

2020  
**STUDENT**



**LAUNCH  
AWARDS**

1  
00:00:00,333 --> 00:00:08,408  
[ music ]

2  
00:00:08,408 --> 00:00:09,075  
>> Hi, everybody,

3  
00:00:09,075 --> 00:00:10,744  
and welcome to the 2020

4  
00:00:10,744 --> 00:00:12,912  
NASA Student Launch Awards.

5  
00:00:12,912 --> 00:00:14,280  
This year, I greatly missed

6  
00:00:14,280 --> 00:00:15,648  
seeing you all in person

7  
00:00:15,648 --> 00:00:16,649  
and being able to see

8  
00:00:16,649 --> 00:00:18,251  
your projects and efforts

9  
00:00:18,251 --> 00:00:19,719  
culminate on launch day.

10  
00:00:19,719 --> 00:00:20,854  
I know you've all put in

11  
00:00:20,854 --> 00:00:22,455  
a lot of hard work,

12  
00:00:22,455 --> 00:00:23,123  
and I trust you

13  
00:00:23,123 --> 00:00:24,157

enjoyed the project

14

00:00:24,157 --> 00:00:25,959

and learned a lot along the way.

15

00:00:25,959 --> 00:00:27,460

I'm proud that Northrop Grumman

16

00:00:27,460 --> 00:00:28,862

has continued to be

17

00:00:28,862 --> 00:00:30,530

the premier corporate sponsor

18

00:00:30,530 --> 00:00:31,698

of Student Launch

19

00:00:31,698 --> 00:00:33,199

for 13 years now.

20

00:00:33,199 --> 00:00:34,534

And it's been my great privilege

21

00:00:34,534 --> 00:00:35,735

to participate in many

22

00:00:35,735 --> 00:00:38,138

rocket fairs and launch events.

23

00:00:38,138 --> 00:00:39,406

It's really an exciting time

24

00:00:39,406 --> 00:00:40,473

to partner with NASA

25

00:00:40,473 --> 00:00:41,207

as we look forward

26

00:00:41,207 --> 00:00:42,675  
to the first launch of NASA's

27

00:00:42,675 --> 00:00:44,077  
space launch system,

28

00:00:44,077 --> 00:00:45,111  
the heavy lift rocket,

29

00:00:45,111 --> 00:00:46,780  
and the Orion Spacecraft.

30

00:00:46,780 --> 00:00:48,715  
It'll happen next year.

31

00:00:48,715 --> 00:00:50,483  
This first launch, Artemis I,

32

00:00:50,483 --> 00:00:51,951  
paves the way for Americans

33

00:00:51,951 --> 00:00:53,153  
to have boots on the moon

34

00:00:53,153 --> 00:00:55,054  
in 2024.

35

00:00:55,054 --> 00:00:56,156  
In preparation for that

36

00:00:56,156 --> 00:00:57,524  
first flight, Northrop Grumman

37

00:00:57,524 --> 00:00:59,292  
is shipping our booster segments

38

00:00:59,292 --> 00:01:00,960

to Kennedy Space Center

39

00:01:00,960 --> 00:01:02,095

where they'll be processed

40

00:01:02,095 --> 00:01:03,596

and stacked into the twin

41

00:01:03,596 --> 00:01:05,465

five segment boosters

42

00:01:05,465 --> 00:01:07,734

that will provide more than 75%

43

00:01:07,734 --> 00:01:09,235

of the initial thrust

44

00:01:09,235 --> 00:01:10,270

for the rocket's escape

45

00:01:10,270 --> 00:01:11,938

from Earth's gravity.

46

00:01:11,938 --> 00:01:13,206

The core stage of the rocket

47

00:01:13,206 --> 00:01:14,374

is at Stennis

48

00:01:14,374 --> 00:01:15,341

and is in preparation

49

00:01:15,341 --> 00:01:16,376

for green run testing

50

00:01:16,376 --> 00:01:17,277

that's critical to

51  
00:01:17,277 --> 00:01:18,978  
this first launch.

52  
00:01:18,978 --> 00:01:20,447  
The Orion spacecraft returned

53  
00:01:20,447 --> 00:01:21,781  
to Kennedy after completing

54  
00:01:21,781 --> 00:01:22,982  
environmental testing

55  
00:01:22,982 --> 00:01:24,250  
at Plumbrook Station

56  
00:01:24,250 --> 00:01:25,452  
back in March.

57  
00:01:25,452 --> 00:01:26,352  
It is nearly ready to

58  
00:01:26,352 --> 00:01:27,353  
go into storage until

59  
00:01:27,353 --> 00:01:28,955  
the core stage is ready.

60  
00:01:28,955 --> 00:01:29,956  
Now having participated

61  
00:01:29,956 --> 00:01:31,558  
in the NASA Student Launch,

62  
00:01:31,558 --> 00:01:32,725  
you're very familiar with

63  
00:01:32,725 --> 00:01:34,060

what it takes to design,

64

00:01:34,060 --> 00:01:35,462  
to manufacture,

65

00:01:35,462 --> 00:01:36,796  
and to launch a rocket.

66

00:01:36,796 --> 00:01:38,131  
And you know there are many

67

00:01:38,131 --> 00:01:40,633  
steps and setbacks as you go.

68

00:01:40,633 --> 00:01:41,701  
There's a lot of learning,

69

00:01:41,701 --> 00:01:42,502  
making changes

70

00:01:42,502 --> 00:01:43,503  
and sometimes even going

71

00:01:43,503 --> 00:01:45,872  
back to the drawing board.

72

00:01:45,872 --> 00:01:46,873  
This competition

73

00:01:46,873 --> 00:01:48,107  
has provided you with

74

00:01:48,107 --> 00:01:49,509  
a lot of experiences

75

00:01:49,509 --> 00:01:51,110  
that will serve you well

76

00:01:51,110 --> 00:01:52,178

regardless of the career

77

00:01:52,178 --> 00:01:54,314

you plan to explore.

78

00:01:54,314 --> 00:01:55,148

I would encourage you

79

00:01:55,148 --> 00:01:56,516

to take the lessons

80

00:01:56,516 --> 00:01:57,183

that you've learned

81

00:01:57,183 --> 00:01:59,519

along the way and use them

82

00:01:59,519 --> 00:02:00,987

in your life as you go forward

83

00:02:00,987 --> 00:02:02,455

to do great things.

84

00:02:02,455 --> 00:02:04,524

Remember that whether your path

85

00:02:04,524 --> 00:02:06,159

is to be a rocket scientist,

86

00:02:06,159 --> 00:02:07,861

an astronaut,

87

00:02:07,861 --> 00:02:09,362

an engineer or something

88

00:02:09,362 --> 00:02:11,531

completely unrelated,

89

00:02:11,531 --> 00:02:12,999

what matters most is that

90

00:02:12,999 --> 00:02:14,968

you enjoy what you're doing.

91

00:02:14,968 --> 00:02:16,402

Find the thing you enjoy

92

00:02:16,402 --> 00:02:18,104

the most, where your passion is,

93

00:02:18,104 --> 00:02:18,905

and work to become

94

00:02:18,905 --> 00:02:20,840

the best at it and do that

95

00:02:20,840 --> 00:02:22,542

one thing with passion.

96

00:02:22,542 --> 00:02:24,077

The rest will follow.

97

00:02:24,077 --> 00:02:25,278

I congratulate you

98

00:02:25,278 --> 00:02:26,479

on completing your project

99

00:02:26,479 --> 00:02:28,481

for the NASA Student Launch.

100

00:02:28,481 --> 00:02:29,916

It's challenging enough

101  
00:02:29,916 --> 00:02:31,551  
in the best of times,

102  
00:02:31,551 --> 00:02:32,352  
and ever more so

103  
00:02:32,352 --> 00:02:33,386  
during the unique times

104  
00:02:33,386 --> 00:02:34,754  
we're living in now.

105  
00:02:34,754 --> 00:02:37,123  
Congratulations, good luck,

106  
00:02:37,123 --> 00:02:37,790  
and I wish you

107  
00:02:37,790 --> 00:02:38,625  
the very, very best

108  
00:02:38,625 --> 00:02:40,827  
in your future endeavors.

109  
00:02:46,199 --> 00:02:47,300  
>> The Vehicle Design Award

110  
00:02:47,300 --> 00:02:48,134  
is given to the team

111  
00:02:48,134 --> 00:02:49,335  
with the most creative,

112  
00:02:49,335 --> 00:02:50,737  
innovative and well-constructed

113  
00:02:50,737 --> 00:02:52,071

overall vehicle design

114

00:02:52,071 --> 00:02:53,573

for their intended payload,

115

00:02:53,573 --> 00:02:54,474

while still maximizing

116

00:02:54,474 --> 00:02:56,109

safety and efficiency.

117

00:02:56,109 --> 00:02:58,144

Here are our winners.

