

**((•)) LIVE**



# Awards Ceremony **LIVE!**

**1:00 p.m. CST, June 2, 2022**

1  
00:04:55,749 --> 00:03:26,820  
[Music]

2  
00:04:55,759 --> 00:05:03,210  
foreign

3  
00:05:21,180 --> 00:05:08,420  
[Music]

4  
00:05:59,510 --> 00:05:21,190  
[Applause]

5  
00:06:33,450 --> 00:06:28,400  
[Music]

6  
00:06:38,280 --> 00:06:33,460  
[Laughter]

7  
00:08:26,890 --> 00:07:22,310  
[Music]

8  
00:08:26,900 --> 00:08:31,730  
[Applause]

9  
00:12:43,350 --> 00:08:47,980  
[Music]

10  
00:12:43,360 --> 00:12:51,880  
so

11  
00:13:56,840 --> 00:13:54,960  
[Music]

12  
00:15:08,470 --> 00:13:56,850  
[Applause]

13  
00:17:02,050 --> 00:15:24,250

[Music]

14

00:17:17,500 --> 00:17:02,060

[Applause]

15

00:18:15,130 --> 00:17:25,590

[Music]

16

00:18:15,140 --> 00:18:19,940

[Applause]

17

00:19:41,669 --> 00:19:10,250

[Music]

18

00:19:41,679 --> 00:19:47,830

so

19

00:21:38,340 --> 00:20:01,270

[Music]

20

00:21:48,960 --> 00:21:39,890

[Applause]

21

00:22:17,750 --> 00:21:55,480

[Music]

22

00:22:17,760 --> 00:22:54,020

so

23

00:23:00,100 --> 00:22:59,100

[Music]

24

00:23:05,630 --> 00:23:00,110

[Applause]

25

00:23:43,370 --> 00:23:40,090

[Music]

26  
00:23:43,380 --> 00:23:52,300  
[Applause]

27  
00:23:52,310 --> 00:23:56,149  
[Music]

28  
00:24:10,630 --> 00:23:57,980  
so

29  
00:24:12,290 --> 00:24:10,640  
[Music]

30  
00:24:37,180 --> 00:24:12,300  
so

31  
00:24:42,570 --> 00:24:38,930  
[Music]

32  
00:24:45,640 --> 00:24:42,580  
[Applause]

33  
00:24:46,950 --> 00:24:45,650  
[Music]

34  
00:24:48,400 --> 00:24:46,960  
[Applause]

35  
00:24:49,910 --> 00:24:48,410  
[Music]

36  
00:24:54,670 --> 00:24:49,920  
[Applause]

37  
00:25:31,510 --> 00:24:54,680  
[Music]

