

1360

01:03:34,789 --> 01:03:31,920

names that you see on the you're behind

1361

01:03:36,150 --> 01:03:34,799

you and as i read them please uh

1362

01:03:37,589 --> 01:03:36,160

uh send a little bit of your love and

1363

01:03:39,829 --> 01:03:37,599

energy

1364

01:03:53,109 --> 01:03:39,839

to each and every one of these uh

1365

01:03:59,109 --> 01:03:54,309

i'll read the names and we'll have a

1366

01:04:05,670 --> 01:04:02,309

theodore c freeman

1367

01:04:07,190 --> 01:04:05,680

charles a bassette iii

1368

01:04:09,670 --> 01:04:07,200

elliott m.c

1369

01:04:13,990 --> 01:04:11,750

clifton c williams

1370

01:04:15,109 --> 01:04:14,000

jr

1371

01:04:17,910 --> 01:04:15,119

virgil

1372

01:04:19,589 --> 01:04:17,920

gus grissom

1373

01:04:21,750 --> 01:04:19,599

edward h white

1374

01:04:25,190 --> 01:04:21,760

ii

1375

01:04:28,069 --> 01:04:25,200

roger b chaffee

1376  
01:04:29,270 --> 01:04:28,079  
michael j adams

1377  
01:04:32,549 --> 01:04:29,280  
robert

1378  
01:04:33,750 --> 01:04:32,559  
h lawrence jr

1379  
01:04:35,750 --> 01:04:33,760  
francis

1380  
01:04:36,710 --> 01:04:35,760  
dick scobee

1381  
01:04:38,950 --> 01:04:36,720  
michael

1382  
01:04:42,309 --> 01:04:38,960  
j smith

1383  
01:04:45,430 --> 01:04:42,319  
judith a resnick

1384  
01:04:48,390 --> 01:04:45,440  
ellison s onizuka

1385  
01:04:49,910 --> 01:04:48,400  
ronald e mcnaair

1386  
01:04:51,990 --> 01:04:49,920  
gregory b

1387  
01:04:55,430 --> 01:04:52,000  
jarvis

1388  
01:04:57,589 --> 01:04:55,440

s christa mcauliffe

1389

01:04:58,870 --> 01:04:57,599

manley l

1390

01:05:00,789 --> 01:04:58,880

sonny carter

1391

01:05:01,829 --> 01:05:00,799

jr

1392

01:05:04,150 --> 01:05:01,839

rick

1393

01:05:05,109 --> 01:05:04,160

d husband

1394

01:05:08,069 --> 01:05:05,119

william

1395

01:05:09,589 --> 01:05:08,079

c mccool

1396

01:05:11,670 --> 01:05:09,599

michael p

1397

01:05:14,789 --> 01:05:11,680

anderson

1398

01:05:15,829 --> 01:05:14,799

kalpana chawla

1399

01:05:16,630 --> 01:05:15,839

david

1400

01:05:18,789 --> 01:05:16,640

m

1401

01:05:19,829 --> 01:05:18,799

brown

1402

01:05:22,150 --> 01:05:19,839

laurel

1403

01:05:24,710 --> 01:05:22,160

clark

1404

01:05:27,109 --> 01:05:24,720

and elon ramon

1405

01:05:47,990 --> 01:05:27,119

let's all please have a 30-second

1406

01:05:51,029 --> 01:05:49,430

ladies and gentlemen thank you for being