118

00:02:58,144 --> 00:02:59,445

Third place, University

119

00:02:59,445 --> 00:03:02,515

of North Carolina, Charlotte.

120

00:03:02,515 --> 00:03:03,449

Second place,

121

00:03:03,449 --> 00:03:04,851

the University of Florida,

122

00:03:04,851 --> 00:03:07,287

Gainesville, Florida.

123

00:03:07,287 --> 00:03:08,388

And in first place,

124

00:03:08,388 --> 00:03:09,489

Vanderbilt University

125

00:03:09,489 --> 00:03:13,693

of Nashville, Tennessee.

126

00:03:13,693 --> 00:03:15,228

Vanderbilt iterated their design

127

00:03:15,228 --> 00:03:16,896

to a precise and refined product

128

00:03:16,896 --> 00:03:18,031

justifying their decisions

129

00:03:18,031 --> 00:03:19,132

with a wealth of analysis

130

00:03:19,132 --> 00:03:20,700

and testing, both computer-aided

131

00:03:20,700 --> 00:03:22,235

and simulation.

132

00:03:22,235 --> 00:03:22,835

The team provided

133

00:03:22,835 --> 00:03:23,836

accurate and thorough

134

00:03:23,836 --> 00:03:25,204

computer-aided design models

135

00:03:25,204 --> 00:03:26,139

which clearly showed

136

00:03:26,139 --> 00:03:27,540

how the different systems,

137

00:03:27,540 --> 00:03:28,841

subsystems and components

138

00:03:28,841 --> 00:03:30,810

integrated together.

139

00:03:30,810 --> 00:03:32,045

This team used the fundamentals

140

00:03:32,045 --> 00:03:33,446

of rocket science to design

141

00:03:33,446 --> 00:03:34,614

and construct a vehicle

142

00:03:34,614 --> 00:03:36,082

that performed as designed

143

00:03:36,082 --> 00:03:37,083

in multiple performance

144

00:03:37,083 --> 00:03:39,719

proof tests, congratulations.

145

00:03:44,724 --> 00:03:46,092

>> Designing, building

146

00:03:46,092 --> 00:03:47,193

and launching rockets

147

00:03:47,193 --> 00:03:49,395

is always an exciting journey.

148

00:03:49,395 --> 00:03:50,763

But perhaps a real benefit

149

00:03:50,763 --> 00:03:51,798

of rockets isn't what

150

00:03:51,798 --> 00:03:53,299

they do during launch,

151  
00:03:53,299 --> 00:03:54,167  
but what they carry

152  
00:03:54,167 --> 00:03:55,234  
as their scientific

153  
00:03:55,234 --> 00:03:56,903  
or engineering mission.

154  
00:03:56,903 --> 00:03:58,104  
Payloads can be anything

155  
00:03:58,104 --> 00:04:00,540  
from telescopes to satellites

156  
00:04:00,540 --> 00:04:02,442  
to scientific instruments.

157  
00:04:02,442 --> 00:04:03,710  
The payload component

158  
00:04:03,710 --> 00:04:04,544  
of this year's

159  
00:04:04,544 --> 00:04:07,080  
NASA Student Launch competition

160  
00:04:07,080 --> 00:04:08,247  
challenged teams

161  
00:04:08,247 --> 00:04:09,916  
to build a system that,

162  
00:04:09,916 --> 00:04:10,917  
following the landing

163  
00:04:10,917 --> 00:04:12,752

of the rocket, would navigate

164

00:04:12,752 --> 00:04:14,654  
to a designated site,

165

00:04:14,654 --> 00:04:15,521  
retrieve at least

166

00:04:15,521 --> 00:04:16,723  
ten milliliters

167

00:04:16,723 --> 00:04:18,725  
of simulated lunar ice,

168

00:04:18,725 --> 00:04:20,026  
and then navigate at least

169

00:04:20,026 --> 00:04:21,861  
ten feet away from that site

170

00:04:21,861 --> 00:04:24,197  
with their sample safely stored.

171

00:04:24,197 --> 00:04:25,765  
The Payload Design Award

172

00:04:25,765 --> 00:04:27,433  
is given to the team

173

00:04:27,433 --> 00:04:28,701  
with the most creative

174

00:04:28,701 --> 00:04:30,103  
and innovative approach

175

00:04:30,103 --> 00:04:31,671  
to tackling this challenge

176  
00:04:31,671 --> 00:04:33,640  
while maximizing safety,

177  
00:04:33,640 --> 00:04:34,474  
and scientific

178  
00:04:34,474 --> 00:04:36,909  
and engineering value.

179  
00:04:36,909 --> 00:04:38,111  
In third place,

180  
00:04:38,111 --> 00:04:39,178  
Purdue University

181  
00:04:39,178 --> 00:04:42,482  
of West Lafayette, Indiana.

182  
00:04:42,482 --> 00:04:43,850  
Second place goes to

183  
00:04:43,850 --> 00:04:45,385  
Vanderbilt University

184  
00:04:45,385 --> 00:04:48,154  
of Nashville, Tennessee.

185  
00:04:48,154 --> 00:04:50,490  
In first place, University

186  
00:04:50,490 --> 00:04:52,725  
of North Carolina, Charlotte.

187  
00:04:52,725 --> 00:04:54,027  
UNCC approached

188  
00:04:54,027 --> 00:04:55,228

this mission objective

189

00:04:55,228 --> 00:04:57,597  
by designing a two-part system.

190

00:04:57,597 --> 00:04:58,765  
The first part detected

191

00:04:58,765 --> 00:05:00,333  
the sample retrieval location

192

00:05:00,333 --> 00:05:01,868  
during the rockets descent,

193

00:05:01,868 --> 00:05:02,468  
and saved that

194

00:05:02,468 --> 00:05:04,370  
location information.

195

00:05:04,370 --> 00:05:06,005  
Once the rocket had landed,

196

00:05:06,005 --> 00:05:07,206  
that location information

197

00:05:07,206 --> 00:05:08,841  
was relayed to an unmanned

198

00:05:08,841 --> 00:05:10,176  
aerial vehicle,

199

00:05:10,176 --> 00:05:11,911  
with integrated computer vision

200

00:05:11,911 --> 00:05:13,680  
and obstacle avoidance.

201  
00:05:13,680 --> 00:05:15,114  
This allowed it to calculate

202  
00:05:15,114 --> 00:05:16,582  
a clean flight path

203  
00:05:16,582 --> 00:05:17,150  
to the sample

204  
00:05:17,150 --> 00:05:18,985  
retrieval location.

205  
00:05:18,985 --> 00:05:20,486  
Testing of this system

206  
00:05:20,486 --> 00:05:21,688  
showed that the design

207  
00:05:21,688 --> 00:05:22,722  
and construction were

208  
00:05:22,722 --> 00:05:25,158  
successful, congratulations.

209  
00:05:30,296 --> 00:05:30,797  
>> Hello, my name

210  
00:05:30,797 --> 00:05:31,964  
is Jorge Herenandez,

211  
00:05:31,964 --> 00:05:32,598  
I'm the CEO

212  
00:05:32,598 --> 00:05:33,666  
of Bastion Technologies

213  
00:05:33,666 --> 00:05:34,233

and I'm honored

214

00:05:34,233 --> 00:05:35,968

to represent our company

215

00:05:35,968 --> 00:05:36,936

and NASA Student Launch

216

00:05:36,936 --> 00:05:37,737

for presentation

217

00:05:37,737 --> 00:05:39,105

of the Safety Award.

218

00:05:39,105 --> 00:05:40,039

Bastion Technologies

219

00:05:40,039 --> 00:05:42,008

is a proud sponsor of this event

220

00:05:42,008 --> 00:05:43,009

and shows its commitment

221

00:05:43,009 --> 00:05:44,444

to continued support

222

00:05:44,444 --> 00:05:46,245

by providing a \$500 prize

223

00:05:46,245 --> 00:05:47,246

to the first place winner

224

00:05:47,246 --> 00:05:48,815

of this award

225

00:05:48,815 --> 00:05:50,349

in recognition of the fact

226  
00:05:50,349 --> 00:05:51,117  
that launching

227  
00:05:51,117 --> 00:05:52,285  
and even viewing a launch

228  
00:05:52,285 --> 00:05:53,986  
is inherently hazardous,

229  
00:05:53,986 --> 00:05:55,388  
you have been singled out

230  
00:05:55,388 --> 00:05:56,355  
for your efforts to maintain

231  
00:05:56,355 --> 00:05:57,256  
a safe environment

232  
00:05:57,256 --> 00:05:58,691  
during this event.

233  
00:05:58,691 --> 00:05:59,692  
As you know,

234  
00:05:59,692 --> 00:06:00,827  
NASA applies stringent

235  
00:06:00,827 --> 00:06:02,361  
range safety principles

236  
00:06:02,361 --> 00:06:03,730  
and techniques.