38  
00:25:35,430 --> 00:25:33,430

hello and welcome to the virtual awards

39

00:25:36,390 --> 00:25:35,440

ceremony for nasa's student launch

40

00:25:37,830 --> 00:25:36,400

challenge

41

00:25:39,510 --> 00:25:37,840

i'm christopher blair with nasa's

42

00:25:41,510 --> 00:25:39,520

marshall space flight center here in

43

00:25:44,470 --> 00:25:41,520

huntsville alabama and it's my pleasure

44

00:25:46,470 --> 00:25:44,480

to serve as mc for today's event

45

00:25:49,110 --> 00:25:46,480

our first distinguished speaker is

46

00:25:51,269 --> 00:25:49,120

nasa's deputy administrator as well as

47

00:25:53,510 --> 00:25:51,279

one of only two women to ever command a

48

00:25:55,590 --> 00:25:53,520

space shuttle mission please welcome

49

00:25:58,390 --> 00:25:55,600

miss pam melroy

50

00:26:00,470 --> 00:25:58,400

hello everyone and welcome to the 2022

51  
00:26:01,590 --> 00:26:00,480  
nasa student launch virtual awards

52  
00:26:03,830 --> 00:26:01,600  
ceremony

53  
00:26:05,110 --> 00:26:03,840  
i want to congratulate all the teams who

54  
00:26:07,350 --> 00:26:05,120  
participated

55  
00:26:09,269 --> 00:26:07,360  
it was another exceptional year both in

56  
00:26:11,590 --> 00:26:09,279  
terms of the challenges each team had to

57  
00:26:13,350 --> 00:26:11,600  
work through as well as the drive to

58  
00:26:14,870 --> 00:26:13,360  
succeed that each of you have

59  
00:26:17,510 --> 00:26:14,880  
demonstrated

60  
00:26:19,990 --> 00:26:17,520  
nasa has long been a part of my life

61  
00:26:21,909 --> 00:26:20,000  
and the urge to explore has been with me

62  
00:26:23,430 --> 00:26:21,919  
even longer

63  
00:26:27,269 --> 00:26:23,440

the things that we do in space are

64

00:26:29,510 --> 00:26:27,279

difficult but the results the impacts on

65

00:26:31,830 --> 00:26:29,520

people's lives around the world

66

00:26:33,590 --> 00:26:31,840

and the future that we're creating

67

00:26:36,149 --> 00:26:33,600

through exploration

68

00:26:38,549 --> 00:26:36,159

are well worth the effort

69

00:26:40,950 --> 00:26:38,559

the technologies scientific discoveries

70

00:26:43,029 --> 00:26:40,960

and engineering breakthroughs we make as

71

00:26:44,630 --> 00:26:43,039

we work to expand the capabilities of

72

00:26:47,350 --> 00:26:44,640

humans in space

73

00:26:49,669 --> 00:26:47,360

and learn more about our own planet

74

00:26:52,710 --> 00:26:49,679

and the broader universe

75

00:26:55,350 --> 00:26:52,720

these are things that touch each of us

76  
00:26:58,230 --> 00:26:55,360  
programs like nasa's student launch are

77  
00:27:01,190 --> 00:26:58,240  
part of a greater process to prepare a

78  
00:27:03,830 --> 00:27:01,200  
new generation of scientists engineers

79  
00:27:04,789 --> 00:27:03,840  
astronauts and explorers to pick up the

80  
00:27:07,909 --> 00:27:04,799  
torch

81  
00:27:10,149 --> 00:27:07,919  
and carry out the next missions

82  
00:27:11,350 --> 00:27:10,159  
you are that generation the artemis

83  
00:27:13,350 --> 00:27:11,360  
generation

84  
00:27:14,630 --> 00:27:13,360  
there are so many opportunities before

85  
00:27:17,909 --> 00:27:14,640  
you

86  
00:27:20,710 --> 00:27:17,919  
accomplished and learned in student

87  
00:27:23,830 --> 00:27:20,720  
launch and i encourage each of you to

88  
00:27:25,669 --> 00:27:23,840

maintain a curiosity to learn and to

89

00:27:27,909 --> 00:27:25,679

explore

90

00:27:30,549 --> 00:27:27,919

someday it may be you

91

00:27:33,190 --> 00:27:30,559

designing a new space flight system

92

00:27:35,430 --> 00:27:33,200

a vehicle to land on another planet

93

00:27:37,430 --> 00:27:35,440

a space suit to keep humans alive in

94

00:27:39,029 --> 00:27:37,440

extreme conditions

95

00:27:42,310 --> 00:27:39,039

or it could be you

96

00:27:43,830 --> 00:27:42,320

landing on the moon or mars

97

00:27:46,230 --> 00:27:43,840

while we're planning for those missions

98

00:27:48,630 --> 00:27:46,240

now we know the ways we carry them out

99

00:27:50,630 --> 00:27:48,640

will grow and evolve over time

100

00:27:53,430 --> 00:27:50,640

so i hope what you've begun here will

101  
00:27:55,990 --> 00:27:53,440  
serve as an inspiration for a lifetime

102  
00:27:57,750 --> 00:27:56,000  
of learning and excellence

103  
00:28:00,630 --> 00:27:57,760  
we need your skills

104  
00:28:03,269 --> 00:28:00,640  
we need your enthusiasm and most of all

105  
00:28:05,510 --> 00:28:03,279  
we need your dedication

106  
00:28:07,430 --> 00:28:05,520  
every year teams like yours work

107  
00:28:09,909 --> 00:28:07,440  
diligently and persevere against

108  
00:28:12,230 --> 00:28:09,919  
incredible challenges to succeed in the

109  
00:28:14,789 --> 00:28:12,240  
nasa student launch competition

110  
00:28:17,510 --> 00:28:14,799  
and once again this year you have

111  
00:28:20,710 --> 00:28:17,520  
overcome and succeeded in spite of

112  
00:28:23,190 --> 00:28:20,720  
unique and exceptional circumstances

113  
00:28:25,430 --> 00:28:23,200

i know firsthand the importance of

114

00:28:27,830 --> 00:28:25,440

seeing a mission through to completion

115

00:28:31,590 --> 00:28:27,840

even when the timeline is brisk

116

00:28:33,110 --> 00:28:31,600

and the obstacles may seem impossible

117

00:28:35,190 --> 00:28:33,120

i appreciate the rigor of this

118

00:28:38,710 --> 00:28:35,200

competition and i congratulate all of

119

00:28:42,710 --> 00:28:38,720

you on seeing the mission to completion

120

00:28:46,710 --> 00:28:44,870

thank you miss melroy our next

121

00:28:48,789 --> 00:28:46,720

distinguished speaker is also a former

122

00:28:51,430 --> 00:28:48,799

national astronaut of three space

123

00:28:53,669 --> 00:28:51,440

missions now retired he is the senior

124

00:28:55,750 --> 00:28:53,679

director of business development with

125

00:28:59,510 --> 00:28:55,760

northrop grumman propulsion systems

126

00:29:02,389 --> 00:28:59,520

please welcome mr doug hurley

127

00:29:04,149 --> 00:29:02,399

greetings and hello 2022 nasa student

128

00:29:05,830 --> 00:29:04,159

launch teams

129

00:29:07,350 --> 00:29:05,840

my name is doug hurley and i'm the

130

00:29:08,710 --> 00:29:07,360

director of business development at

131

00:29:10,389 --> 00:29:08,720

north of grumman

132

00:29:12,870 --> 00:29:10,399

and i am so honored to welcome you to

133

00:29:14,630 --> 00:29:12,880

this year's awards ceremony

134

00:29:16,310 --> 00:29:14,640

throughout my career in the marines and

135

00:29:17,909 --> 00:29:16,320

then with nasa i learned that a

136

00:29:20,870 --> 00:29:17,919

well-trained team can accomplish

137

00:29:22,549 --> 00:29:20,880

significantly more than any individual

138

00:29:24,950 --> 00:29:22,559

whether you are flying in space or

139

00:29:27,029 --> 00:29:24,960

working on your senior design project

140

00:29:29,269 --> 00:29:27,039

you will have to rely on others and

141

00:29:31,110 --> 00:29:29,279

others will have to rely on you

142

00:29:33,590 --> 00:29:31,120

the ability to communicate and work as a

143

00:29:35,590 --> 00:29:33,600

team is paramount to success and

144

00:29:37,669 --> 00:29:35,600

sometimes survival

145

00:29:38,710 --> 00:29:37,679

you have survived this nine month long

146

00:29:40,389 --> 00:29:38,720

project

147

00:29:42,230 --> 00:29:40,399

and you have succeeded in completing one

148

00:29:45,029 --> 00:29:42,240

of the most demanding student challenges

149

00:29:46,789 --> 00:29:45,039

that nasa issues to students

150

00:29:49,029 --> 00:29:46,799

many awards will be given today but as

151

00:29:50,710 --> 00:29:49,039

you reflect in the years to come

152

00:29:52,389 --> 00:29:50,720

you will remember this journey that

153

00:29:54,470 --> 00:29:52,399

brought you here more than you will

154

00:29:56,789 --> 00:29:54,480

remember this ceremony

155

00:29:58,230 --> 00:29:56,799

the 2022 activity year was full of

156

00:29:59,909 --> 00:29:58,240

challenges

157

00:30:02,230 --> 00:29:59,919

your engineering skills were tested as

158

00:30:03,669 --> 00:30:02,240

you designed built and flew your rockets

159

00:30:05,750 --> 00:30:03,679

and payload

160

00:30:08,149 --> 00:30:05,760

you persevered you adapted and you

161

00:30:09,430 --> 00:30:08,159

overcame these challenges

162

00:30:11,590 --> 00:30:09,440

the skills you learned and the

163

00:30:13,909 --> 00:30:11,600

challenges you faced in engineering

164

00:30:16,230 --> 00:30:13,919

teamwork and communication

165

00:30:18,470 --> 00:30:16,240

are invaluable to your future

166

00:30:20,789 --> 00:30:18,480

they are the core to success especially

167

00:30:22,789 --> 00:30:20,799

at nasa as we push harder to send humans

168

00:30:24,710 --> 00:30:22,799

deeper into space than ever before with

169

00:30:26,549 --> 00:30:24,720

the artemis program

170

00:30:28,549 --> 00:30:26,559

and in all the industry roles that

171

00:30:30,710 --> 00:30:28,559

support those goals

172

00:30:32,310 --> 00:30:30,720

you are the artemis generation and we

173

00:30:34,389 --> 00:30:32,320

cannot be more excited to have you as

174

00:30:36,789 --> 00:30:34,399

part of our team

175

00:30:38,389 --> 00:30:36,799

congratulations on a job well done

176

00:30:41,110 --> 00:30:38,399

and best of luck in all your future

177

00:30:46,070 --> 00:30:43,510

thank you mr hurley we will now begin

178

00:30:47,830 --> 00:30:46,080

with our awards presentations it is my

179

00:30:50,230 --> 00:30:47,840

privilege to introduce one of nasa's

180

00:30:52,070 --> 00:30:50,240

most ardent supporters of stem education

181

00:30:54,310 --> 00:30:52,080

he is the associate administrator of

182

00:30:58,710 --> 00:30:54,320

nasa's office of stem engagement please

183

00:31:02,710 --> 00:31:00,789

i am so excited to be here right now i'm

184

00:31:05,029 --> 00:31:02,720

in my office at nasa headquarters last

185

00:31:07,350 --> 00:31:05,039

time i saw you i was standing on a field

186

00:31:08,710 --> 00:31:07,360

in alabama and at the time i was told

187

00:31:11,029 --> 00:31:08,720

you was my first time to come and i

188

00:31:13,190 --> 00:31:11,039

brought my 13 year old daughter and man

189

00:31:14,470 --> 00:31:13,200

we had a great experience and when i was

190

00:31:16,149 --> 00:31:14,480

there talking to those of you who were

191

00:31:17,669 --> 00:31:16,159

able to join us in person alabama i

192

00:31:19,669 --> 00:31:17,679

asked you to do a couple of things one

193

00:31:21,190 --> 00:31:19,679

of them was to pause and just think

194

00:31:23,269 --> 00:31:21,200

about the moment you're in you've got a

195

00:31:24,950 --> 00:31:23,279

chance to do something for nasa as part

196

00:31:25,669 --> 00:31:24,960

of as part of our team and thank you for

197

00:31:27,110 --> 00:31:25,679

that

198

00:31:28,789 --> 00:31:27,120

the second thing i asked you to do is i

199

00:31:30,389 --> 00:31:28,799

said please i hope that you'll use this

200

00:31:31,750 --> 00:31:30,399

moment and share it with others that

201  
00:31:33,750 --> 00:31:31,760  
other people will benefit from your

202  
00:31:35,430 --> 00:31:33,760  
experiences you're only one person but

203  
00:31:36,710 --> 00:31:35,440  
you know many other people and i hope

204  
00:31:38,070 --> 00:31:36,720  
that you've had a chance to talk about

205  
00:31:39,430 --> 00:31:38,080  
that experience

206  
00:31:41,029 --> 00:31:39,440  
and as i reflected on the rest of the

207  
00:31:42,310 --> 00:31:41,039  
day as my daughter my 13 year old and i

208  
00:31:44,230 --> 00:31:42,320  
talked at the end of the day we had so

209  
00:31:45,750 --> 00:31:44,240  
much fun seeing how you guys came

210  
00:31:47,830 --> 00:31:45,760  
together how your teams came together

211  
00:31:49,909 --> 00:31:47,840  
how you're able to launch rockets

212  
00:31:51,990 --> 00:31:49,919  
some successfully some a little

213  
00:31:53,669 --> 00:31:52,000

nerve-wrackingly some maybe a little

214

00:31:56,310 --> 00:31:53,679

less successfully but all of those are

215

00:31:57,430 --> 00:31:56,320

part of that process and it was so fun

216

00:31:58,230 --> 00:31:57,440

for us

217

00:31:59,830 --> 00:31:58,240

um

218

00:32:01,750 --> 00:31:59,840

it's my pleasure to tell you about the i

219

00:32:03,509 --> 00:32:01,760

get to give out the team spirit award

220

00:32:05,909 --> 00:32:03,519

and you know while it's important to

