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00:00:03,949 --> 00:00:08,780

>>I'm Emily Glover, I'm a Senior at Georgia Tech, and I'm a Pathways Intern at NASA Armstrong.

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00:00:08,780 --> 00:00:13,740

This summer I'm working on heat shield research, specifically measuring the ultraviolet part

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00:00:13,740 --> 00:00:17,410

on the heat shield, so that we can make it less heavy for future flights.

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00:00:17,410 --> 00:00:22,120

The internship program at NASA Armstrong focuses on inspiring the next generation.

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00:00:22,120 --> 00:00:26,029

The projects we work on are important, but at the end of the day it's mostly about making

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00:00:26,029 --> 00:00:28,259

us into the best engineers that we can be.

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00:00:28,259 --> 00:00:32,160

>>I'm Jordan Conner, I'm a Senior at Embry-Riddle Aeronautical University, and I'm a Flight

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00:00:32,160 --> 00:00:36,140

Test Operations Engineering intern here at NASA Armstrong Flight Research Center.

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00:00:36,140 --> 00:00:40,210

I'm working on the Unmanned Aircraft Systems Integration into the National Air Space System

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00:00:40,210 --> 00:00:41,210

project.

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00:00:41,210 --> 00:00:44,660

We're trying to integrate small UAS into the human piloted airspace.

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00:00:44,660 --> 00:00:48,980  
And to do this, we're doing flight tests where we fly a manned aircraft towards this one

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00:00:48,980 --> 00:00:52,860  
and make sure that detect and avoid sensors are working, so that there is no midair collisions.

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00:00:52,860 --> 00:00:57,170  
What I do during these flights tests, I'm in the control room monitoring everything,

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00:00:57,170 --> 00:01:00,940  
making sure the autopilot is working correctly, the altitudes are correct, the flight plans

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00:01:00,940 --> 00:01:02,260  
are as we inputted them.

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00:01:02,260 --> 00:01:07,350  
The advice I'd give to someone wanting to intern here at NASA would be to get good grades,

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00:01:07,350 --> 00:01:12,040  
work hard in school, that's really important, however the most important thing is passion,

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00:01:12,040 --> 00:01:16,020  
drive, and people skills, because you'll be using that a lot, and it doesn't matter what

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00:01:16,020 --> 00:01:19,840  
your grades are, when you get into the work place it's about your people skills and how

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00:01:19,840 --> 00:01:22,000  
you can work in a team.

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00:02:38,209 --> 00:02:42,090  
>>My name is Sarah Estep and I am going to be  
a Senior at Morehead State University, and

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00:02:42,090 --> 00:02:46,670  
I'm majoring in Space Systems Engineering,  
and I am an intern here at NASA's Armstrong

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00:02:46,670 --> 00:02:47,769  
Flight Research Center.

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00:02:47,769 --> 00:02:54,129  
So I am an intern on the Mars Glider Swarm/PRANDTL-M  
projects and our goal is to be able to release

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00:02:54,129 --> 00:02:58,019  
a swarm of gliders in the Martian atmosphere  
to do atmospheric sensing.

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00:02:58,019 --> 00:03:01,560  
So to be able to test that, this summer, we  
wanted to be able to release multiple gliders

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00:03:01,560 --> 00:03:06,579  
from a weather balloon, and so, specifically  
I'm making the release system that's going

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00:03:06,579 --> 00:03:09,060  
to hold the gliders and release them here.

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00:03:09,060 --> 00:03:12,849  
So I've got to help a lot with laying out  
the actual molds and fabricating my gondola,

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00:03:12,849 --> 00:03:19,329  
so I was able to help with the epoxy and spread  
it out, help wrap the carbon fiber around

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00:03:19,329 --> 00:03:22,950

the mold, I got to do some sanding, some soldering, they've really let me help with every step

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00:03:22,950 --> 00:03:26,700

of the process and really helped walk me through it, so I've learned a lot about what goes

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00:03:26,700 --> 00:03:28,590

into actually making something here.

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00:03:28,590 --> 00:03:32,560

>>My name is Loren Newton, I'm going to be a first year Master's student at Stanford University,

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00:03:32,560 --> 00:03:36,670

studying aeronautics and astronautics, and I am a Pathways Co-op Intern in the Operations

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00:03:36,670 --> 00:03:38,480

Engineering Branch here at NASA Armstrong.

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00:03:38,480 --> 00:03:43,010

I'm working on the Life Support System for the X-59 Low-Boom Flight Demonstrator, essentially

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00:03:43,010 --> 00:03:47,609

the X-59 seeks to demonstrate quiet supersonic flight without those loud sonic booms that

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00:03:47,609 --> 00:03:50,690

have made overland supersonic flight infeasible in the past.

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00:03:50,690 --> 00:03:54,510

The life-support system revolves around making sure that we can get oxygen to sustain the

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00:03:54,510 --> 00:04:00,310

pilot at the inhospitable altitudes we'll

be flying at, up to 60,000 feet, both in the

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00:04:00,310 --> 00:04:04,090

aircraft, and God-forbid if the pilot should have to eject and descend to the ground.

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00:04:04,090 --> 00:04:08,859

My responsibilities include getting the system designed and tested, and this includes both

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00:04:08,859 --> 00:04:12,840

the mechanical design of several of the components in the system, as well as the logistics of

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00:04:12,840 --> 00:04:17,290

getting ready to send it over to Texas for pressure-chamber qualification testing.

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00:04:17,290 --> 00:04:21,459

My future plans, for the short-term, are to do a good job in whatever role I may be assigned

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00:04:21,459 --> 00:04:26,160

to next, I aim to complete my graduate studies at Stanford, and then continue to work in

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00:04:26,160 --> 00:04:29,710

flight test engineering, it's something I've wanted to work in ever since I was a kid,