237  
00:06:03,730 --> 00:06:04,564  
You obviously took

238  
00:06:04,564 --> 00:06:06,365

those cautions seriously,

239

00:06:06,365 --> 00:06:07,166

and did your best

240

00:06:07,166 --> 00:06:08,201

to incorporate appropriate

241

00:06:08,201 --> 00:06:11,003

safeguards into your projects.

242

00:06:11,003 --> 00:06:11,771

For that reason,

243

00:06:11,771 --> 00:06:13,039

I am proud to present you

244

00:06:13,039 --> 00:06:14,507

with the Safety Award.

245

00:06:14,507 --> 00:06:16,375

This award is given to the team

246

00:06:16,375 --> 00:06:18,144

that meets all safety

247

00:06:18,144 --> 00:06:20,213

expectations and has the highest

248

00:06:20,213 --> 00:06:21,347

quality documentation

249

00:06:21,347 --> 00:06:23,182

regarding safety.

250

00:06:23,182 --> 00:06:24,884

Here are the winners.

251  
00:06:24,884 --> 00:06:27,520  
Third place, the University

252  
00:06:27,520 --> 00:06:30,389  
of North Carolina, Charlotte.

253  
00:06:30,389 --> 00:06:31,858  
Second place,

254  
00:06:31,858 --> 00:06:33,025  
Vanderbilt University,

255  
00:06:33,025 --> 00:06:36,863  
Nashville, Tennessee.

256  
00:06:36,863 --> 00:06:39,332  
And first place goes to

257  
00:06:39,332 --> 00:06:40,633  
the University of Alabama

258  
00:06:40,633 --> 00:06:42,368  
in Huntsville.

259  
00:06:42,368 --> 00:06:44,570  
UAH created and continually

260  
00:06:44,570 --> 00:06:45,671  
updated safe--

261  
00:06:45,671 --> 00:06:46,906  
a safety manual

262  
00:06:46,906 --> 00:06:48,608  
that covered shop hazards,

263  
00:06:48,608 --> 00:06:50,009

chemical material safety,

264

00:06:50,009 --> 00:06:51,377

construction hazards

265

00:06:51,377 --> 00:06:53,146

and a thorough investigation

266

00:06:53,146 --> 00:06:55,248

of all failure modes.

267

00:06:55,248 --> 00:06:56,616

Hazard worksheets are

268

00:06:56,616 --> 00:06:58,184

well organized in functional

269

00:06:58,184 --> 00:07:00,453

groups and operational phases.

270

00:07:00,453 --> 00:07:01,587

And match up with

271

00:07:01,587 --> 00:07:02,522

our launch procedures

272

00:07:02,522 --> 00:07:04,056

and safety checklists.

273

00:07:04,056 --> 00:07:06,058

Congratulations, UAH.

274

00:07:11,297 --> 00:07:12,965

>> Hello, I'm Andy Schorr,

275

00:07:12,965 --> 00:07:13,833

Deputy Manager of

276

00:07:13,833 --> 00:07:15,434  
the Spacecraft/Payload

277

00:07:15,434 --> 00:07:17,737  
Integration and Evolution Office

278

00:07:17,737 --> 00:07:19,705  
at Marshall Space Flight Center.

279

00:07:19,705 --> 00:07:20,273  
Part of the Space

280

00:07:20,273 --> 00:07:22,809  
Launch System Program.

281

00:07:22,809 --> 00:07:23,543  
Now it is important

282

00:07:23,543 --> 00:07:24,911  
for scientists,

283

00:07:24,911 --> 00:07:26,345  
engineers, and spacecraft

284

00:07:26,345 --> 00:07:27,547  
professionals to have

285

00:07:27,547 --> 00:07:30,049  
the necessary technical skills,

286

00:07:30,049 --> 00:07:31,984  
innovating mindsets

287

00:07:31,984 --> 00:07:33,319  
and ability to collaborate

288

00:07:33,319 --> 00:07:34,520

within the team

289

00:07:34,520 --> 00:07:36,222

in order to be successful.

290

00:07:36,222 --> 00:07:37,957

However, it is also

291

00:07:37,957 --> 00:07:38,891

important to have strong

292

00:07:38,891 --> 00:07:40,660

communication skills

293

00:07:40,660 --> 00:07:41,494

as this is the key

294

00:07:41,494 --> 00:07:42,962

to opening the door

295

00:07:42,962 --> 00:07:44,730

and letting ideas mature

296

00:07:44,730 --> 00:07:47,300

and also succeed.

297

00:07:47,300 --> 00:07:49,368

The Project Review award

298

00:07:49,368 --> 00:07:51,003

recognizes the college

299

00:07:51,003 --> 00:07:52,338

or university team

300

00:07:52,338 --> 00:07:53,539

that was determined

301  
00:07:53,539 --> 00:07:54,907  
to have the best combination

302  
00:07:54,907 --> 00:07:57,143  
of written reviews and oral

303  
00:07:57,143 --> 00:07:58,811  
presentations throughout

304  
00:07:58,811 --> 00:08:01,347  
the Student Launch here.

305  
00:08:01,347 --> 00:08:03,883  
Now for the awardees.

306  
00:08:03,883 --> 00:08:05,318  
In third place is

307  
00:08:05,318 --> 00:08:08,054  
California State, Long Beach.

308  
00:08:08,054 --> 00:08:10,656  
Congratulations.

309  
00:08:10,656 --> 00:08:12,325  
Taking second place

310  
00:08:12,325 --> 00:08:13,960  
is Vanderbilt University

311  
00:08:13,960 --> 00:08:16,162  
of Nashville, Tennessee.

312  
00:08:16,162 --> 00:08:18,764  
Again, congratulations.

313  
00:08:18,764 --> 00:08:20,399

And in first place is

314

00:08:20,399 --> 00:08:22,435  
the University of Puerto Rico,

315

00:08:22,435 --> 00:08:25,338  
Mayaguez Campus.

316

00:08:25,338 --> 00:08:27,106  
This team went above and beyond

317

00:08:27,106 --> 00:08:28,608  
expectations when delivering

318

00:08:28,608 --> 00:08:31,010  
their preliminary design,

319

00:08:31,010 --> 00:08:32,178  
critical design,

320

00:08:32,178 --> 00:08:33,846  
and flight-readiness review.

321

00:08:33,846 --> 00:08:34,614  
Written reports

322

00:08:34,614 --> 00:08:37,116  
and oral presentations.

323

00:08:37,116 --> 00:08:38,684  
Their reports clearly described

324

00:08:38,684 --> 00:08:40,519  
how the program evolved

325

00:08:40,519 --> 00:08:41,220  
over the course

326  
00:08:41,220 --> 00:08:42,989  
of the project life cycle,

327  
00:08:42,989 --> 00:08:45,291  
and contained several unique

328  
00:08:45,291 --> 00:08:46,592  
features to aid in navigating

329  
00:08:46,592 --> 00:08:47,860  
the extensive

330  
00:08:47,860 --> 00:08:50,429  
documentation provided.

331  
00:08:50,429 --> 00:08:51,998  
The team answered questions

332  
00:08:51,998 --> 00:08:54,066  
directly and honestly

333  
00:08:54,066 --> 00:08:56,235  
and humbly accepted constructive

334  
00:08:56,235 --> 00:08:58,971  
criticism and feedback.

335  
00:08:58,971 --> 00:08:59,939  
And they did so while

336  
00:08:59,939 --> 00:09:01,207  
remarkably surviving

337  
00:09:01,207 --> 00:09:04,644  
a 6.4 magnitude earthquake.

338  
00:09:04,644 --> 00:09:05,645

Much congratulations to

339

00:09:05,645 --> 00:09:07,847  
the winning team, thank you.

340

00:09:12,351 --> 00:09:13,653  
>> Hello I'm John Hochheimer,

341

00:09:13,653 --> 00:09:14,754  
President of the National

342

00:09:14,754 --> 00:09:16,522  
Association of Rocketry.

343

00:09:16,522 --> 00:09:17,924  
We can probably all remember

344

00:09:17,924 --> 00:09:19,759  
at least one parent, teacher,

345

00:09:19,759 --> 00:09:21,027  
guest speaker or mentor

346

00:09:21,027 --> 00:09:21,961  
who inspired us to do

347

00:09:21,961 --> 00:09:23,362  
something really cool.

348

00:09:23,362 --> 00:09:24,964  
That is why it is so important

349

00:09:24,964 --> 00:09:26,165  
for our Student Launch teams

350

00:09:26,165 --> 00:09:26,933  
to reach out,

351  
00:09:26,933 --> 00:09:28,200  
teach and inspire

352  
00:09:28,200 --> 00:09:29,302  
the next generation--

353  
00:09:29,302 --> 00:09:31,170  
the Artemis generation.

354  
00:09:31,170 --> 00:09:32,305  
Combined, this year's student

355  
00:09:32,305 --> 00:09:33,839  
launch teams reached, taught,

356  
00:09:33,839 --> 00:09:34,607  
and worked with more

357  
00:09:34,607 --> 00:09:36,943  
than 47,000 people

358  
00:09:36,943 --> 00:09:38,945  
at over 280 events.