221

00:32:07,509 --> 00:32:05,919

launch the rocket and to to recover it

222

00:32:10,149 --> 00:32:07,519

uh it's also about how do you come

223

00:32:11,350 --> 00:32:10,159

together and performance is really how a

224

00:32:12,710 --> 00:32:11,360

team comes together in fact that's why

225

00:32:14,230 --> 00:32:12,720

i'm at headquarters today visiting with

226

00:32:16,389 --> 00:32:14,240

our team here at headquarters we're

227

00:32:18,070 --> 00:32:16,399

talking about how do we work together so

228

00:32:20,630 --> 00:32:18,080

the team the other cool thing about this

229

00:32:22,630 --> 00:32:20,640

award is that nasa doesn't pick it it's

230

00:32:24,470 --> 00:32:22,640

voted on and chosen by members of the

231

00:32:26,310 --> 00:32:24,480

other competing team so it's how are you

232

00:32:29,110 --> 00:32:26,320

showing up on that field in alabama or

233

00:32:30,950 --> 00:32:29,120

wherever you might be and we have both a

234

00:32:32,549 --> 00:32:30,960

a k-12 division as well as a college

235

00:32:34,549 --> 00:32:32,559

university division so this year's

236

00:32:37,830 --> 00:32:34,559

winners in the middle high school

237

00:32:40,470 --> 00:32:37,840

division our first second place is math

238

00:32:43,029 --> 00:32:40,480

mania robotics mission viejo california

239

00:32:44,870 --> 00:32:43,039

so congratulations

240

00:32:47,029 --> 00:32:44,880

and then in first place

241

00:32:49,269 --> 00:32:47,039

in the middle high school division

242

00:32:52,710 --> 00:32:49,279

american youth soccer organization

243

00:32:57,830 --> 00:32:52,720

region 174 granada hills california

244

00:33:01,029 --> 00:32:59,509

going on i'm going to talk a little bit

245

00:33:03,750 --> 00:33:01,039

about we also the college university

246

00:33:06,070 --> 00:33:03,760

decision decision division easy for me

247

00:33:11,509 --> 00:33:06,080

to say in third place

248

00:33:15,830 --> 00:33:12,950

in second place

249

00:33:19,350 --> 00:33:15,840

north carolina state university raleigh

250

00:33:21,990 --> 00:33:19,360

north carolina congratulations

251

00:33:24,230 --> 00:33:22,000

and finally in first place lipscomb

252

00:33:26,389 --> 00:33:24,240

university nashville tennessee so

253

00:33:28,470 --> 00:33:26,399

congratulations to all our teams very

254

00:33:31,909 --> 00:33:28,480

exciting day for us to be part of this

255

00:33:34,710 --> 00:33:33,750

thank you mr kincaid we appreciate your

256

00:33:36,710 --> 00:33:34,720

support

257

00:33:39,110 --> 00:33:36,720

our next presenter is the director of

258

00:33:41,509 --> 00:33:39,120

nasa's office of stem engagement for the

259

00:33:46,789 --> 00:33:41,519

southeast region of the united states

260

00:33:52,310 --> 00:33:50,149

hi like mike i'm in washington d.c today

261

00:33:55,669 --> 00:33:52,320

at nasa headquarters and like mike the

262

00:33:57,350 --> 00:33:55,679

last time i saw you all was on the field

263

00:34:00,149 --> 00:33:57,360

uh the launch field

264

00:34:02,310 --> 00:34:00,159

in alabama and i had the pleasure of

265

00:34:04,549 --> 00:34:02,320

announcing the next award social media

266

00:34:07,110 --> 00:34:04,559

is an important communication tool

267

00:34:08,310 --> 00:34:07,120

keeping nasa and its partners connected

268

00:34:09,909 --> 00:34:08,320

to the world

269

00:34:12,389 --> 00:34:09,919

the continuing story of the artemis

270

00:34:15,190 --> 00:34:12,399

program this year's launch of the james

271

00:34:17,909 --> 00:34:15,200

webb telescope and the exciting upcoming

272

00:34:19,430 --> 00:34:17,919

maiden launch of sls are just a few

273

00:34:21,909 --> 00:34:19,440

stories brought directly to nasa's

274

00:34:23,589 --> 00:34:21,919

audience through the many social media

275

00:34:26,069 --> 00:34:23,599

platforms available

276  
00:34:28,790 --> 00:34:26,079  
this year social media award winners did

277  
00:34:31,349 --> 00:34:28,800  
an amazing job bringing their audiences

278  
00:34:33,270 --> 00:34:31,359  
along on their journey through the nasa

279  
00:34:35,669 --> 00:34:33,280  
student launch challenge

280  
00:34:37,829 --> 00:34:35,679  
pictures and videos from the team builds

281  
00:34:39,589 --> 00:34:37,839  
showed us what it takes to design and

282  
00:34:40,869 --> 00:34:39,599  
develop one of these high-powered

283  
00:34:43,270 --> 00:34:40,879  
rockets

284  
00:34:45,190 --> 00:34:43,280  
teams showcase their test launches

285  
00:34:47,030 --> 00:34:45,200  
throughout the project before finally

286  
00:34:48,389 --> 00:34:47,040  
heading to the launch pad for their

287  
00:34:49,990 --> 00:34:48,399  
final flights

288  
00:34:52,389 --> 00:34:50,000

we were able to meet team members

289

00:34:54,710 --> 00:34:52,399

through spotlights join teams for their

290

00:34:57,270 --> 00:34:54,720

stem engagement events and watch rookie

291

00:34:58,950 --> 00:34:57,280

teams grow and learn over the course of

292

00:35:00,230 --> 00:34:58,960

the activity year

293

00:35:03,270 --> 00:35:00,240

traditions

294

00:35:05,190 --> 00:35:03,280

that transform transformed teams uh

295

00:35:07,589 --> 00:35:05,200

people into teams i should say were

296

00:35:10,550 --> 00:35:07,599

shared and the next generation of space

297

00:35:11,910 --> 00:35:10,560

explorers were educated and inspired

298

00:35:13,829 --> 00:35:11,920

along the way

299

00:35:16,950 --> 00:35:13,839

teams are judged on their posting

300

00:35:18,470 --> 00:35:16,960

consistency their creativity and their

301  
00:35:20,550 --> 00:35:18,480  
content

302  
00:35:22,950 --> 00:35:20,560  
it is my honor to announce the top three

303  
00:35:24,069 --> 00:35:22,960  
teams in each division of the social

304  
00:35:25,349 --> 00:35:24,079  
media

305  
00:35:29,910 --> 00:35:25,359  
category

306  
00:35:31,510 --> 00:35:29,920  
middle and high school or sli division

307  
00:35:34,310 --> 00:35:31,520  
in third place

308  
00:35:36,150 --> 00:35:34,320  
is portland rocketry in portland oregon

309  
00:35:38,310 --> 00:35:36,160  
congratulations

310  
00:35:40,950 --> 00:35:38,320  
in second place is cedar falls high

311  
00:35:43,990 --> 00:35:40,960  
school at the cedar field in cedaw falls

312  
00:35:45,190 --> 00:35:44,000  
cedar falls iowa congratulations to you

313  
00:35:47,109 --> 00:35:45,200

all as well

314

00:35:50,550 --> 00:35:47,119

and in first place

315

00:35:54,390 --> 00:35:50,560

webster webster city high school in

316

00:35:55,829 --> 00:35:54,400

webster city iowa webster city high kept

317

00:35:58,150 --> 00:35:55,839

followers informed throughout their

318

00:36:00,870 --> 00:35:58,160

student launch journey content included

319

00:36:02,950 --> 00:36:00,880

videos and photo bursts of launches and

320

00:36:05,190 --> 00:36:02,960

photos of students working

321

00:36:07,670 --> 00:36:05,200

on their rockets setting up for launch

322

00:36:09,589 --> 00:36:07,680

and taking part in presentations and

323

00:36:12,069 --> 00:36:09,599

outreach activities promoting

324

00:36:13,349 --> 00:36:12,079

fundraising events and producing a team

325

00:36:17,430 --> 00:36:13,359

patch

326

00:36:19,349 --> 00:36:17,440

congratulations to webster city high

327

00:36:22,710 --> 00:36:19,359

and for the college and university or

328

00:36:25,270 --> 00:36:22,720

usli division finishing in third place

329

00:36:28,390 --> 00:36:25,280

is purdue university in west lafayette

330

00:36:30,790 --> 00:36:28,400

indiana congratulations perdue

331

00:36:33,990 --> 00:36:30,800

in second place iowa state university in

332

00:36:35,990 --> 00:36:34,000

ames iowa congratulations to you all and

333

00:36:38,150 --> 00:36:36,000

in first place

334

00:36:40,630 --> 00:36:38,160

is north carolina state university in

335

00:36:42,550 --> 00:36:40,640

raleigh north carolina now north

336

00:36:45,510 --> 00:36:42,560

carolina state consistently produced

337

00:36:47,910 --> 00:36:45,520

quality content across three platforms

338

00:36:51,430 --> 00:36:47,920

the team's videos were mixed were a mix

339

00:36:53,750 --> 00:36:51,440

of creative informational and humorous

340

00:36:56,550 --> 00:36:53,760

highlights included an in-flight view of

341

00:36:58,230 --> 00:36:56,560

the test launch and a light-hearted look

342

00:37:00,630 --> 00:36:58,240

at the team's lab

343

00:37:03,349 --> 00:37:00,640

photo posts included launches

344

00:37:05,589 --> 00:37:03,359

rocket and payload progress and stem

345

00:37:07,670 --> 00:37:05,599

outreach congratulations to north

346

00:37:11,109 --> 00:37:07,680

carolina state university and to all of

347

00:37:15,670 --> 00:37:13,430

thank you mr maga we are now pleased to

348

00:37:18,150 --> 00:37:15,680

be joined by the project manager for the

349

00:37:20,230 --> 00:37:18,160

next gen stem program with nasa's office

350

00:37:23,270 --> 00:37:20,240

of stem engagement please welcome our

351

00:37:25,270 --> 00:37:23,280

good friend dr carrie olsen

352

00:37:27,750 --> 00:37:25,280

a rocket that flies precisely to its

353

00:37:30,630 --> 00:37:27,760

destination performs its mission without

354

00:37:32,470 --> 00:37:30,640

delays or setbacks and can safely return

355

00:37:34,550 --> 00:37:32,480

to the ground are the objectives set

356

00:37:35,910 --> 00:37:34,560

forth by the nasa student launch review

357

00:37:37,990 --> 00:37:35,920

team

358

00:37:39,750 --> 00:37:38,000

those are criteria i have experience

359

00:37:40,710 --> 00:37:39,760

with through my career as an aerospace

360

00:37:42,710 --> 00:37:40,720

engineer

361

00:37:44,310 --> 00:37:42,720

but those criteria aren't the only

362

00:37:46,790 --> 00:37:44,320

things that make a team's rocket

363

00:37:48,630 --> 00:37:46,800

memorable a rocket with flare and a

364

00:37:50,470 --> 00:37:48,640

unique look will make it stand out

365

00:37:53,109 --> 00:37:50,480

amongst its competitors

366

00:37:55,510 --> 00:37:53,119

many teams put hours into the look and

367

00:37:57,829 --> 00:37:55,520

design of their rockets fueling their

368

00:38:00,150 --> 00:37:57,839

team spirit and spreading happiness at

369

00:38:02,230 --> 00:38:00,160

the launch field and honestly if

370

00:38:03,430 --> 00:38:02,240

engineering isn't fun you're not doing

371

00:38:05,430 --> 00:38:03,440

it right

372

00:38:07,190 --> 00:38:05,440

the best-looking rocket award is given

373

00:38:09,109 --> 00:38:07,200

to teams in both the middle and high

374

00:38:11,750 --> 00:38:09,119

school division and the college and

375

00:38:14,069 --> 00:38:11,760

university division it is voted on by

376

00:38:15,990 --> 00:38:14,079

the competitors themselves

377

00:38:17,829 --> 00:38:16,000

this year teams submitted pictures of

378

00:38:20,069 --> 00:38:17,839

their rockets for their competitors to

379

00:38:21,990 --> 00:38:20,079

view and decide who they thought

380

00:38:23,670 --> 00:38:22,000

produced the best looking rockets of

381

00:38:25,190 --> 00:38:23,680

2022

382

00:38:27,670 --> 00:38:25,200

the winners in the middle and high

383

00:38:31,109 --> 00:38:27,680

school division are

384

00:38:33,750 --> 00:38:31,119

in third place webster city high school

385

00:38:36,390 --> 00:38:33,760

webster city iowa

386

00:38:39,510 --> 00:38:36,400

and in second place

387

00:38:40,870 --> 00:38:39,520

yam hill carlton high school yam hill

388

00:38:43,910 --> 00:38:40,880

oregon

389

00:38:47,589 --> 00:38:43,920

and now in first place

390

00:38:51,670 --> 00:38:47,599

the best looking rocket cedar fall high

391

00:38:53,430 --> 00:38:51,680

school cedar falls iowa

392

00:38:55,750 --> 00:38:53,440

and now for the winners

393

00:38:58,230 --> 00:38:55,760

in the university college and university

394

00:39:00,470 --> 00:38:58,240

usli division

395

00:39:04,870 --> 00:39:00,480

in third place

396

00:39:07,190 --> 00:39:04,880

iowa state university ames iowa

397

00:39:09,750 --> 00:39:07,200

in second place

398

00:39:13,670 --> 00:39:09,760

the university of north carolina at

399

00:39:16,150 --> 00:39:13,680

charlotte charlotte north carolina

400

00:39:17,589 --> 00:39:16,160

and in first place in the university

401  
00:39:20,310 --> 00:39:17,599  
division

402  
00:39:22,710 --> 00:39:20,320  
north carolina state university

403  
00:39:24,870 --> 00:39:22,720  
raleigh north carolina