359  
00:09:38,945 --> 00:09:40,212  
It is my honor to recognize

360  
00:09:40,212 --> 00:09:41,714  
the top three STEM engagement

361  
00:09:41,714 --> 00:09:43,082  
teams from both our Middle

362  
00:09:43,082 --> 00:09:44,350  
and High School Division,

363  
00:09:44,350 --> 00:09:45,051

and in our College

364

00:09:45,051 --> 00:09:47,420  
and University Division.

365

00:09:47,420 --> 00:09:47,920  
In the Middle

366

00:09:47,920 --> 00:09:49,021  
and High School Division,

367

00:09:49,021 --> 00:09:50,022  
finishing third is

368

00:09:50,022 --> 00:09:51,390  
Oak Park High School,

369

00:09:51,390 --> 00:09:53,359  
Oak Park, California.

370

00:09:56,262 --> 00:09:57,396  
Finishing second is

371

00:09:57,396 --> 00:09:58,664  
the Notre Dame Academy

372

00:09:58,664 --> 00:10:00,800  
of Los Angeles, California.

373

00:10:04,603 --> 00:10:05,438  
In first place,

374

00:10:05,438 --> 00:10:08,140  
receiving a \$1,000 prize,

375

00:10:08,140 --> 00:10:09,508  
is Madison West High School

376  
00:10:09,508 --> 00:10:11,677  
from Madison, Wisconsin.

377  
00:10:11,677 --> 00:10:12,745  
Madison West reached over

378  
00:10:12,745 --> 00:10:14,313  
6,000 participants.

379  
00:10:14,313 --> 00:10:15,047  
The team has had

380  
00:10:15,047 --> 00:10:16,649  
a Halloween Family Science night

381  
00:10:16,649 --> 00:10:17,650  
and participated in

382  
00:10:17,650 --> 00:10:19,518  
the Wisconsin Science Fest.

383  
00:10:19,518 --> 00:10:20,353  
Congratulations,

384  
00:10:20,353 --> 00:10:23,689  
Madison West High School.

385  
00:10:23,689 --> 00:10:24,824  
In the college division,

386  
00:10:24,824 --> 00:10:25,524  
finishing third

387  
00:10:25,524 --> 00:10:26,625  
is Citrus College

388  
00:10:26,625 --> 00:10:30,730

from Glendora, California.

389

00:10:30,730 --> 00:10:32,198

In second place is

390

00:10:32,198 --> 00:10:33,899

University of Puerto Rico,

391

00:10:33,899 --> 00:10:37,636

Mayaguez Campus.

392

00:10:37,636 --> 00:10:39,171

In first place of this year's

393

00:10:39,171 --> 00:10:41,140

College and University Division

394

00:10:41,140 --> 00:10:43,576

and receiving the \$1,000 prize,

395

00:10:43,576 --> 00:10:45,644

the honor goes to

396

00:10:45,644 --> 00:10:47,146

Oregon State University

397

00:10:47,146 --> 00:10:49,115

from Corvallis, Oregon.

398

00:10:49,115 --> 00:10:51,484

OSU conducted 15 STEM activities

399

00:10:51,484 --> 00:10:52,651

with various elementary,

400

00:10:52,651 --> 00:10:53,552

middle and high school

401  
00:10:53,552 --> 00:10:55,287  
students and educators.

402  
00:10:55,287 --> 00:10:56,489  
The team coordinated several

403  
00:10:56,489 --> 00:10:57,890  
events and activities ranging

404  
00:10:57,890 --> 00:10:59,392  
from chemical decomposition

405  
00:10:59,392 --> 00:11:01,427  
experiments to straw rockets.

406  
00:11:01,427 --> 00:11:02,595  
Congratulations,

407  
00:11:02,595 --> 00:11:04,030  
Oregon State University

408  
00:11:04,030 --> 00:11:06,665  
and thank you, NASA.

409  
00:11:06,665 --> 00:11:07,933  
Hello this is John Hochheimer

410  
00:11:07,933 --> 00:11:08,834  
with a sad postscript

411  
00:11:08,834 --> 00:11:10,569  
to my previous message.

412  
00:11:10,569 --> 00:11:12,338  
Since the time that the judges

413  
00:11:12,338 --> 00:11:13,239

selected the winners

414

00:11:13,239 --> 00:11:14,373  
of the STEM Engagement Award

415

00:11:14,373 --> 00:11:14,974  
this year,

416

00:11:14,974 --> 00:11:18,210  
Dr. Nancy Squires passed away.

417

00:11:18,210 --> 00:11:19,245  
Dr. Squires was

418

00:11:19,245 --> 00:11:20,346  
a decorated professor

419

00:11:20,346 --> 00:11:21,647  
at Oregon State University

420

00:11:21,647 --> 00:11:22,748  
and a long time advocate

421

00:11:22,748 --> 00:11:24,417  
for their rocketry teams.

422

00:11:24,417 --> 00:11:25,684  
Nancy was a friend

423

00:11:25,684 --> 00:11:27,153  
and inspiration to many of us

424

00:11:27,153 --> 00:11:29,188  
in the rocketry community.

425

00:11:29,188 --> 00:11:30,423  
She exemplified being that

426  
00:11:30,423 --> 00:11:31,791  
one teacher who challenged

427  
00:11:31,791 --> 00:11:32,591  
many students

428  
00:11:32,591 --> 00:11:33,726  
and long-time rocketeers

429  
00:11:33,726 --> 00:11:35,461  
to do cool things.

430  
00:11:35,461 --> 00:11:36,262  
It is bittersweet

431  
00:11:36,262 --> 00:11:37,029  
and serendipitous

432  
00:11:37,029 --> 00:11:38,264  
that Dr. Squires will

433  
00:11:38,264 --> 00:11:39,165  
not get to share in

434  
00:11:39,165 --> 00:11:40,566  
the accomplishment of OSU

435  
00:11:40,566 --> 00:11:42,368  
winning the award this year.

436  
00:11:42,368 --> 00:11:43,436  
The National Association

437  
00:11:43,436 --> 00:11:45,171  
of Rocketry sponsors

438  
00:11:45,171 --> 00:11:46,472

the STEM Engagement Awards.

439

00:11:46,472 --> 00:11:47,440

And I want to announce that

440

00:11:47,440 --> 00:11:49,542

we are providing the \$1,000

441

00:11:49,542 --> 00:11:50,943

College Division Award

442

00:11:50,943 --> 00:11:53,345

in memory of Dr. Nancy Squires.

443

00:11:53,345 --> 00:11:55,214

Thank you.

444

00:12:02,321 --> 00:12:03,889

>> Hello, I'm Johnny Stephenson,

445

00:12:03,889 --> 00:12:05,024

I'm Director of the Office

446

00:12:05,024 --> 00:12:06,258

of Strategic Analysis

447

00:12:06,258 --> 00:12:07,927

and Communications at NASA's

448

00:12:07,927 --> 00:12:09,862

Marshall Space Flight Center.

449

00:12:09,862 --> 00:12:10,796

I'm privileged this year

450

00:12:10,796 --> 00:12:12,131

to announce the social media

451  
00:12:12,131 --> 00:12:13,499  
award winners for our

452  
00:12:13,499 --> 00:12:15,601  
Student Launch Competition.

453  
00:12:15,601 --> 00:12:16,469  
Social Media plays

454  
00:12:16,469 --> 00:12:18,003  
a significant role

455  
00:12:18,003 --> 00:12:19,505  
in NASA and our spaceflight

456  
00:12:19,505 --> 00:12:20,706  
partner's ability

457  
00:12:20,706 --> 00:12:22,842  
to tell a story of Artemis,

458  
00:12:22,842 --> 00:12:23,809  
and to tell a story of our

459  
00:12:23,809 --> 00:12:25,077  
journey of exploration

460  
00:12:25,077 --> 00:12:26,045  
and discovery

461  
00:12:26,045 --> 00:12:27,746  
throughout the universe.

462  
00:12:27,746 --> 00:12:28,681  
This year, you've been

463  
00:12:28,681 --> 00:12:30,149

a part of that as well.

464

00:12:30,149 --> 00:12:30,916

You've been encouraged to

465

00:12:30,916 --> 00:12:33,119

the Student Launch Competition,

466

00:12:33,119 --> 00:12:34,220

to be able to use your own

467

00:12:34,220 --> 00:12:37,022

variety of platforms to inspire,

468

00:12:37,022 --> 00:12:38,691

educate, and literally

469

00:12:38,691 --> 00:12:40,593

to tell your own unique story

470

00:12:40,593 --> 00:12:41,660

of what you've gone through

471

00:12:41,660 --> 00:12:42,328

this year in

472

00:12:42,328 --> 00:12:44,563

the launch competition.

473

00:12:44,563 --> 00:12:45,464

Those of you that have told it

474

00:12:45,464 --> 00:12:46,665

the best have literally

475

00:12:46,665 --> 00:12:47,967

been able to bring folks,

476  
00:12:47,967 --> 00:12:49,301  
followers along with you

477  
00:12:49,301 --> 00:12:50,469  
as you took the journey

478  
00:12:50,469 --> 00:12:51,604  
so they felt like they were--

479  
00:12:51,604 --> 00:12:53,205  
they were there with you.

480  
00:12:53,205 --> 00:12:54,006  
This year, you were graded

481  
00:12:54,006 --> 00:12:55,341  
in three categories.

482  
00:12:55,341 --> 00:12:56,275  
Three things is

483  
00:12:56,275 --> 00:12:57,109  
what we looked at,

484  
00:12:57,109 --> 00:12:58,544  
and number one, we looked at

485  
00:12:58,544 --> 00:13:00,212  
how creative you were,

486  
00:13:00,212 --> 00:13:01,247  
number two, we looked at

487  
00:13:01,247 --> 00:13:02,648  
how consistent you were

488  
00:13:02,648 --> 00:13:03,816

in posting,

489

00:13:03,816 --> 00:13:04,717

and number three,

490

00:13:04,717 --> 00:13:06,752

we looked at the actual content.

491

00:13:06,752 --> 00:13:07,686

And in doing so,

492

00:13:07,686 --> 00:13:08,487

we'd like to announce

493

00:13:08,487 --> 00:13:09,822

the winners today,

494

00:13:09,822 --> 00:13:11,724

so let me do that now.

495

00:13:11,724 --> 00:13:13,259

I'll start with the high school

496

00:13:13,259 --> 00:13:15,561

and middle school categories.

497

00:13:15,561 --> 00:13:17,029

In third place goes

498

00:13:17,029 --> 00:13:18,797

to Minster Journeymen from

499

00:13:18,797 --> 00:13:21,867

Minster, Ohio, congratulations.

500

00:13:21,867 --> 00:13:23,269

In second place,

501  
00:13:23,269 --> 00:13:24,803  
goes to Oakton High School

502  
00:13:24,803 --> 00:13:26,705  
in Vienna, Virginia.

503  
00:13:26,705 --> 00:13:28,407  
Again, congratulations.

504  
00:13:28,407 --> 00:13:29,775  
And then first place

505  
00:13:29,775 --> 00:13:31,377  
is Madison West High School

506  
00:13:31,377 --> 00:13:33,812  
of Madison, Wisconsin.

507  
00:13:33,812 --> 00:13:35,881  
In the College Division,

508  
00:13:35,881 --> 00:13:36,782  
third place goes

509  
00:13:36,782 --> 00:13:38,117  
to the Rocket Owls

510  
00:13:38,117 --> 00:13:39,151  
from Citrus College

511  
00:13:39,151 --> 00:13:41,387  
in Glendora, California.

512  
00:13:41,387 --> 00:13:42,821  
Second place goes to

513  
00:13:42,821 --> 00:13:43,989

the North Carolina State

514

00:13:43,989 --> 00:13:45,357

Wolf Pack.

515

00:13:45,357 --> 00:13:47,126

Coming in first place

516

00:13:47,126 --> 00:13:49,195

is those Purdue Boilermakers.

517

00:13:49,195 --> 00:13:51,830

West Lafayette, Indiana.

518

00:13:51,830 --> 00:13:52,765

Congratulations to

519

00:13:52,765 --> 00:13:54,300

all of your teams.

520

00:13:54,300 --> 00:13:55,768

Purdue, you went further

521

00:13:55,768 --> 00:13:57,002

than anyone else.

522

00:13:57,002 --> 00:13:58,637

You literally took teams along

523

00:13:58,637 --> 00:14:00,406

with you on the journey.

524

00:14:00,406 --> 00:14:01,640

You actually carried them out

525

00:14:01,640 --> 00:14:03,676

to the launch site, you, uh,

526

00:14:03,676 --> 00:14:05,211  
carried them along in your way,

527

00:14:05,211 --> 00:14:05,878  
you brought them

528

00:14:05,878 --> 00:14:07,146  
to STEM events.

529

00:14:07,146 --> 00:14:07,980  
Uh, the next thing

530

00:14:07,980 --> 00:14:08,714  
I'm looking for is

531

00:14:08,714 --> 00:14:09,949  
putting them in the rocket

532

00:14:09,949 --> 00:14:10,683  
so they can actually

533

00:14:10,683 --> 00:14:12,251  
see the launch as well.

534

00:14:12,251 --> 00:14:13,619  
You did-- you did all of it

535

00:14:13,619 --> 00:14:14,420  
really, really well,

536

00:14:14,420 --> 00:14:16,055  
so congratulations.

537

00:14:16,055 --> 00:14:17,690  
I'd also make a special mention

538

00:14:17,690 --> 00:14:19,425

to Wichita State University

539

00:14:19,425 --> 00:14:20,392  
as well.

540

00:14:20,392 --> 00:14:22,661  
Um, during this year of COVID,

541

00:14:22,661 --> 00:14:24,363  
unprecedented year, uh,

542

00:14:24,363 --> 00:14:25,231  
it's been hard for teams

543

00:14:25,231 --> 00:14:26,498  
to get together.

544

00:14:26,498 --> 00:14:28,033  
What, uh, Wichita State did

545

00:14:28,033 --> 00:14:28,867  
was they put together

546

00:14:28,867 --> 00:14:30,336  
a launch hour where teams

547

00:14:30,336 --> 00:14:31,136  
got together and they

548

00:14:31,136 --> 00:14:32,838  
shared their own stories.

549

00:14:32,838 --> 00:14:33,939  
And so that is creative

550

00:14:33,939 --> 00:14:35,274  
in and of itself.

551  
00:14:35,274 --> 00:14:36,175  
So we appreciate your

552  
00:14:36,175 --> 00:14:37,943  
participation, we really

553  
00:14:37,943 --> 00:14:38,978  
appreciate what you do,

554  
00:14:38,978 --> 00:14:40,446  
we appreciate your love

555  
00:14:40,446 --> 00:14:42,715  
for space, your love for NASA.

556  
00:14:42,715 --> 00:14:44,149  
You set the bar high,

557  
00:14:44,149 --> 00:14:45,084  
and high is where NASA

558  
00:14:45,084 --> 00:14:47,152  
wants to go, thank you.

559  
00:14:51,423 --> 00:14:51,991  
>> Hi!

560  
00:14:51,991 --> 00:14:52,691  
I'm Tracie Prater,

561  
00:14:52,691 --> 00:14:53,692  
an engineer at NASA's

562  
00:14:53,692 --> 00:14:55,127  
Marshall Space Flight Center.

563  
00:14:55,127 --> 00:14:55,995

And I'm here to present

564

00:14:55,995 --> 00:14:57,162

this years Student Launch

565

00:14:57,162 --> 00:14:59,365

Competition Altitude Award.

566

00:14:59,365 --> 00:15:01,100

Whether launching model rockets

567

00:15:01,100 --> 00:15:02,234

or big rockets like

568

00:15:02,234 --> 00:15:04,436

NASA's Space Launch System,

569

00:15:04,436 --> 00:15:05,137

everyone always

570

00:15:05,137 --> 00:15:06,438

asks the question,

571

00:15:06,438 --> 00:15:08,274

how high does it go?

572

00:15:08,274 --> 00:15:09,275

In past years,

573

00:15:09,275 --> 00:15:10,175

we've challenged teams

574

00:15:10,175 --> 00:15:11,076

to send their rockets

575

00:15:11,076 --> 00:15:12,778

to an altitude of one mile,

576  
00:15:12,778 --> 00:15:15,080  
5,290 feet.

577  
00:15:15,080 --> 00:15:16,782  
In 2019, we changed the rules

578  
00:15:16,782 --> 00:15:18,284  
a little, challenging teams

579  
00:15:18,284 --> 00:15:20,552  
to go a step further.

580  
00:15:20,552 --> 00:15:21,687  
Teams must now predict

581  
00:15:21,687 --> 00:15:22,488  
the altitude of their

582  
00:15:22,488 --> 00:15:23,889  
rocket using modeling

583  
00:15:23,889 --> 00:15:26,058  
and simulation software.

584  
00:15:26,058 --> 00:15:27,126  
They submit their predicted

585  
00:15:27,126 --> 00:15:28,127  
altitude as part of

586  
00:15:28,127 --> 00:15:29,395  
their preliminary design

587  
00:15:29,395 --> 00:15:31,363  
review package long before

588  
00:15:31,363 --> 00:15:31,997

they've built their

589

00:15:31,997 --> 00:15:33,866  
competition rockets.