404  
00:39:27,430 --> 00:39:24,880  
congratulations to all the winners in

405  
00:39:29,990 --> 00:39:27,440  
both divisions

406  
00:39:31,990 --> 00:39:30,000  
thank you dr olson our next award is

407  
00:39:34,390 --> 00:39:32,000  
being presented by a familiar face to

408  
00:39:36,950 --> 00:39:34,400  
each of you he is the activity lead for

409  
00:39:38,390 --> 00:39:36,960  
student launch please welcome mr fred

410  
00:39:39,589 --> 00:39:38,400  
kepner

411  
00:39:42,230 --> 00:39:39,599  
thank you chris

412  
00:39:44,950 --> 00:39:42,240  
the ability to innovate endure set packs

413  
00:39:47,349 --> 00:39:44,960

setbacks and complete difficult work on

414

00:39:50,069 --> 00:39:47,359

a tight schedule are all abilities that

415

00:39:51,910 --> 00:39:50,079

are critical for engineers scientists

416

00:39:53,430 --> 00:39:51,920

and technicians to possess when

417

00:39:55,829 --> 00:39:53,440

designing and developing new

418

00:39:58,230 --> 00:39:55,839

technologies and launch systems

419

00:40:00,950 --> 00:39:58,240

they are however not the only skills

420

00:40:03,190 --> 00:40:00,960

required for success in a major program

421

00:40:04,790 --> 00:40:03,200

the ability to communicate is also an

422

00:40:06,150 --> 00:40:04,800

important part of any design and

423

00:40:08,390 --> 00:40:06,160

development goal

424

00:40:10,470 --> 00:40:08,400

the project review award recognizes the

425

00:40:13,349 --> 00:40:10,480

college or university team that has the

426  
00:40:15,270 --> 00:40:13,359  
best combination of written reviews and

427  
00:40:17,589 --> 00:40:15,280  
formal presentations throughout the

428  
00:40:19,190 --> 00:40:17,599  
student launch project year

429  
00:40:21,349 --> 00:40:19,200  
since we have two divisions i'll start

430  
00:40:24,550 --> 00:40:21,359  
with the design division for the design

431  
00:40:25,750 --> 00:40:24,560  
division the project review award winner

432  
00:40:29,030 --> 00:40:25,760  
is

433  
00:40:32,630 --> 00:40:29,040  
new york university

434  
00:40:35,109 --> 00:40:32,640  
beyond expectations when delivering

435  
00:40:37,190 --> 00:40:35,119  
their preliminar preliminary design

436  
00:40:39,910 --> 00:40:37,200  
critical design and flight readiness

437  
00:40:41,510 --> 00:40:39,920  
review written reports and presentations

438  
00:40:43,910 --> 00:40:41,520

the level of detail regarding their

439

00:40:46,150 --> 00:40:43,920

vehicle and payload was unmatched the

440

00:40:47,910 --> 00:40:46,160

use of solidworks drawings finite

441

00:40:49,990 --> 00:40:47,920

element analysis and complete

442

00:40:53,030 --> 00:40:50,000

mathematics showcasing the validity of

443

00:40:55,270 --> 00:40:53,040

their design was evident congratulations

444

00:40:57,910 --> 00:40:55,280

new york university

445

00:40:59,670 --> 00:40:57,920

and for this year's launch division

446

00:41:01,829 --> 00:40:59,680

we'll announce the top three

447

00:41:04,150 --> 00:41:01,839

in third place this year

448

00:41:06,790 --> 00:41:04,160

for the project review award is

449

00:41:09,510 --> 00:41:06,800

california state polytechnic university

450

00:41:11,030 --> 00:41:09,520

of pomona

451  
00:41:13,109 --> 00:41:11,040  
in second place

452  
00:41:15,670 --> 00:41:13,119  
is the university of north carolina in

453  
00:41:19,990 --> 00:41:18,069  
and in first place

454  
00:41:22,309 --> 00:41:20,000  
vanderbilt university of nashville

455  
00:41:25,190 --> 00:41:22,319  
tennessee

456  
00:41:27,510 --> 00:41:25,200  
vanderbilt submitted over 850 pages for

457  
00:41:29,030 --> 00:41:27,520  
their project reviews detailing every

458  
00:41:31,430 --> 00:41:29,040  
aspect of their launch vehicle and

459  
00:41:33,270 --> 00:41:31,440  
payload from their preliminary materials

460  
00:41:35,670 --> 00:41:33,280  
selection all the way through their

461  
00:41:37,750 --> 00:41:35,680  
payload mission completion vanderbilt

462  
00:41:40,150 --> 00:41:37,760  
stayed detailed and goal-oriented the

463  
00:41:42,069 --> 00:41:40,160

reports pictures and videos taken

464

00:41:43,589 --> 00:41:42,079

allowed anyone viewing to feel as if

465

00:41:45,990 --> 00:41:43,599

they were right there with the team

466

00:41:47,750 --> 00:41:46,000

constructing analyzing and watching the

467

00:41:51,349 --> 00:41:47,760

launch of the vehicle and payload

468

00:41:53,589 --> 00:41:51,359

congratulations vanderbilt university

469

00:41:55,750 --> 00:41:53,599

thank you mr kepner our next award

470

00:41:57,589 --> 00:41:55,760

presenter is the representative of the

471

00:42:00,150 --> 00:41:57,599

academic student competition team

472

00:42:02,950 --> 00:42:00,160

america for siemens digital industries

473

00:42:05,030 --> 00:42:02,960

software please welcome mr

474

00:42:06,950 --> 00:42:05,040

christopher penny

475

00:42:08,230 --> 00:42:06,960

student launches rocketry competition at

476

00:42:09,829 --> 00:42:08,240

its heart but there's much more to

477

00:42:12,390 --> 00:42:09,839

rocketry in building and launching

478

00:42:14,630 --> 00:42:12,400

rocket designing building and executing

479

00:42:16,790 --> 00:42:14,640

a scientific payload mission is an

480

00:42:19,109 --> 00:42:16,800

equally important and potentially a more

481

00:42:21,190 --> 00:42:19,119

demanding challenge in this competition

482

00:42:22,550 --> 00:42:21,200

traditionally rockets are a means to

483

00:42:25,270 --> 00:42:22,560

transport these payloads to their

484

00:42:28,230 --> 00:42:25,280

destinations in the stars a payload can

485

00:42:30,950 --> 00:42:28,240

be anything from a rover to a uas to an

486

00:42:33,349 --> 00:42:30,960

entire space station module designed to

487

00:42:34,950 --> 00:42:33,359

orbit a distant planet the payload

488

00:42:37,030 --> 00:42:34,960

challenge of this year's nasa student

489

00:42:39,190 --> 00:42:37,040

launch competition asked teams to design

490

00:42:41,589 --> 00:42:39,200

a unique method of locating the rocket

491

00:42:42,790 --> 00:42:41,599

after landing without the use of gps

492

00:42:45,030 --> 00:42:42,800

technology

493

00:42:46,950 --> 00:42:45,040

after touchdown the rockets onboard

494

00:42:48,550 --> 00:42:46,960

system was expected to autonomously

495

00:42:50,790 --> 00:42:48,560

determine where it had landed on a

496

00:42:52,870 --> 00:42:50,800

pre-made grip map of the launch field

497

00:42:55,430 --> 00:42:52,880

and transmit that location to the team's

498

00:42:57,270 --> 00:42:55,440

ground station back in a prep area

499

00:42:59,430 --> 00:42:57,280

this type of technology capabilities

500

00:43:02,150 --> 00:42:59,440

notably useful for unmanned planetary

501  
00:43:04,309 --> 00:43:02,160  
exploration as there's no gps systems

502  
00:43:06,150 --> 00:43:04,319  
available beyond earth and it's very

503  
00:43:09,270 --> 00:43:06,160  
important to know where nasa's probes

504  
00:43:11,349 --> 00:43:09,280  
rovers and uas systems are

505  
00:43:13,510 --> 00:43:11,359  
the experiment design award is given to

506  
00:43:15,430 --> 00:43:13,520  
the college or university team in the

507  
00:43:17,030 --> 00:43:15,440  
design division with the most creative

508  
00:43:19,750 --> 00:43:17,040  
and innovative way of tackling the

509  
00:43:23,109 --> 00:43:19,760  
challenge while maximizing safety and

510  
00:43:24,950 --> 00:43:23,119  
science and engineering value

511  
00:43:26,710 --> 00:43:24,960  
for the design division the winner of

512  
00:43:28,950 --> 00:43:26,720  
the experimental design award is

513  
00:43:31,030 --> 00:43:28,960

tarleton state university in stefanville

514

00:43:32,710 --> 00:43:31,040

texas

515

00:43:34,550 --> 00:43:32,720

their design featured an innovative

516

00:43:36,470 --> 00:43:34,560

approach to the limited working space of

517

00:43:39,270 --> 00:43:36,480

a rocket and ground station

518

00:43:42,150 --> 00:43:39,280

tarleton created a triangulation system

519

00:43:44,470 --> 00:43:42,160

featuring low ra radio technology and

520

00:43:46,309 --> 00:43:44,480

four individual microcontrollers this

521

00:43:48,710 --> 00:43:46,319

combined with sophisticated timing

522

00:43:50,069 --> 00:43:48,720

devices and software proved that there's

523

00:43:51,510 --> 00:43:50,079

always a creative approach to a

524

00:43:53,270 --> 00:43:51,520

difficult mission

525

00:43:54,950 --> 00:43:53,280

charlatan's detailed application and

526  
00:43:56,870 --> 00:43:54,960  
construction plans proved the system was

527  
00:43:58,550 --> 00:43:56,880  
more than theory and earned them this

528  
00:44:01,589 --> 00:43:58,560  
year's experimental design award

529  
00:44:03,270 --> 00:44:01,599  
congratulations the aiaa launch division

530  
00:44:05,030 --> 00:44:03,280  
payload design award is given to the

531  
00:44:06,470 --> 00:44:05,040  
launch division's college or university

532  
00:44:08,470 --> 00:44:06,480  
team with the most creative and

533  
00:44:11,109 --> 00:44:08,480  
innovative way of tackling the challenge

534  
00:44:12,710 --> 00:44:11,119  
while maximizing safety and science and

535  
00:44:14,790 --> 00:44:12,720  
engineering value

536  
00:44:17,190 --> 00:44:14,800  
in third place university of florida

537  
00:44:19,349 --> 00:44:17,200  
gainesville florida

538  
00:44:23,270 --> 00:44:19,359

second place north carolina state

539

00:44:25,349 --> 00:44:23,280

university raleigh north carolina

540

00:44:27,510 --> 00:44:25,359

and for first place university of north

541

00:44:29,829 --> 00:44:27,520

carolina at charlotte charlotte north

542

00:44:32,230 --> 00:44:29,839

carolina

543

00:44:35,109 --> 00:44:32,240

this year's aiaa launch division payload

544

00:44:37,510 --> 00:44:35,119

design award comes with a 1 000 prize

545

00:44:39,190 --> 00:44:37,520

sponsored by aia

546

00:44:41,190 --> 00:44:39,200

this year's challenge was difficult task

547

00:44:43,349 --> 00:44:41,200

and many teams worked exceptionally hard

548

00:44:45,430 --> 00:44:43,359

to bring their unique solution to life

549

00:44:47,190 --> 00:44:45,440

uncc roasted the challenge and created

550

00:44:50,870 --> 00:44:47,200

the autonomous vehicle imaging

551  
00:44:52,870 --> 00:44:50,880  
localization or anvil this unique design

552  
00:44:55,109 --> 00:44:52,880  
utilized recognition and comparison

553  
00:44:57,109 --> 00:44:55,119  
software in conjunction with a gimbaled

554  
00:44:59,270 --> 00:44:57,119  
camera mount to take a progression of

555  
00:45:01,030 --> 00:44:59,280  
photographs during the rocket's descent

556  
00:45:02,710 --> 00:45:01,040  
each picture provided an opportunity to

557  
00:45:04,790 --> 00:45:02,720  
refine the rocket's perceived descent

558  
00:45:06,630 --> 00:45:04,800  
path and the team did exceptional

559  
00:45:08,710 --> 00:45:06,640  
software development to make a robust

560  
00:45:10,390 --> 00:45:08,720  
system their documentation including

561  
00:45:12,230 --> 00:45:10,400  
power budgets drawings electrical

562  
00:45:14,470 --> 00:45:12,240  
diagrams and test results proved their

563  
00:45:17,030 --> 00:45:14,480

design was of the highest quality

564

00:45:18,790 --> 00:45:17,040

congratulations to uncc on a job well

565

00:45:21,510 --> 00:45:18,800

done

566

00:45:23,510 --> 00:45:21,520

thank you mr penny for our next award we

567

00:45:25,829 --> 00:45:23,520

are joined by the university recruiter

568

00:45:29,349 --> 00:45:25,839

with one of our many sponsors relativity

569

00:45:32,069 --> 00:45:29,359

space please welcome miss sarah pollock

570

00:45:34,630 --> 00:45:32,079

from 1986 when the first patent was

571

00:45:36,630 --> 00:45:34,640

issued for a 3d printing device

572

00:45:38,470 --> 00:45:36,640

individuals and companies have been

573

00:45:41,750 --> 00:45:38,480

pushing the boundaries of what can be

574

00:45:44,309 --> 00:45:41,760

manufactured using 3d printing from raw

575

00:45:46,870 --> 00:45:44,319

materials to flight in 60 days

576

00:45:50,710 --> 00:45:46,880

relativity space is creating the first

577

00:45:53,430 --> 00:45:50,720

entirely 3d printed rocket taren one set

578

00:45:56,470 --> 00:45:53,440

to launch this year and the first fully

579

00:46:00,309 --> 00:45:56,480

reusable entirely 3d printed rocket

580

00:46:02,390 --> 00:46:00,319

taren r which will launch starting 2024.