590

00:15:33,866 --> 00:15:35,301  
The team in each division

591

00:15:35,301 --> 00:15:37,069  
that comes closest to matching

592

00:15:37,069 --> 00:15:38,504  
their prediction wins

593

00:15:38,504 --> 00:15:40,873  
the coveted Altitude Award.

594

00:15:40,873 --> 00:15:41,640  
Since we couldn't have our

595

00:15:41,640 --> 00:15:43,909  
in-person launch day events

596

00:15:43,909 --> 00:15:45,844  
due to COVID-19,

597

00:15:45,844 --> 00:15:47,813  
we use the teams' altitudes

598

00:15:47,813 --> 00:15:49,181  
from their test launches

599

00:15:49,181 --> 00:15:50,015  
that they submitted

600

00:15:50,015 --> 00:15:51,150  
as part of their flight

601  
00:15:51,150 --> 00:15:53,152  
readiness review packages.

602  
00:15:53,152 --> 00:15:54,153  
And now the winners

603  
00:15:54,153 --> 00:15:57,256  
of each division.

604  
00:15:57,256 --> 00:15:59,224  
Micah, come on!

605  
00:16:00,592 --> 00:16:10,436  
[ music ]

606  
00:16:10,436 --> 00:16:11,136  
In the Middle School,

607  
00:16:11,136 --> 00:16:13,272  
High School Division,

608  
00:16:13,272 --> 00:16:14,273  
third place goes to

609  
00:16:14,273 --> 00:16:15,674  
Creekview High School

610  
00:16:15,674 --> 00:16:17,843  
from Canton, Georgia.

611  
00:16:17,843 --> 00:16:19,011  
Second place goes to

612  
00:16:19,011 --> 00:16:20,879  
Nativity Catholic School

613  
00:16:20,879 --> 00:16:22,715

of Burke, Virginia.

614

00:16:22,715 --> 00:16:23,749

In space flight,

615

00:16:23,749 --> 00:16:24,817

one foot can make

616

00:16:24,817 --> 00:16:26,352

a big difference.

617

00:16:26,352 --> 00:16:27,553

In this competition,

618

00:16:27,553 --> 00:16:28,654

it was the difference between

619

00:16:28,654 --> 00:16:31,056

first and second place.

620

00:16:31,056 --> 00:16:32,491

In first place,

621

00:16:32,491 --> 00:16:34,460

Sierra Vista Middle School

622

00:16:34,460 --> 00:16:36,428

of Irvine, California.

623

00:16:36,428 --> 00:16:39,665

Congratulations!

624

00:16:39,665 --> 00:16:40,499

The College Division

625

00:16:40,499 --> 00:16:42,768

was also a close battle.

626  
00:16:42,768 --> 00:16:44,803  
Finishing in third place,

627  
00:16:44,803 --> 00:16:46,372  
Northwestern University

628  
00:16:46,372 --> 00:16:48,774  
of Evanston, Illinois.

629  
00:16:48,774 --> 00:16:50,309  
In second place,

630  
00:16:50,309 --> 00:16:51,877  
University of Tennessee

631  
00:16:51,877 --> 00:16:53,846  
in Knoxville, Tennessee.

632  
00:16:53,846 --> 00:16:55,347  
And in first place,

633  
00:16:55,347 --> 00:16:57,149  
University of Florida

634  
00:16:57,149 --> 00:16:59,718  
in Gainesville, Florida.

635  
00:16:59,718 --> 00:17:00,819  
University of Florida

636  
00:17:00,819 --> 00:17:02,521  
missed their target altitude

637  
00:17:02,521 --> 00:17:04,823  
by only 50 feet!

638  
00:17:04,823 --> 00:17:06,024

Congratulations to

639

00:17:06,024 --> 00:17:08,060

all these teams.

640

00:17:12,865 --> 00:17:13,665

>> Having a rocket that

641

00:17:13,665 --> 00:17:15,667

flies high, performs well,

642

00:17:15,667 --> 00:17:16,902

and lands safely is

643

00:17:16,902 --> 00:17:18,003

the goal of NASA's

644

00:17:18,003 --> 00:17:20,072

Student Launch Competition.

645

00:17:20,072 --> 00:17:21,240

But having a rocket that

646

00:17:21,240 --> 00:17:22,975

also looks really cool

647

00:17:22,975 --> 00:17:23,909

means having a rocket

648

00:17:23,909 --> 00:17:25,944

that is often remembered.

649

00:17:25,944 --> 00:17:27,045

Hi, I'm June Malone,

650

00:17:27,045 --> 00:17:28,213

the Communications Director at

651  
00:17:28,213 --> 00:17:29,615  
NASA's Marshall Space Flight

652  
00:17:29,615 --> 00:17:31,049  
Center, here to announce

653  
00:17:31,049 --> 00:17:33,051  
this year's Student Launch

654  
00:17:33,051 --> 00:17:35,888  
Best-looking Rocket Award.

655  
00:17:35,888 --> 00:17:37,689  
Teams put hours into the look

656  
00:17:37,689 --> 00:17:39,491  
and design of their rockets,

657  
00:17:39,491 --> 00:17:41,293  
fueling their team spirit

658  
00:17:41,293 --> 00:17:42,428  
and spreading happiness

659  
00:17:42,428 --> 00:17:44,229  
at the launch field.

660  
00:17:44,229 --> 00:17:45,697  
The Best-looking Rocket Award

661  
00:17:45,697 --> 00:17:47,199  
is given to teams in both

662  
00:17:47,199 --> 00:17:49,568  
the Middle/High School Division,

663  
00:17:49,568 --> 00:17:51,336

and the College/University

664

00:17:51,336 --> 00:17:53,705

Division, and it is voted on

665

00:17:53,705 --> 00:17:56,542

by the competitors themselves.

666

00:17:56,542 --> 00:17:58,043

The winners in the Middle/

667

00:17:58,043 --> 00:18:00,379

High School Division are...

668

00:18:00,379 --> 00:18:03,282

in third place for a tie,

669

00:18:03,282 --> 00:18:05,184

East Fairmont Middle School

670

00:18:05,184 --> 00:18:07,719

of Fairmont, West Virginia.

671

00:18:07,719 --> 00:18:09,521

And Minster Journeymen

672

00:18:09,521 --> 00:18:11,857

of Minster, Ohio.

673

00:18:13,158 --> 00:18:14,927

In second place,

674

00:18:14,927 --> 00:18:17,696

Sylvania Northview High School

675

00:18:17,696 --> 00:18:19,765

of Sylvania, Ohio.

676  
00:18:21,700 --> 00:18:23,702  
And in first place,

677  
00:18:23,702 --> 00:18:25,471  
Oak Park High School

678  
00:18:25,471 --> 00:18:28,373  
of Oak Park, California.

679  
00:18:28,373 --> 00:18:30,442  
Congratulations.

680  
00:18:31,577 --> 00:18:32,811  
This year's winner--

681  
00:18:32,811 --> 00:18:34,146  
winners in the College/

682  
00:18:34,146 --> 00:18:36,248  
University Division are,

683  
00:18:36,248 --> 00:18:39,551  
in third place for a tie,

684  
00:18:39,551 --> 00:18:40,752  
Purdue University

685  
00:18:40,752 --> 00:18:43,288  
of West Lafayette, Indiana

686  
00:18:43,288 --> 00:18:44,923  
and Vanderbilt University

687  
00:18:44,923 --> 00:18:47,292  
of Nashville, Tennessee.

688  
00:18:48,894 --> 00:18:51,897

In second place, Citrus College

689

00:18:51,897 --> 00:18:53,899  
of Glendora, California.

690

00:18:56,635 --> 00:18:58,804  
And in first place,

691

00:18:58,804 --> 00:19:00,372  
University of Cincinnati

692

00:19:00,372 --> 00:19:02,341  
in Ohio.

693

00:19:03,408 --> 00:19:04,409  
Congratulations to

694

00:19:04,409 --> 00:19:06,645  
all of our teams.

695

00:19:10,549 --> 00:19:12,651  
>> Hi, I'm Kevin Mcghaw,

696

00:19:12,651 --> 00:19:14,086  
the Director of NASA's

697

00:19:14,086 --> 00:19:15,888  
Southeast Regional

698

00:19:15,888 --> 00:19:17,623  
STEM Engagement Office,

699

00:19:17,623 --> 00:19:19,358  
where we lead activities at both

700

00:19:19,358 --> 00:19:21,093  
Marshall's Space Flight Center

701  
00:19:21,093 --> 00:19:23,161  
and Stennis Space Center.

702  
00:19:23,161 --> 00:19:24,229  
And I'm here to announce this

703  
00:19:24,229 --> 00:19:25,797  
year's Student Launch winner

704  
00:19:25,797 --> 00:19:29,001  
of the Team Spirit Award.

705  
00:19:29,001 --> 00:19:30,135  
Teams may be remembered

706  
00:19:30,135 --> 00:19:31,003  
for winning, but they're

707  
00:19:31,003 --> 00:19:33,071  
loved by their fans

708  
00:19:33,071 --> 00:19:34,072  
for their character

709  
00:19:34,072 --> 00:19:35,641  
and their spirit.

710  
00:19:35,641 --> 00:19:37,009  
That team spirit formed by

711  
00:19:37,009 --> 00:19:38,810  
late nights in the lab,

712  
00:19:38,810 --> 00:19:39,811  
technical challenges

713  
00:19:39,811 --> 00:19:41,113

in the field,

714

00:19:41,113 --> 00:19:43,248  
and post-launch celebrations

715

00:19:43,248 --> 00:19:45,150  
of every form and fashion

716

00:19:45,150 --> 00:19:46,018  
are the glue that

717

00:19:46,018 --> 00:19:48,820  
holds teams together.

718

00:19:48,820 --> 00:19:50,122  
The Best Team Spirit Award

719

00:19:50,122 --> 00:19:52,157  
is voted on and chosen by

720

00:19:52,157 --> 00:19:54,626  
the competitors themselves.

721

00:19:54,626 --> 00:19:56,161  
It is given to teams

722

00:19:56,161 --> 00:19:57,162  
in both the Middle

723

00:19:57,162 --> 00:19:58,797  
and High School Division,

724

00:19:58,797 --> 00:20:00,065  
and the College

725

00:20:00,065 --> 00:20:02,167  
and University Division.

726  
00:20:02,167 --> 00:20:03,769  
This year's winners

727  
00:20:03,769 --> 00:20:05,571  
in the Middle School Division

728  
00:20:05,571 --> 00:20:08,307  
are in third place, Engineering

729  
00:20:08,307 --> 00:20:10,008  
and Technologies Academy

730  
00:20:10,008 --> 00:20:12,210  
at Roosevelt High School

731  
00:20:12,210 --> 00:20:14,446  
in San Antonio, Texas.

732  
00:20:14,446 --> 00:20:16,582  
Congratulations.

733  
00:20:18,216 --> 00:20:19,718  
In second place,

734  
00:20:19,718 --> 00:20:21,420  
the Sylvania Northview

735  
00:20:21,420 --> 00:20:24,289  
High School in Sylvania, Ohio.

736  
00:20:24,289 --> 00:20:26,458  
Congratulations to you all.

737  
00:20:28,961 --> 00:20:31,330  
And in first place,

738  
00:20:31,330 --> 00:20:33,298

Harrison Central School District

739

00:20:33,298 --> 00:20:35,200  
of Harrison, New York.

740

00:20:35,200 --> 00:20:37,235  
Congratulations, Harrison

741

00:20:37,235 --> 00:20:39,438  
Central School District.

742

00:20:42,441 --> 00:20:42,975  
In the College

743

00:20:42,975 --> 00:20:44,977  
and University Division,

744

00:20:44,977 --> 00:20:47,179  
we have a tie for second place

745

00:20:47,179 --> 00:20:48,647  
between the University

746

00:20:48,647 --> 00:20:50,515  
of California Davis and

747

00:20:50,515 --> 00:20:52,517  
the University of Notre Dame

748

00:20:52,517 --> 00:20:54,753  
of South Bend, Indiana.

749

00:20:54,753 --> 00:20:57,122  
Congratulations to both teams.

750

00:20:58,857 --> 00:21:00,425  
And the winner in the College

751  
00:21:00,425 --> 00:21:02,160  
and University Division,

752  
00:21:02,160 --> 00:21:04,062  
number one first place is

753  
00:21:04,062 --> 00:21:06,231  
the University of Califan--

754  
00:21:06,231 --> 00:21:09,034  
California, Santa Cruz.

755  
00:21:09,034 --> 00:21:11,336  
Congratulations to you all.

756  
00:21:12,704 --> 00:21:14,339  
And let me just say in closing,

757  
00:21:14,339 --> 00:21:15,273  
congratulations to

758  
00:21:15,273 --> 00:21:16,141  
all of the teams

759  
00:21:16,141 --> 00:21:17,509  
that competed this year.

760  
00:21:17,509 --> 00:21:19,911  
Thank you so much.

761  
00:21:23,415 --> 00:21:24,483  
>> NASA's Student Launch

762  
00:21:24,483 --> 00:21:25,717  
Competition is not

763  
00:21:25,717 --> 00:21:27,786

for the faint of heart.

764

00:21:27,786 --> 00:21:28,720

Teams not only must

765

00:21:28,720 --> 00:21:29,921

design a high powered,

766

00:21:29,921 --> 00:21:31,156

amateur rocket and figure out

767

00:21:31,156 --> 00:21:32,124

how to accomplish

768

00:21:32,124 --> 00:21:33,792

the payload challenge,

769

00:21:33,792 --> 00:21:34,559

fitting that payload

770

00:21:34,559 --> 00:21:35,994

within their rocket,

771

00:21:35,994 --> 00:21:37,029

but they must also submit

772

00:21:37,029 --> 00:21:38,196

multiple design review

773

00:21:38,196 --> 00:21:39,498

documents that can easily

774

00:21:39,498 --> 00:21:42,067

total over 1,000 pages,

775

00:21:42,067 --> 00:21:43,135

and give multiple

776  
00:21:43,135 --> 00:21:45,103  
presentations to NASA

777  
00:21:45,103 --> 00:21:47,739  
and rocketry experts.

778  
00:21:47,739 --> 00:21:48,974  
These milestones ensure that

779  
00:21:48,974 --> 00:21:50,342  
the teams making necessary

780  
00:21:50,342 --> 00:21:52,177  
progress toward their goal

781  
00:21:52,177 --> 00:21:53,045  
and that their work is

782  
00:21:53,045 --> 00:21:55,414  
being done in a safe manner.

783  
00:21:55,414 --> 00:21:56,515  
Experienced teams

784  
00:21:56,515 --> 00:21:57,816  
know the challenge

785  
00:21:57,816 --> 00:22:00,318  
and can begin to prepare.

786  
00:22:00,318 --> 00:22:01,286  
For our rookie teams,

787  
00:22:01,286 --> 00:22:03,388  
the experiences and challenges

788  
00:22:03,388 --> 00:22:05,590

are brand new.

789

00:22:05,590 --> 00:22:06,725

That's why we recognize

790

00:22:06,725 --> 00:22:08,393

our new teams in the College

791

00:22:08,393 --> 00:22:10,362

and University Division

792

00:22:10,362 --> 00:22:12,964

with the Rookie Award.

793

00:22:12,964 --> 00:22:13,932

This year's competition

794

00:22:13,932 --> 00:22:16,034

had eight rookie teams.

795

00:22:16,034 --> 00:22:17,269

Finishing third is

796

00:22:17,269 --> 00:22:18,036

the University of

797

00:22:18,036 --> 00:22:20,405

Texas, Arlington.

798

00:22:20,405 --> 00:22:21,707

Our second place rookie team

799

00:22:21,707 --> 00:22:22,541

is the University of

800

00:22:22,541 --> 00:22:25,377

California, Los Angeles.

801  
00:22:25,377 --> 00:22:28,180  
And winning the 2020 Student

802  
00:22:28,180 --> 00:22:30,048  
Launch Rookie Award is

803  
00:22:30,048 --> 00:22:31,416  
the University of

804  
00:22:31,416 --> 00:22:34,086  
Puerto Rico, Mayaguez.

805  
00:22:34,086 --> 00:22:36,088  
Congratulations.

806  
00:22:40,325 --> 00:22:41,393  
The Judge's Choice award

807  
00:22:41,393 --> 00:22:42,661  
is selected by a panel of

808  
00:22:42,661 --> 00:22:44,730  
NASA judges and given to

809  
00:22:44,730 --> 00:22:45,931  
the team that has the best

810  
00:22:45,931 --> 00:22:48,433  
combination of documentation,

811  
00:22:48,433 --> 00:22:50,202  
payload innovation,

812  
00:22:50,202 --> 00:22:52,637  
vehicle design and construction,

813  
00:22:52,637 --> 00:22:54,840

and student engagement.

814

00:22:54,840 --> 00:22:56,108

All of the teams have put in

815

00:22:56,108 --> 00:22:57,509

a tremendous amount of work

816

00:22:57,509 --> 00:22:59,211

this year and although

817

00:22:59,211 --> 00:23:01,079

the COVID-19 prevented teams

818

00:23:01,079 --> 00:23:03,115

from travelling to Huntsville,

819

00:23:03,115 --> 00:23:04,416

every team should be proud of

820

00:23:04,416 --> 00:23:06,284

finishing the program through

821

00:23:06,284 --> 00:23:09,187

these unprecedented times.

822

00:23:09,187 --> 00:23:11,056

Third place is a tie between

823

00:23:11,056 --> 00:23:13,058

Madison West High School

824

00:23:13,058 --> 00:23:15,327

from Madison, Wisconsin

825

00:23:15,327 --> 00:23:17,696

and Nativity Catholic School

826  
00:23:17,696 --> 00:23:20,799  
of Burke, Virginia.