581

00:46:04,790 --> 00:46:02,400

with more and more student launch teams

582

00:46:07,750 --> 00:46:04,800

utilizing 3d printing in their vehicle

583

00:46:10,630 --> 00:46:07,760

and payload designs relativity space has

584

00:46:15,030 --> 00:46:10,640

graciously sponsored an award for both

585

00:46:17,589 --> 00:46:15,040

sli and usli awarded to the team with

586

00:46:20,550 --> 00:46:17,599

best application design and

587

00:46:23,829 --> 00:46:20,560

implementation of 3d printing into their

588

00:46:27,030 --> 00:46:23,839

launch vehicle and payload

589

00:46:29,750 --> 00:46:27,040

for the sli division the winners of the

590

00:46:31,349 --> 00:46:29,760

3d printing award are

591

00:46:36,069 --> 00:46:31,359

in third place

592

00:46:37,589 --> 00:46:36,079

cedar falls high school cedar falls iowa

593

00:46:39,190 --> 00:46:37,599

in second place

594

00:46:41,030 --> 00:46:39,200

aiaa

595

00:46:44,150 --> 00:46:41,040

orange county section

596

00:46:45,829 --> 00:46:44,160

irvine california

597

00:46:47,829 --> 00:46:45,839

and this year's winner

598

00:46:51,030 --> 00:46:47,839

madison west high school

599

00:46:52,950 --> 00:46:51,040

madison wisconsin

600

00:46:55,349 --> 00:46:52,960

this award comes with a one thousand

601  
00:46:58,150 --> 00:46:55,359  
dollar prize sponsored by relativity

602  
00:47:00,710 --> 00:46:58,160  
space madison west high school focused

603  
00:47:03,829 --> 00:47:00,720  
on the applications of 3d printing for

604  
00:47:06,069 --> 00:47:03,839  
their payload they wanted to look at the

605  
00:47:08,309 --> 00:47:06,079  
impact of rocket flight on samples of

606  
00:47:09,990 --> 00:47:08,319  
sourdough starter and yogurt they

607  
00:47:12,150 --> 00:47:10,000  
quickly realized that nothing was

608  
00:47:13,829 --> 00:47:12,160  
commercially available and wanted a way

609  
00:47:16,230 --> 00:47:13,839  
to have repeated results of

610  
00:47:17,190 --> 00:47:16,240  
manufacturing so they turned to 3d

611  
00:47:19,510 --> 00:47:17,200  
printing

612  
00:47:21,750 --> 00:47:19,520  
they manufactured a housing to hold the

613  
00:47:23,670 --> 00:47:21,760

petri dishes with their samples while

614

00:47:25,990 --> 00:47:23,680

maintaining the rocket stresses to

615

00:47:28,390 --> 00:47:26,000

validate the results of their payload

616

00:47:30,950 --> 00:47:28,400

the team's design required a transition

617

00:47:33,270 --> 00:47:30,960

due to the enhanced width of the payload

618

00:47:34,790 --> 00:47:33,280

and with the flexibility of 3d printing

619

00:47:37,589 --> 00:47:34,800

allowed the team to choose their

620

00:47:39,510 --> 00:47:37,599

materials quickly and efficiently while

621

00:47:42,309 --> 00:47:39,520

watching key metrics of their launch

622

00:47:44,390 --> 00:47:42,319

vehicle such as weight congratulations

623

00:47:46,790 --> 00:47:44,400

madison west

624

00:47:50,870 --> 00:47:46,800

for the usli division

625

00:47:52,549 --> 00:47:50,880

the winners of the 3d printing award are

626  
00:47:55,190 --> 00:47:52,559  
in third place

627  
00:47:57,990 --> 00:47:55,200  
university of north dakota grand forks

628  
00:48:01,589 --> 00:47:59,750  
in second place

629  
00:48:04,710 --> 00:48:01,599  
auburn university

630  
00:48:06,630 --> 00:48:04,720  
auburn alabama

631  
00:48:11,670 --> 00:48:06,640  
and this year's winner

632  
00:48:13,589 --> 00:48:11,680  
purdue university west lafayette indiana

633  
00:48:16,069 --> 00:48:13,599  
this award comes with a one thousand

634  
00:48:16,950 --> 00:48:16,079  
dollar prize sponsored by relativity

635  
00:48:19,990 --> 00:48:16,960  
space

636  
00:48:22,309 --> 00:48:20,000  
the purdue university team 3d printed

637  
00:48:24,870 --> 00:48:22,319  
nearly 20 percent of their vehicle and

638  
00:48:27,990 --> 00:48:24,880

payload from their nose cone using

639

00:48:30,549 --> 00:48:28,000

p-e-t-g which housed several cameras to

640

00:48:32,549 --> 00:48:30,559

record in-flight video to their fin

641

00:48:33,589 --> 00:48:32,559

shells using nylon for a stiffer

642

00:48:36,390 --> 00:48:33,599

structure

643

00:48:38,630 --> 00:48:36,400

the team antenna deployment subsystem

644

00:48:41,670 --> 00:48:38,640

was not possible without primary

645

00:48:44,390 --> 00:48:41,680

components printed using 3d printing

646

00:48:45,829 --> 00:48:44,400

including the chassis chains and the

647

00:48:48,870 --> 00:48:45,839

antenna holder

648

00:48:51,349 --> 00:48:48,880

this team focused on manufacturability

649

00:48:55,109 --> 00:48:51,359

ease of integration and the performance

650

00:48:58,150 --> 00:48:55,119

which helped create the ground orienting

651  
00:49:00,309 --> 00:48:58,160  
actuating transceiver or goat

652  
00:49:02,470 --> 00:49:00,319  
their air brakes were entirely made

653  
00:49:06,790 --> 00:49:02,480  
using additive manufacturing

654  
00:49:09,109 --> 00:49:06,800  
a combination of pla abs and nylon 12

655  
00:49:11,430 --> 00:49:09,119  
carbon fiber were used to ensure

656  
00:49:13,910 --> 00:49:11,440  
reliability high stiffness and

657  
00:49:16,390 --> 00:49:13,920  
durability congratulations purdue

658  
00:49:18,470 --> 00:49:16,400  
university

659  
00:49:20,630 --> 00:49:18,480  
thank you miss pollock i am now pleased

660  
00:49:23,030 --> 00:49:20,640  
to introduce another long-time supporter

661  
00:49:25,270 --> 00:49:23,040  
of stem education with nasa she is the

662  
00:49:27,589 --> 00:49:25,280  
director of the strategic integration

663  
00:49:31,670 --> 00:49:27,599

and management division with nasa please

664

00:49:34,870 --> 00:49:31,680

welcome our good friend dr aladda taylor

665

00:49:38,390 --> 00:49:34,880

for the launching small model rockets or

666

00:49:40,549 --> 00:49:38,400

big ones like nasa space launch system

667

00:49:43,109 --> 00:49:40,559

everyone wants to know

668

00:49:46,069 --> 00:49:43,119

how high does it go

669

00:49:48,950 --> 00:49:46,079

nasa student launch teams decide on a

670

00:49:50,950 --> 00:49:48,960

target attitude for their projects early

671

00:49:53,750 --> 00:49:50,960

in the program as part of their

672

00:49:56,710 --> 00:49:53,760

preliminary design review

673

00:49:58,710 --> 00:49:56,720

teams then design their rocket payload

674

00:50:01,030 --> 00:49:58,720

and propulsion systems

675

00:50:04,710 --> 00:50:01,040

to meet stringent weight and thrust

676  
00:50:06,950 --> 00:50:04,720  
values in order to achieve that target

677  
00:50:08,950 --> 00:50:06,960  
teams use modeling and simulation

678  
00:50:10,230 --> 00:50:08,960  
software to predict their rocket's

679  
00:50:12,950 --> 00:50:10,240  
performance

680  
00:50:15,990 --> 00:50:12,960  
and perform test launches to confirm

681  
00:50:18,230 --> 00:50:16,000  
their models are accurate

682  
00:50:20,950 --> 00:50:18,240  
the team in each division that comes

683  
00:50:23,430 --> 00:50:20,960  
closest to their prediction wins the

684  
00:50:25,990 --> 00:50:23,440  
altitude award

685  
00:50:27,829 --> 00:50:26,000  
often the ward is a small is a very

686  
00:50:30,150 --> 00:50:27,839  
close competition

687  
00:50:32,710 --> 00:50:30,160  
sometimes coming down to single digit

688  
00:50:34,230 --> 00:50:32,720

differences between teams and their

689

00:50:37,750 --> 00:50:34,240

targets

690

00:50:39,430 --> 00:50:37,760

for this year's sli division the winners

691

00:50:41,270 --> 00:50:39,440

are

692

00:50:44,150 --> 00:50:41,280

in third place

693

00:50:48,870 --> 00:50:44,160

webster city high school

694

00:50:52,470 --> 00:50:50,950

in second place

695

00:50:54,549 --> 00:50:52,480

saint vincent

696

00:50:58,549 --> 00:50:54,559

saint mary high school

697

00:51:05,190 --> 00:51:02,549

and this year's sli altitude award

698

00:51:09,589 --> 00:51:05,200

goes to caymus high school

699

00:51:13,109 --> 00:51:10,870

in their

700

00:51:14,630 --> 00:51:13,119

high-powered rocketry

701  
00:51:15,750 --> 00:51:14,640  
there are a lot of things you can

702  
00:51:18,870 --> 00:51:15,760  
control

703  
00:51:21,990 --> 00:51:18,880  
but unfortunately some things you cannot

704  
00:51:24,870 --> 00:51:22,000  
such as launch day conditions

705  
00:51:28,230 --> 00:51:24,880  
this didn't deter caymus high school

706  
00:51:30,510 --> 00:51:28,240  
who achieved within 54 feet of their

707  
00:51:32,790 --> 00:51:30,520  
target apogee

708  
00:51:36,309 --> 00:51:32,800  
congratulations caymus high school on

709  
00:51:41,270 --> 00:51:37,510  
finishing

710  
00:51:43,030 --> 00:51:41,280  
now for the sli division

711  
00:51:45,750 --> 00:51:43,040  
third place winner

712  
00:51:47,109 --> 00:51:45,760  
is the university of alabama in

713  
00:51:50,630 --> 00:51:47,119

huntsville

714

00:51:55,750 --> 00:51:52,549

in second place

715

00:51:59,589 --> 00:51:55,760

iowa state university

716

00:52:02,710 --> 00:52:00,870

and

717

00:52:06,630 --> 00:52:02,720

the usli

718

00:52:09,030 --> 00:52:06,640

first place altitude award goes to

719

00:52:10,230 --> 00:52:09,040

university of north carolina at

720

00:52:14,470 --> 00:52:10,240

charlotte

721

00:52:20,150 --> 00:52:17,750

this team missed their target apogee by

722

00:52:23,190 --> 00:52:20,160

only two feet

723

00:52:26,470 --> 00:52:23,200

they scrutinized every detail of their

724

00:52:28,870 --> 00:52:26,480

launch vehicle design to make sure it

725

00:52:32,270 --> 00:52:28,880

met their calculated metrics

726

00:52:34,549 --> 00:52:32,280

such as weight and drag coefficient

727

00:52:36,470 --> 00:52:34,559

congratulations university of north

728

00:52:39,270 --> 00:52:36,480

carolina at charlotte

729

00:52:41,750 --> 00:52:39,280

and congratulations to all the winners

730

00:52:46,069 --> 00:52:41,760

thank you

731

00:52:48,549 --> 00:52:46,079

appreciate your support for our next

732

00:52:51,030 --> 00:52:48,559

award is my pleasure to introduce the

733

00:52:53,589 --> 00:52:51,040

institutional safety and quality manager

734

00:52:56,630 --> 00:52:53,599

with bastian technologies please welcome

735

00:52:58,390 --> 00:52:56,640

mr early mcknight

736

00:53:00,470 --> 00:52:58,400

good afternoon

737

00:53:03,510 --> 00:53:00,480

i'm honored to represent bastion

738

00:53:06,549 --> 00:53:03,520

technologies and nasa student launch

739

00:53:08,630 --> 00:53:06,559

for presentation of the 2022

740

00:53:10,950 --> 00:53:08,640

safety award

741

00:53:13,109 --> 00:53:10,960

there are many aspects of rocketry that

742

00:53:15,510 --> 00:53:13,119

create dangers

743

00:53:17,190 --> 00:53:15,520

working in machine shops

744

00:53:19,190 --> 00:53:17,200

and laboratories

745

00:53:21,190 --> 00:53:19,200

launching at the field

746

00:53:23,349 --> 00:53:21,200

testing hardware

747

00:53:25,829 --> 00:53:23,359

even watching a launch includes a

748

00:53:27,910 --> 00:53:25,839

measurable amount of risk

749

00:53:29,430 --> 00:53:27,920

this year all of the teams did an

750

00:53:30,950 --> 00:53:29,440

excellent job

751  
00:53:33,990 --> 00:53:30,960  
incorporating

752  
00:53:35,190 --> 00:53:34,000  
research and mitigating and planning

753  
00:53:37,670 --> 00:53:35,200  
hazards

754  
00:53:39,829 --> 00:53:37,680  
hazardous scenarios as a priority for

755  
00:53:41,910 --> 00:53:39,839  
their program

756  
00:53:44,390 --> 00:53:41,920  
the safety award is given to the team

757  
00:53:46,549 --> 00:53:44,400  
that has met all of student launch's

758  
00:53:51,030 --> 00:53:46,559  
safety expectations

759  
00:53:56,390 --> 00:53:54,150  
bastion technologies is a proud sponsor

760  
00:53:59,349 --> 00:53:56,400  
of nasa student launch

761  
00:54:03,349 --> 00:53:59,359  
and shows its commitment to continued

762  
00:54:07,589 --> 00:54:03,359  
support by providing a 500 prize

763  
00:54:09,829 --> 00:54:07,599

to the first place winner of this award

764

00:54:11,829 --> 00:54:09,839

this year's recipient

765

00:54:16,790 --> 00:54:11,839

of the 2022

766

00:54:19,109 --> 00:54:16,800

nasa student launch safety award is

767

00:54:22,630 --> 00:54:19,119

university of notre dame

768

00:54:24,950 --> 00:54:22,640

notre dame indiana

769

00:54:28,150 --> 00:54:24,960

notre dame managed risk to their

770

00:54:29,750 --> 00:54:28,160

personnel their rocket and payload and

771

00:54:32,950 --> 00:54:29,760

their program

772

00:54:36,789 --> 00:54:32,960

as a whole with well-documented hazards

773

00:54:39,510 --> 00:54:36,799

and failure modes and effects analyses

774

00:54:41,990 --> 00:54:39,520

each concern the team had was entered

775

00:54:45,109 --> 00:54:42,000

into detailed worksheets

776  
00:54:48,710 --> 00:54:45,119  
and monitored and updated as the project

777  
00:54:51,829 --> 00:54:48,720  
evolved throughout the competition year

778  
00:54:54,309 --> 00:54:51,839  
before any construction or launch

779  
00:54:56,549 --> 00:54:54,319  
extensive procedures and checklists

780  
00:55:00,789 --> 00:54:56,559  
guided the team throughout their

781  
00:55:03,710 --> 00:55:00,799  
launches and resulted in safe operations

782  
00:55:06,390 --> 00:55:03,720  
and a successful season

783  
00:55:09,349 --> 00:55:06,400  
congratulations to the university of

784  
00:55:13,910 --> 00:55:11,910  
thank you mr mcknight year after year

785  
00:55:16,069 --> 00:55:13,920  
the national association of rocketry

786  
00:55:18,230 --> 00:55:16,079  
provides critical support to complete

787  
00:55:20,390 --> 00:55:18,240  
student launch here to present our next

788  
00:55:24,870 --> 00:55:20,400

award and to speak on their behalf

789

00:55:27,109 --> 00:55:24,880

is their president mr john hockheimer

790

00:55:29,190 --> 00:55:27,119

good afternoon in addition to presenting

791

00:55:31,589 --> 00:55:29,200

this year's nasa student launch stem

792

00:55:33,270 --> 00:55:31,599

engagement award i also have the honor

793

00:55:35,910 --> 00:55:33,280

and privilege of presenting it in

794

00:55:37,349 --> 00:55:35,920

dedication to a member of nar who has

795

00:55:39,670 --> 00:55:37,359

been critical to

796

00:55:42,870 --> 00:55:39,680

to the success of the nasa student loans

797

00:55:45,349 --> 00:55:42,880

program for many years mr john lingdal

798

00:55:47,510 --> 00:55:45,359

john embodies the spirit of this award

799

00:55:49,670 --> 00:55:47,520

he spends countless hours each year

800

00:55:52,630 --> 00:55:49,680

volunteering is time to ensure that all

801  
00:55:55,750 --> 00:55:52,640  
student launch rockets are safe and have

802  
00:55:57,910 --> 00:55:55,760  
the best chance for a successful mission

803  
00:55:59,990 --> 00:55:57,920  
john participates in nearly all the

804  
00:56:02,549 --> 00:56:00,000  
student team reviews which amounts to

805  
00:56:04,710 --> 00:56:02,559  
several hundred hours each year john has

806  
00:56:06,230 --> 00:56:04,720  
led the nar flight operations team for

807  
00:56:08,470 --> 00:56:06,240  
over 10 years

808  
00:56:11,030 --> 00:56:08,480  
additionally he volunteers as a mentor

809  
00:56:12,470 --> 00:56:11,040  
and member of the range crew for torque

810  
00:56:14,390 --> 00:56:12,480  
and arless

811  
00:56:16,390 --> 00:56:14,400  
donlingdahl is a great yet humble

812  
00:56:19,109 --> 00:56:16,400  
ambassador from the north to encourage

813  
00:56:20,710 --> 00:56:19,119

rocketry as a hands-on tool for teaching

814

00:56:23,990 --> 00:56:20,720

stem at all levels

815

00:56:26,069 --> 00:56:24,000

it is in his honor that the 2022 nasa

816

00:56:27,510 --> 00:56:26,079

student launch stem engagement award is

817

00:56:29,349 --> 00:56:27,520

presented

818

00:56:31,270 --> 00:56:29,359

many student launch participants this

819

00:56:33,349 --> 00:56:31,280

year can attribute their success to a

820

00:56:35,270 --> 00:56:33,359

lifetime of learning

821

00:56:37,109 --> 00:56:35,280

often the spark that ignited their

822

00:56:39,349 --> 00:56:37,119

passion for science technology

823

00:56:42,630 --> 00:56:39,359

engineering and math was created and

824

00:56:44,950 --> 00:56:42,640

nurtured by a parent teacher or mentor

825

00:56:46,950 --> 00:56:44,960

that is why we feel it is so important

826  
00:56:48,710 --> 00:56:46,960  
for our student launch teams to work to

827  
00:56:50,870 --> 00:56:48,720  
ignite that passion in others by

828  
00:56:53,349 --> 00:56:50,880  
reaching out teaching and inspiring the

829  
00:56:54,390 --> 00:56:53,359  
next generation of stem learners

830  
00:56:56,789 --> 00:56:54,400  
this year

831  
00:57:00,069 --> 00:56:56,799  
student launch teams engaged more than

832  
00:57:02,789 --> 00:57:00,079  
25 000 fellow students friends family

833  
00:57:04,549 --> 00:57:02,799  
and the public at 280 stem education

834  
00:57:06,950 --> 00:57:04,559  
events

835  
00:57:09,109 --> 00:57:06,960  
it is my honor to recognize the top

836  
00:57:11,190 --> 00:57:09,119  
three stem engagement teams from both

837  
00:57:13,910 --> 00:57:11,200  
our middle and high school division and

838  
00:57:16,549 --> 00:57:13,920

our college and university division

839

00:57:19,190 --> 00:57:16,559

in the sli division finishing in third

840

00:57:22,710 --> 00:57:19,200

place is cedar falls high school from

841

00:57:29,430 --> 00:57:25,030

finishing in second place is madison

842

00:57:31,190 --> 00:57:29,440

west high school from madison wisconsin

843

00:57:34,390 --> 00:57:31,200

and this year's middle and high school

844

00:57:37,109 --> 00:57:34,400

division winner of the 2022 nasa student

845

00:57:40,390 --> 00:57:37,119

launch stem engagement award is wise

846

00:57:42,870 --> 00:57:40,400

campus from belleveue washington

847

00:57:45,990 --> 00:57:42,880

the wise camps team argonauts reached

848

00:57:47,670 --> 00:57:46,000

over 650 participants in hands-on direct

849

00:57:49,430 --> 00:57:47,680

stem engagement

850

00:57:51,589 --> 00:57:49,440

the team held events with middle and

851  
00:57:53,270 --> 00:57:51,599  
high school students teaching them about

852  
00:57:56,950 --> 00:57:53,280  
forces that impact the flight of

853  
00:57:58,630 --> 00:57:56,960  
aircraft such as thrust drag and lift

854  
00:58:01,910 --> 00:57:58,640  
the team will receive a one thousand

855  
00:58:05,670 --> 00:58:01,920  
dollar cash prize congratulations

856  
00:58:10,470 --> 00:58:08,309  
and in the usli division finishing in

857  
00:58:13,510 --> 00:58:10,480  
third place is purdue university from

858  
00:58:16,150 --> 00:58:13,520  
west lafayette indiana

859  
00:58:18,950 --> 00:58:16,160  
in second place is auburn university

860  
00:58:20,950 --> 00:58:18,960  
auburn alabama

861  
00:58:24,069 --> 00:58:20,960  
and this year's university division

862  
00:58:26,870 --> 00:58:24,079  
winner of the 2022 nasa student launch

863  
00:58:29,510 --> 00:58:26,880

stem engagement award is california's

864

00:58:32,309 --> 00:58:29,520

california state university long beach

865

00:58:34,309 --> 00:58:32,319

from long beach california

866

00:58:36,710 --> 00:58:34,319

california state university long beach

867

00:58:38,230 --> 00:58:36,720

conducted stem activities with preschool

868

00:58:40,069 --> 00:58:38,240

elementary middle and high school

869

00:58:42,069 --> 00:58:40,079

students and educators

870

00:58:45,510 --> 00:58:42,079

in total through their education and

871

00:58:47,990 --> 00:58:45,520

outreach efforts csu long beach was able

872

00:58:50,870 --> 00:58:48,000

to reach more than 3 800 students and

873

00:58:51,829 --> 00:58:50,880

adults engaging them in 25 stem related

874

00:58:54,390 --> 00:58:51,839

events

875

00:58:58,150 --> 00:58:54,400

that span topics including programming

876

00:59:01,270 --> 00:58:58,160

robotics rocketry and software design

877

00:59:03,829 --> 00:59:01,280

the team will receive a 1 000 cash prize

878

00:59:06,950 --> 00:59:03,839

congratulations to csu long beach and

879

00:59:09,270 --> 00:59:06,960

all the teams thank you

880

00:59:10,710 --> 00:59:09,280

thank you mr hockheimer the american

881

00:59:12,710 --> 00:59:10,720

institute of aeronautics and

882

00:59:15,190 --> 00:59:12,720

astronautics has a long tradition of

883

00:59:17,270 --> 00:59:15,200

supporting stem education here to speak

884

00:59:20,309 --> 00:59:17,280

on their behalf is their executive

885

00:59:22,069 --> 00:59:20,319

director mr dan dunbacher

886

00:59:24,230 --> 00:59:22,079

good afternoon everyone

887

00:59:26,390 --> 00:59:24,240

thank you for having me here today

888

00:59:28,950 --> 00:59:26,400

i am so pleased to join you on behalf of

889

00:59:30,870 --> 00:59:28,960

aia to recognize the hard work of

890

00:59:33,270 --> 00:59:30,880

university students participating in the

891

00:59:37,910 --> 00:59:33,280

nasa student launch project

892

00:59:40,230 --> 00:59:37,920

special place in my heart because of my

893

00:59:43,990 --> 00:59:40,240

opportunities through my career to work

894

00:59:45,349 --> 00:59:44,000

on launch vehicles as a nasa engineer

895

00:59:47,910 --> 00:59:45,359

i really look forward to this

896

00:59:50,549 --> 00:59:47,920

competition every year

897

00:59:52,069 --> 00:59:50,559

aia's mission is shaping the future of

898

00:59:53,990 --> 00:59:52,079

aerospace

899

00:59:55,430 --> 00:59:54,000

now i know that can sound like a pretty

900

00:59:57,910 --> 00:59:55,440

bold statement

901  
01:00:00,630 --> 00:59:57,920  
yet aia is the world's largest

902  
01:00:02,870 --> 01:00:00,640  
professional aerospace society so we are

903  
01:00:04,870 --> 01:00:02,880  
doing that with the engagement of 30 000

904  
01:00:07,430 --> 01:00:04,880  
professional and student members along

905  
01:00:09,430 --> 01:00:07,440  
with 100 corporate members

906  
01:00:11,270 --> 01:00:09,440  
one of the most important aspects of

907  
01:00:12,870 --> 01:00:11,280  
shaping the future of aerospace is

908  
01:00:15,270 --> 01:00:12,880  
ensuring there is a talented and

909  
01:00:17,510 --> 01:00:15,280  
qualified workforce coming along

910  
01:00:19,670 --> 01:00:17,520  
we want to see you the university

911  
01:00:21,829 --> 01:00:19,680  
students develop into the leaders of the

912  
01:00:24,549 --> 01:00:21,839  
aerospace profession moving from the

913  
01:00:26,789 --> 01:00:24,559

classroom through your career

914

01:00:28,710 --> 01:00:26,799

you are taking a very important step on

915

01:00:31,510 --> 01:00:28,720

your journey by participating in this

916

01:00:33,349 --> 01:00:31,520

type of valuable competition

917

01:00:36,069 --> 01:00:33,359

aia student members have this

918

01:00:39,430 --> 01:00:36,079

opportunity along with so much more

919

01:00:41,510 --> 01:00:39,440

aiaa also wants to be sure that you the

920

01:00:42,870 --> 01:00:41,520

student members careers are connected to

921

01:00:45,109 --> 01:00:42,880

your passions

922

01:00:47,109 --> 01:00:45,119

we support student members dreams with

923

01:00:48,309 --> 01:00:47,119

three broad programs

924

01:00:49,990 --> 01:00:48,319

one

925

01:00:52,309 --> 01:00:50,000

we connect you with our diverse

926  
01:00:53,109 --> 01:00:52,319  
international membership as mentors

927  
01:00:55,190 --> 01:00:53,119  
two

928  
01:00:57,910 --> 01:00:55,200  
we provide you with other competitions

929  
01:01:00,230 --> 01:00:57,920  
and scholarship opportunities and three

930  
01:01:02,470 --> 01:01:00,240  
we give you access to the cutting edge

931  
01:01:04,710 --> 01:01:02,480  
technical knowledge base of the

932  
01:01:08,150 --> 01:01:04,720  
aeronautics and space industry which

933  
01:01:11,109 --> 01:01:08,160  
dates back to the early 1900s

934  
01:01:14,069 --> 01:01:11,119  
it is now my honor to present the 2022

935  
01:01:16,069 --> 01:01:14,079  
aia vehicle design award

936  
01:01:17,750 --> 01:01:16,079  
completing a full-scale rocket build is

937  
01:01:20,230 --> 01:01:17,760  
hard work and can come with unique

938  
01:01:22,309 --> 01:01:20,240

difficulties for teams facing challenges

939

01:01:25,109 --> 01:01:22,319

and accessing the components necessary

940

01:01:27,190 --> 01:01:25,119

for a successful build

941

01:01:29,589 --> 01:01:27,200

challenges such as the complexities of

942

01:01:31,910 --> 01:01:29,599

virtual meetings limited access to

943

01:01:33,829 --> 01:01:31,920

software and simulation systems and

944

01:01:36,150 --> 01:01:33,839

restrictions on testing and construction

945

01:01:39,190 --> 01:01:36,160

facilities are all hurdles that many

946

01:01:41,510 --> 01:01:39,200

teams faced in 2022

947

01:01:43,270 --> 01:01:41,520

however all these additional barriers

948

01:01:45,829 --> 01:01:43,280

did not prevent the students from

949

01:01:48,549 --> 01:01:45,839

competing in the student launch project

950

01:01:50,069 --> 01:01:48,559

and from succeeding you guys all did

951  
01:01:52,789 --> 01:01:50,079  
fantastic

952  
01:01:54,630 --> 01:01:52,799  
the aia vehicle design award is given to

953  
01:01:57,109 --> 01:01:54,640  
the design division team with the most