827  
00:23:20,799 --> 00:23:22,234  
In second place is

828  
00:23:22,234 --> 00:23:23,602  
the Harrison Central

829  
00:23:23,602 --> 00:23:25,470  
School District from

830  
00:23:25,470 --> 00:23:27,405  
Harrison, New York.

831  
00:23:27,405 --> 00:23:29,441  
And in first place is

832  
00:23:29,441 --> 00:23:31,510  
Notre Dame Academy from

833  
00:23:31,510 --> 00:23:34,613  
Los Angeles, California.

834  
00:23:34,613 --> 00:23:35,714  
This award also comes

835  
00:23:35,714 --> 00:23:37,415  
with a \$2,000 award from

836  
00:23:37,415 --> 00:23:38,650  
the National Space Club,

837  
00:23:38,650 --> 00:23:40,285  
Huntsville.

838  
00:23:40,285 --> 00:23:41,620

This team's presentation

839

00:23:41,620 --> 00:23:42,587  
during the preliminary

840

00:23:45,957 --> 00:23:44,022  
design review,

841

00:23:45,957 --> 00:23:46,858  
and the flight readiness

842

00:23:46,858 --> 00:23:48,660  
review were thorough

843

00:23:48,660 --> 00:23:50,262  
and complete.

844

00:23:50,262 --> 00:23:51,997  
It was clear that this team

845

00:23:51,997 --> 00:23:53,999  
took extra precaution

846

00:23:53,999 --> 00:23:54,599  
and thought through

847

00:23:54,599 --> 00:23:55,901  
intricate designs when it

848

00:23:55,901 --> 00:23:59,237  
came to their payload.

849

00:23:59,237 --> 00:24:00,305  
The payload was geared toward

850

00:24:00,305 --> 00:24:02,874  
measuring cosmic ray detection

851  
00:24:02,874 --> 00:24:04,209  
and the device's ability

852  
00:24:04,209 --> 00:24:06,945  
to function while withstanding

853  
00:24:06,945 --> 00:24:08,947  
high acceleration.

854  
00:24:08,947 --> 00:24:10,282  
Congratulations on

855  
00:24:10,282 --> 00:24:12,517  
a job well done.

856  
00:24:17,155 --> 00:24:18,390  
>> I'm Steve Miley,

857  
00:24:18,390 --> 00:24:19,357  
the Associate Director

858  
00:24:19,357 --> 00:24:20,725  
of NASA's Marshall

859  
00:24:20,725 --> 00:24:22,160  
Space Flight Center,

860  
00:24:22,160 --> 00:24:23,328  
here to announce the final

861  
00:24:23,328 --> 00:24:24,930  
category of the NASA

862  
00:24:24,930 --> 00:24:26,798  
Student Launch Competition.

863  
00:24:26,798 --> 00:24:27,866

One of the agencies'

864

00:24:27,866 --> 00:24:30,802

Artemis Student Challenges.

865

00:24:30,802 --> 00:24:32,537

Student Launch competitors

866

00:24:32,537 --> 00:24:33,638

go through an intense,

867

00:24:33,638 --> 00:24:34,806

eight-month program that

868

00:24:34,806 --> 00:24:36,241

begins in August when

869

00:24:36,241 --> 00:24:38,210

we release the rules, and ends

870

00:24:38,210 --> 00:24:40,078

in April at Launch Day

871

00:24:40,078 --> 00:24:42,347

in Huntsville, Alabama.

872

00:24:42,347 --> 00:24:44,316

While we were unfortunately

873

00:24:44,316 --> 00:24:46,518

unable to host our students

874

00:24:46,518 --> 00:24:48,153

for the grand finale events

875

00:24:48,153 --> 00:24:50,055

due to COVID-19,

876  
00:24:50,055 --> 00:24:51,289  
we are excited that

877  
00:24:51,289 --> 00:24:52,924  
we are able to recognize

878  
00:24:52,924 --> 00:24:54,025  
the many accomplishments

879  
00:24:54,025 --> 00:24:54,926  
they achieved during

880  
00:24:54,926 --> 00:24:56,728  
late nights in the lab,

881  
00:24:56,728 --> 00:24:57,596  
long weekends

882  
00:24:57,596 --> 00:24:58,997  
on the launch field,

883  
00:24:58,997 --> 00:25:01,266  
and early morning presentations

884  
00:25:01,266 --> 00:25:03,401  
to rocketry experts.

885  
00:25:03,401 --> 00:25:04,436  
The program challenges

886  
00:25:04,436 --> 00:25:05,971  
young people to experience

887  
00:25:05,971 --> 00:25:07,973  
the life cycle of engineering

888  
00:25:07,973 --> 00:25:09,608

and hardware development.

889

00:25:09,608 --> 00:25:10,976

And only the top teams

890

00:25:10,976 --> 00:25:13,178

are selected to compete.

891

00:25:13,178 --> 00:25:14,846

It is my honor to announce

892

00:25:14,846 --> 00:25:17,515

the top three overall winners

893

00:25:17,515 --> 00:25:18,917

for the College and University

894

00:25:18,917 --> 00:25:21,753

Division of this year's NASA

895

00:25:21,753 --> 00:25:24,055

Student Launch Competition.

896

00:25:24,055 --> 00:25:25,523

Finishing in third place is

897

00:25:25,523 --> 00:25:27,425

a team whose school has a rich

898

00:25:27,425 --> 00:25:28,560

heritage with Marshall

899

00:25:28,560 --> 00:25:30,228

Space Flight Center.

900

00:25:30,228 --> 00:25:32,230

Congratulations the University

901  
00:25:32,230 --> 00:25:34,532  
of Alabama in Huntsville.

902  
00:25:35,867 --> 00:25:38,270  
Finishing in second place is

903  
00:25:38,270 --> 00:25:39,604  
a group of students who are

904  
00:25:39,604 --> 00:25:42,107  
no strangers to the top echelon

905  
00:25:42,107 --> 00:25:44,209  
of NASA's Student Launch.

906  
00:25:44,209 --> 00:25:46,745  
Congratulations to the 49ers

907  
00:25:46,745 --> 00:25:47,746  
of the University of

908  
00:25:47,746 --> 00:25:49,848  
North Carolina, Charlotte.

909  
00:25:52,150 --> 00:25:53,818  
The overall winner of this

910  
00:25:53,818 --> 00:25:55,654  
year's competition has made

911  
00:25:55,654 --> 00:25:57,789  
a habit of being at the top

912  
00:25:57,789 --> 00:25:59,658  
of the competition.

913  
00:25:59,658 --> 00:26:01,159

For the seventh time

914

00:26:01,159 --> 00:26:03,161  
in the past eight years,

915

00:26:03,161 --> 00:26:04,562  
the Vanderbilt Aerospace

916

00:26:04,562 --> 00:26:06,298  
Design Lab from Vanderbilt

917

00:26:06,298 --> 00:26:07,632  
University in Nashville,

918

00:26:07,632 --> 00:26:09,668  
Tennessee is the winner

919

00:26:09,668 --> 00:26:11,836  
of NASA's Student Launch.

920

00:26:11,836 --> 00:26:13,638  
En route to victory,

921

00:26:13,638 --> 00:26:15,740  
Vanderbilt also claimed awards

922

00:26:15,740 --> 00:26:17,943  
in multiple other categories.

923

00:26:17,943 --> 00:26:18,910  
Applying both

924

00:26:18,910 --> 00:26:20,245  
computer software and

925

00:26:20,245 --> 00:26:22,547  
the fundamentals of rocketry,

926  
00:26:22,547 --> 00:26:23,748  
The students consistently

927  
00:26:23,748 --> 00:26:25,617  
thought outside of the box

928  
00:26:25,617 --> 00:26:26,851  
and innovated the various

929  
00:26:26,851 --> 00:26:28,586  
systems of their rocket

930  
00:26:28,586 --> 00:26:30,221  
and payload.

931  
00:26:30,221 --> 00:26:31,222  
They truly have

932  
00:26:31,222 --> 00:26:32,891  
the right stuff.

933  
00:26:32,891 --> 00:26:34,025  
Congratulations,

934  
00:26:34,025 --> 00:26:36,594  
Vanderbilt University.

935  
00:26:36,594 --> 00:26:37,963  
And congratulations

936  
00:26:37,963 --> 00:26:39,397  
to all of our NASA

937  
00:26:39,397 --> 00:26:41,533  
Student Launch participants.

938  
00:26:41,533 --> 00:26:44,035

You did a tremendous job.

939

00:26:44,035 --> 00:26:46,871

You are the Artemis generation.

940

00:26:46,871 --> 00:26:48,073

And we at NASA,

941

00:26:48,073 --> 00:26:49,074

along with all of our

942

00:26:49,074 --> 00:26:51,109

challenge partners, can't wait