954  
01:01:59,510 --> 01:01:57,119  
creative and innovative overall vehicle

955  
01:02:00,950 --> 01:01:59,520  
design that maximizes safety and

956  
01:02:03,510 --> 01:02:00,960  
efficiency

957  
01:02:07,349 --> 01:02:03,520  
this year's winner is new york

958  
01:02:09,349 --> 01:02:07,359  
university new york new york

959  
01:02:11,109 --> 01:02:09,359  
new york university excelled in the

960  
01:02:13,349 --> 01:02:11,119  
competition in their execution of

961  
01:02:15,270 --> 01:02:13,359  
designing their full-scale rocket their

962  
01:02:17,190 --> 01:02:15,280  
attention to detail in the vehicle's

963  
01:02:19,710 --> 01:02:17,200

design and construction methods was

964

01:02:23,190 --> 01:02:19,720

meticulous and incredibly thorough

965

01:02:25,589 --> 01:02:23,200

congratulations nyu on a job extremely

966

01:02:27,990 --> 01:02:25,599

well done

967

01:02:30,230 --> 01:02:28,000

thank you mr dunbacher next we are also

968

01:02:33,270 --> 01:02:30,240

pleased to be joined by another

969

01:02:36,950 --> 01:02:33,280

aia representative he is the region two

970

01:02:39,430 --> 01:02:36,960

director please welcome mr curt polzin

971

01:02:42,710 --> 01:02:39,440

good afternoon i'm kurt paulsen i'm the

972

01:02:44,710 --> 01:02:42,720

region 2 director for iaa

973

01:02:46,630 --> 01:02:44,720

in much the same way that nasa and its

974

01:02:49,029 --> 01:02:46,640

partners develop reusable launch

975

01:02:50,710 --> 01:02:49,039

vehicles competing teams in the student

976

01:02:52,470 --> 01:02:50,720

launch division

977

01:02:54,390 --> 01:02:52,480

are challenged to design a reusable

978

01:02:56,710 --> 01:02:54,400

rocket that can repeatedly fly to

979

01:02:58,870 --> 01:02:56,720

predictable altitudes while performing

980

01:03:00,870 --> 01:02:58,880

scientific experiments

981

01:03:02,950 --> 01:03:00,880

over the course of the activity year

982

01:03:06,309 --> 01:03:02,960

each team's design is evaluated by the

983

01:03:08,069 --> 01:03:06,319

nasa review panel for safety performance

984

01:03:10,069 --> 01:03:08,079

and innovation

985

01:03:12,470 --> 01:03:10,079

the a double a reusable launch vehicle

986

01:03:15,349 --> 01:03:12,480

award is given to the usli launch

987

01:03:17,829 --> 01:03:15,359

division team with the most creative

988

01:03:19,430 --> 01:03:17,839

innovative and well constructed overall

989

01:03:22,789 --> 01:03:19,440

reusable design

990

01:03:26,789 --> 01:03:22,799

that maximizes safety and efficiency

991

01:03:28,710 --> 01:03:26,799

for the 2022 year the winners are

992

01:03:31,670 --> 01:03:28,720

in third place

993

01:03:34,950 --> 01:03:31,680

california state university long beach

994

01:03:36,789 --> 01:03:34,960

long beach california

995

01:03:38,710 --> 01:03:36,799

in second place

996

01:03:41,990 --> 01:03:38,720

cedarville university

997

01:03:48,309 --> 01:03:43,589

and in first place

998

01:03:51,750 --> 01:03:48,319

purdue university west lafayette indiana

999

01:03:54,549 --> 01:03:51,760

purdue university's nearly 9 foot and 53

1000

01:03:57,430 --> 01:03:54,559

pound launch vehicle performed nominally

1001  
01:03:59,910 --> 01:03:57,440  
in their final competition launch

1002  
01:04:01,510 --> 01:03:59,920  
their vehicle was a standard dual deploy

1003  
01:04:03,670 --> 01:04:01,520  
with sufficient testing and finite

1004  
01:04:05,510 --> 01:04:03,680  
element analysis performed to ensure

1005  
01:04:07,750 --> 01:04:05,520  
vehicle integrity

1006  
01:04:10,150 --> 01:04:07,760  
produced payload emulated nasa's deep

1007  
01:04:12,390 --> 01:04:10,160  
space network or dsn

1008  
01:04:15,670 --> 01:04:12,400  
with their own which they called the

1009  
01:04:17,589 --> 01:04:15,680  
near space network or nsn

1010  
01:04:20,309 --> 01:04:17,599  
for successful recovery and re-flight

1011  
01:04:22,630 --> 01:04:20,319  
the launch vehicle must land softly

1012  
01:04:24,870 --> 01:04:22,640  
purdue's launch vehicle landed safely

1013  
01:04:27,670 --> 01:04:24,880

due to a retainer plate design that

1014

01:04:29,109 --> 01:04:27,680

absorbs impact energy upon landing

1015

01:04:31,430 --> 01:04:29,119

along with the recovery system

1016

01:04:33,829 --> 01:04:31,440

permitting vehicle landing at a speed

1017

01:04:35,510 --> 01:04:33,839

under 13 feet per second

1018

01:04:37,430 --> 01:04:35,520

these features allowed the vehicle to be

1019

01:04:41,190 --> 01:04:37,440

reflown quickly

1020

01:04:43,349 --> 01:04:41,200

congratulations to purdue university

1021

01:04:45,510 --> 01:04:43,359

thank you mr polzin our next award

1022

01:04:47,750 --> 01:04:45,520

presenter is the vice president and

1023

01:04:50,390 --> 01:04:47,760

general manager of space development and

1024

01:04:52,230 --> 01:04:50,400

integration with accient please welcome

1025

01:04:54,230 --> 01:04:52,240

dr rusty powell

1026

01:04:55,829 --> 01:04:54,240

nasa student launch is a challenging

1027

01:04:58,150 --> 01:04:55,839

competition that requires its

1028

01:04:59,510 --> 01:04:58,160

competitors to undertake a large amount

1029

01:05:01,510 --> 01:04:59,520

of work

1030

01:05:03,670 --> 01:05:01,520

teams must design and build a

1031

01:05:05,510 --> 01:05:03,680

high-powered amateur rocket and take on

1032

01:05:06,630 --> 01:05:05,520

the experimental payload design

1033

01:05:09,029 --> 01:05:06,640

challenge

1034

01:05:10,789 --> 01:05:09,039

additionally teams participate in

1035

01:05:13,270 --> 01:05:10,799

milestone reviews throughout the

1036

01:05:15,430 --> 01:05:13,280

activity year that challenge both their

1037

01:05:16,789 --> 01:05:15,440

technical writing and presentation

1038

01:05:18,950 --> 01:05:16,799

skills

1039

01:05:21,349 --> 01:05:18,960

all of this is an immense undertaking

1040

01:05:22,710 --> 01:05:21,359

for even the most veteran teams in the

1041

01:05:24,710 --> 01:05:22,720

competition

1042

01:05:26,870 --> 01:05:24,720

so teams who are participating in their

1043

01:05:28,309 --> 01:05:26,880

rookie year may feel the strain even

1044

01:05:30,390 --> 01:05:28,319

more

1045

01:05:32,150 --> 01:05:30,400

the rookie teams who participated this

1046

01:05:33,910 --> 01:05:32,160

year in our college and university

1047

01:05:36,230 --> 01:05:33,920

division are highly deserving of

1048

01:05:38,710 --> 01:05:36,240

recognition for succeeding and making it

1049

01:05:40,630 --> 01:05:38,720

through the rigors of the nasa student

1050

01:05:42,870 --> 01:05:40,640

launch project

1051  
01:05:46,309 --> 01:05:42,880  
every year the most exceptional of these

1052  
01:05:49,109 --> 01:05:46,319  
are presented with the aiaa rookie award

1053  
01:05:51,029 --> 01:05:49,119  
and here are our winners

1054  
01:05:53,670 --> 01:05:51,039  
finishing in third place

1055  
01:05:57,990 --> 01:05:53,680  
is central washington university

1056  
01:06:05,349 --> 01:06:00,710  
our second place rookie team is

1057  
01:06:07,670 --> 01:06:05,359  
cedarville university cedarville ohio

1058  
01:06:11,589 --> 01:06:07,680  
and the winner is james madison

1059  
01:06:13,750 --> 01:06:11,599  
university harrisonburg virginia

1060  
01:06:16,309 --> 01:06:13,760  
james madison university produced a

1061  
01:06:19,589 --> 01:06:16,319  
detailed rocket and payload design with

1062  
01:06:21,109 --> 01:06:19,599  
outstanding testing verification plans

1063  
01:06:23,430 --> 01:06:21,119

and analysis

1064

01:06:25,910 --> 01:06:23,440

they chose a math and software intensive

1065

01:06:27,750 --> 01:06:25,920

payload that was able to transmit a

1066

01:06:29,910 --> 01:06:27,760

landing location

1067

01:06:32,390 --> 01:06:29,920

this team stayed consistent throughout

1068

01:06:34,950 --> 01:06:32,400

the year producing professional reports

1069

01:06:36,950 --> 01:06:34,960

and presentations they interacted with

1070

01:06:39,430 --> 01:06:36,960

more than 350

1071

01:06:42,549 --> 01:06:39,440

third and fourth grade students teaching

1072

01:06:45,029 --> 01:06:42,559

them about parachutes air resistance and

1073

01:06:48,309 --> 01:06:45,039

gravity while designing an activity to

1074

01:06:50,630 --> 01:06:48,319

illustrate these aerospace principles

1075

01:06:54,150 --> 01:06:50,640

staying within a reasonable budget and

1076  
01:06:58,390 --> 01:06:54,160  
not losing sight of milestone deadlines

1077  
01:07:00,630 --> 01:06:58,400  
congratulations james madison university

1078  
01:07:02,789 --> 01:07:00,640  
thank you dr powell here to present our

1079  
01:07:04,710 --> 01:07:02,799  
next award as our longtime friend with

1080  
01:07:08,870 --> 01:07:04,720  
the national space club of huntsville

1081  
01:07:13,270 --> 01:07:10,870  
each year the judge's choice award is

1082  
01:07:15,750 --> 01:07:13,280  
given to the high school middle school

1083  
01:07:19,029 --> 01:07:15,760  
or sli division team that has the best

1084  
01:07:20,870 --> 01:07:19,039  
combination of all aspects of the nasa

1085  
01:07:23,109 --> 01:07:20,880  
student launch project

1086  
01:07:26,150 --> 01:07:23,119  
including documentation

1087  
01:07:28,549 --> 01:07:26,160  
scientific experiment creativity vehicle

1088  
01:07:30,150 --> 01:07:28,559

design and construction and stem

1089

01:07:32,549 --> 01:07:30,160

engagement

1090

01:07:34,950 --> 01:07:32,559

the winning team is selected by the nasa

1091

01:07:36,789 --> 01:07:34,960

student launch review panel

1092

01:07:39,589 --> 01:07:36,799

all of the sli teams in this year's

1093

01:07:40,950 --> 01:07:39,599

program rose to the rigorous challenge

1094

01:07:43,430 --> 01:07:40,960

of the project

1095

01:07:46,870 --> 01:07:43,440

here are the top three that showcased

1096

01:07:48,630 --> 01:07:46,880

exemplary efforts in the rocketry design

1097

01:07:50,630 --> 01:07:48,640

and performance

1098

01:07:52,069 --> 01:07:50,640

finishing in third place

1099

01:07:56,870 --> 01:07:52,079

st vincent

1100

01:08:00,230 --> 01:07:56,880

st mary high school from akron ohio

1101  
01:08:02,390 --> 01:08:00,240  
in second place plantation high school

1102  
01:08:04,870 --> 01:08:02,400  
plantation florida

1103  
01:08:06,870 --> 01:08:04,880  
and finally in first place is cedar

1104  
01:08:08,829 --> 01:08:06,880  
falls high school

1105  
01:08:11,589 --> 01:08:08,839  
cedar falls

1106  
01:08:13,430 --> 01:08:11,599  
iowa this award comes with a two

1107  
01:08:15,910 --> 01:08:13,440  
thousand dollar prize from the national

1108  
01:08:17,349 --> 01:08:15,920  
space club huntsville

1109  
01:08:19,829 --> 01:08:17,359  
cedar falls high school did an

1110  
01:08:22,149 --> 01:08:19,839  
outstanding job in this year's project

1111  
01:08:24,630 --> 01:08:22,159  
from their design construction and

1112  
01:08:27,749 --> 01:08:24,640  
performance to their reports

1113  
01:08:31,189 --> 01:08:27,759

presentation and reviews this team

1114

01:08:32,430 --> 01:08:31,199

showed exceptional skill in every aspect

1115

01:08:35,110 --> 01:08:32,440

of the challenge

1116

01:08:37,110 --> 01:08:35,120

congratulations to cedar falls high

1117

01:08:39,990 --> 01:08:37,120

school

1118

01:08:41,749 --> 01:08:40,000

thank you mr nable mr abel and now after

1119

01:08:43,910 --> 01:08:41,759

months of hard work and dedication from

1120

01:08:46,390 --> 01:08:43,920

each of you we are now ready to announce

1121

01:08:47,829 --> 01:08:46,400

the overall winners of nasa's student

1122

01:08:49,829 --> 01:08:47,839

launch challenge

1123

01:08:51,910 --> 01:08:49,839

joining us once again representing the

1124

01:08:55,669 --> 01:08:51,920

national space club of huntsville please

1125

01:08:57,590 --> 01:08:55,679

welcome back mr terry abel

1126  
01:08:59,669 --> 01:08:57,600  
congratulations to all of the teams that

1127  
01:09:01,749 --> 01:08:59,679  
have won awards here today

1128  
01:09:05,030 --> 01:09:01,759  
your amazing accomplishments this year

1129  
01:09:07,829 --> 01:09:05,040  
have not gone unnoticed it's my pleasure

1130  
01:09:10,630 --> 01:09:07,839  
to continue to acknowledge the sexist

1131  
01:09:13,110 --> 01:09:10,640  
the successes of this year's nasa

1132  
01:09:15,990 --> 01:09:13,120  
student launch teams by announcing the

1133  
01:09:19,510 --> 01:09:16,000  
third place and the second place winner

1134  
01:09:20,789 --> 01:09:19,520  
award in the usli launch division of

1135  
01:09:23,590 --> 01:09:20,799  
this year's

1136  
01:09:26,550 --> 01:09:23,600  
nasa student launch

1137  
01:09:29,990 --> 01:09:26,560  
finishing third in the 2022 launch

1138  
01:09:32,149 --> 01:09:30,000

division overall competition is

1139

01:09:34,870 --> 01:09:32,159

vanderbilt university

1140

01:09:37,110 --> 01:09:34,880

nashville tennessee

1141

01:09:39,990 --> 01:09:37,120

and the 2022

1142

01:09:43,030 --> 01:09:40,000

student launch second place winner is

1143

01:09:44,550 --> 01:09:43,040

the university of notre dame notre dame

1144

01:09:46,070 --> 01:09:44,560

indiana

1145

01:09:49,990 --> 01:09:46,080

the university of notre dame will

1146

01:09:52,070 --> 01:09:50,000

receive a prize award of 2500

1147

01:09:54,229 --> 01:09:52,080

notre dame had a consistent program this

1148

01:09:56,790 --> 01:09:54,239

year with excellent documentation and

1149

01:10:00,470 --> 01:09:56,800

presentations a quality rocket and

1150

01:10:01,590 --> 01:10:00,480

payload design and successful subscale

1151

01:10:03,990 --> 01:10:01,600

full

1152

01:10:07,110 --> 01:10:04,000

and competition flights along with

1153

01:10:09,590 --> 01:10:07,120

well-documented safety and excellent

1154

01:10:12,470 --> 01:10:09,600

stem engagement opportunities

1155

01:10:15,590 --> 01:10:12,480

with all aspects of the competition

1156

01:10:18,070 --> 01:10:15,600

notre dame was creative and detailed

1157

01:10:20,390 --> 01:10:18,080

our congratulations to the university of

1158

01:10:22,950 --> 01:10:20,400

notre dame

1159

01:10:25,189 --> 01:10:22,960

thank you mr abel our next presenter may

1160

01:10:27,350 --> 01:10:25,199

be recognizable to many of you she is

1161

01:10:29,590 --> 01:10:27,360

the communications and media services

1162

01:10:32,550 --> 01:10:29,600

manager for northrop grumman please

1163

01:10:34,709 --> 01:10:32,560

welcome miss k anderson as a sponsor of

1164

01:10:35,910 --> 01:10:34,719

the usli design division it is a great

1165

01:10:36,950 --> 01:10:35,920

honor for northrop grumman to

1166

01:10:38,790 --> 01:10:36,960

acknowledge the efforts and

1167

01:10:40,310 --> 01:10:38,800

accomplishments of teams exceptionally

1168

01:10:42,630 --> 01:10:40,320

affected by the unique conditions of

1169

01:10:44,550 --> 01:10:42,640

this competition season we understand

1170

01:10:46,870 --> 01:10:44,560

the value of strong design work backed

1171

01:10:49,350 --> 01:10:46,880

by solid modeling simulation and

1172

01:10:51,350 --> 01:10:49,360

calculations it is my honor to announce

1173

01:10:53,590 --> 01:10:51,360

the second place winner overall in the

1174

01:10:55,510 --> 01:10:53,600

usli design division

1175

01:10:57,510 --> 01:10:55,520

our second place winner and recipient of

1176

01:11:02,070 --> 01:10:57,520

a prize award of fifteen hundred dollars

1177

01:11:03,430 --> 01:11:02,080

is new york university new york new york

1178

01:11:06,310 --> 01:11:03,440

in this second year of the design

1179

01:11:07,910 --> 01:11:06,320

division nyu excelled in the competition

1180

01:11:09,510 --> 01:11:07,920

especially noteworthy was the team's

1181

01:11:11,510 --> 01:11:09,520

design and construction plans for the

1182

01:11:13,510 --> 01:11:11,520

launch vehicle and their attention to

1183

01:11:14,870 --> 01:11:13,520

detail and analysis of simulated flight

1184

01:11:16,790 --> 01:11:14,880

performance data

1185

01:11:18,630 --> 01:11:16,800

the team did a fantastic job presenting

1186

01:11:20,229 --> 01:11:18,640

their work and their reports were clean

1187

01:11:23,910 --> 01:11:20,239

efficient and well written

1188

01:11:26,470 --> 01:11:23,920

congratulations nyu on a job well done

1189

01:11:28,390 --> 01:11:26,480

thank you miss anderson joining us is

1190

01:11:30,390 --> 01:11:28,400

another longtime supporter of student

1191

01:11:32,229 --> 01:11:30,400

launch please welcome the manager of

1192

01:11:35,669 --> 01:11:32,239

marshall's resident management office

1193

01:11:38,390 --> 01:11:35,679

for northrop grumman miss jill eskew

1194

01:11:41,270 --> 01:11:38,400

this year's nasa student launch teams

1195

01:11:44,390 --> 01:11:41,280

have spent thousands of hours designing

1196

01:11:46,470 --> 01:11:44,400

simulating building testing and

1197

01:11:48,470 --> 01:11:46,480

launching their rockets and payloads

1198

01:11:51,110 --> 01:11:48,480

they have worked tirelessly towards the

1199

01:11:53,350 --> 01:11:51,120

goal of competing at the highest level

1200

01:11:55,750 --> 01:11:53,360

we are proud to recognize all of the

1201  
01:11:57,830 --> 01:11:55,760  
teams and their achievements it is my

1202  
01:12:01,110 --> 01:11:57,840  
honor to announce the overall winners

1203  
01:12:03,990 --> 01:12:01,120  
for this year's usli competition in both

1204  
01:12:06,390 --> 01:12:04,000  
the design and launch divisions

1205  
01:12:10,390 --> 01:12:06,400  
for the design division the winner of

1206  
01:12:13,270 --> 01:12:10,400  
the 2022 nasa student launch usli design

1207  
01:12:17,030 --> 01:12:13,280  
division competition is tarleton state

1208  
01:12:20,630 --> 01:12:17,040  
university stephenville texas

1209  
01:12:23,030 --> 01:12:20,640  
the 2022 nasa student launch winner for

1210  
01:12:25,110 --> 01:12:23,040  
the design division will receive a prize

1211  
01:12:27,510 --> 01:12:25,120  
award of two thousand five hundred

1212  
01:12:29,750 --> 01:12:27,520  
dollars this team gave a complete

1213  
01:12:32,149 --> 01:12:29,760

payload design utilizing lower

1214

01:12:34,070 --> 01:12:32,159

transceivers along with trigonometric

1215

01:12:36,790 --> 01:12:34,080

equations to help locate their launch

1216

01:12:39,590 --> 01:12:36,800

vehicle upon landing design division

1217

01:12:42,070 --> 01:12:39,600

teams were also given a second task to

1218

01:12:44,550 --> 01:12:42,080

establish permanent location markers on

1219

01:12:46,630 --> 01:12:44,560

a foreign planetary body to create their

1220

01:12:49,189 --> 01:12:46,640

own version of gps

1221

01:12:51,350 --> 01:12:49,199

this team's aerodynamically sound design

1222

01:12:54,310 --> 01:12:51,360

of an autonomous glider to ensure

1223

01:12:56,149 --> 01:12:54,320

maximum range of functioning gps was

1224

01:13:00,790 --> 01:12:56,159

thoroughly designed and tested

1225

01:13:07,030 --> 01:13:03,910

the winner of the 2022 nasa student

1226

01:13:09,590 --> 01:13:07,040

launch usli launch division competition

1227

01:13:12,390 --> 01:13:09,600

is university of north carolina at

1228

01:13:15,750 --> 01:13:12,400

charlotte charlotte north carolina

1229

01:13:17,590 --> 01:13:15,760

the 2022 nasa student launch winner for

1230

01:13:20,310 --> 01:13:17,600

the launch division comes with a

1231

01:13:23,510 --> 01:13:20,320

monetary prize of five thousand dollars

1232

01:13:25,910 --> 01:13:23,520

for the first time since 2019 we were

1233

01:13:28,630 --> 01:13:25,920

able to hold our in-person launch event

1234

01:13:30,630 --> 01:13:28,640

in huntsville alabama this team traveled

1235

01:13:33,669 --> 01:13:30,640

to huntsville to showcase their launch

1236

01:13:36,229 --> 01:13:33,679

vehicle payload and team camaraderie in

1237

01:13:38,470 --> 01:13:36,239

person to be crowned the nasa student

1238

01:13:40,709 --> 01:13:38,480

launch winner means your team excelled

1239

01:13:43,590 --> 01:13:40,719

in all aspects of the program from

1240

01:13:45,990 --> 01:13:43,600

technical writing presentation skills

1241

01:13:48,229 --> 01:13:46,000

stem outreach along with vehicle and

1242

01:13:50,470 --> 01:13:48,239

payload testing and performance

1243

01:13:52,950 --> 01:13:50,480

this team always signed up for the first

1244

01:13:55,110 --> 01:13:52,960

presentation slot showing their constant

1245

01:13:57,990 --> 01:13:55,120

preparedness and picked up where they

1246

01:14:01,030 --> 01:13:58,000

left off surpassing their 16 feet delta

1247

01:14:03,510 --> 01:14:01,040

apogee from target last year to only two

1248

01:14:05,189 --> 01:14:03,520

feet away this year congratulations to

1249

01:14:06,950 --> 01:14:05,199

the university of north carolina at

1250

01:14:09,030 --> 01:14:06,960

charlotte

1251

01:14:10,870 --> 01:14:09,040

thank you miss eskew to close out

1252

01:14:12,870 --> 01:14:10,880

today's award ceremony and to provide

1253

01:14:15,110 --> 01:14:12,880

his final thoughts on our

1254

01:14:17,510 --> 01:14:15,120

successful season please welcome back

1255

01:14:19,350 --> 01:14:17,520

the activity lead for student launch mr

1256

01:14:22,149 --> 01:14:19,360

fred kepner

1257

01:14:23,990 --> 01:14:22,159

thank you chris it is my honor to close

1258

01:14:26,630 --> 01:14:24,000

out the 2022

1259

01:14:28,630 --> 01:14:26,640

nasa student launch activity and i'll

1260

01:14:30,310 --> 01:14:28,640

warn you i have a lot of people to thank

1261

01:14:32,550 --> 01:14:30,320

so i'll begin by thanking today's

1262

01:14:34,310 --> 01:14:32,560

presenters for joining us and helping us

1263

01:14:35,750 --> 01:14:34,320

to recognize the efforts of all of our

1264

01:14:37,430 --> 01:14:35,760

student teams

1265

01:14:39,990 --> 01:14:37,440

additionally student launch would not be

1266

01:14:41,750 --> 01:14:40,000

possible without the support of many

1267

01:14:42,709 --> 01:14:41,760

many people and organizations throughout

1268

01:14:44,870 --> 01:14:42,719

the year

1269

01:14:46,550 --> 01:14:44,880

thank you to all of the volunteers who

1270

01:14:48,709 --> 01:14:46,560

supported student launch by assisting

1271

01:14:51,110 --> 01:14:48,719

with milestone reviews special

1272

01:14:51,910 --> 01:14:51,120

presentations and last month's career

1273

01:14:53,830 --> 01:14:51,920

fair

1274

01:14:56,470 --> 01:14:53,840

thank you to the national association of

1275

01:14:58,550 --> 01:14:56,480

rocketry and especially john lingdal for

1276

01:14:59,830 --> 01:14:58,560

helping us to put on a spectacular

1277

01:15:01,350 --> 01:14:59,840

launch event

1278

01:15:03,430 --> 01:15:01,360

thank you to our communications and

1279

01:15:05,189 --> 01:15:03,440

social media teams for helping us share

1280

01:15:06,470 --> 01:15:05,199

the work and accomplishments of our

1281

01:15:08,310 --> 01:15:06,480

student teams

1282

01:15:10,950 --> 01:15:08,320

thank you to our sponsors

1283

01:15:13,669 --> 01:15:10,960

the nasa office of stem engagement's

1284

01:15:15,750 --> 01:15:13,679

next-gen stem project

1285

01:15:16,870 --> 01:15:15,760

nasa's space operations mission

1286

01:15:19,350 --> 01:15:16,880

directorate

1287

01:15:22,229 --> 01:15:19,360

northrop grumman the national space club

1288

01:15:25,590 --> 01:15:22,239

huntsville the aia

1289

01:15:28,870 --> 01:15:25,600

relativity space bastion technologies

1290

01:15:31,189 --> 01:15:28,880

and siemens digital industries software

1291

01:15:33,189 --> 01:15:31,199

thank you to the nasa student launch

1292

01:15:36,709 --> 01:15:33,199

management team including allison

1293

01:15:39,430 --> 01:15:36,719

schnard john eckert zack stephen

1294

01:15:41,430 --> 01:15:39,440

lowe and joshua mary who worked day in

1295

01:15:44,070 --> 01:15:41,440

and day out to support the student

1296

01:15:45,910 --> 01:15:44,080

launch activity and our teams

1297

01:15:48,229 --> 01:15:45,920

finally i want to say a special thank

1298

01:15:50,830 --> 01:15:48,239

you to all of our participants

1299

01:15:53,270 --> 01:15:50,840

you are what makes this activity

1300

01:15:55,430 --> 01:15:53,280

special we enjoyed working with all of

1301

01:15:57,590 --> 01:15:55,440

you over the past nine months

1302

01:15:58,870 --> 01:15:57,600

today was a celebration of your

1303

01:16:01,189 --> 01:15:58,880

accomplishments

1304

01:16:03,750 --> 01:16:01,199

whether your team won an award or not

1305

01:16:05,350 --> 01:16:03,760

you successfully completed a long and

1306

01:16:07,189 --> 01:16:05,360

difficult challenge

1307

01:16:09,750 --> 01:16:07,199

the knowledge and practice you gained

1308

01:16:12,070 --> 01:16:09,760

will serve you well in your careers

1309

01:16:13,990 --> 01:16:12,080

you are the future of nasa and the

1310

01:16:16,229 --> 01:16:14,000

aerospace industry

1311

01:16:18,070 --> 01:16:16,239

and i know we're in good hands

1312

01:16:20,390 --> 01:16:18,080

i hope that this experience is one that

1313

01:16:23,030 --> 01:16:20,400

you will look fondly back on for many

1314

01:16:25,189 --> 01:16:23,040

years to come i know i will

1315

01:16:27,510 --> 01:16:25,199

so thank you for joining us today and