Third Year in the life of a Commercial Space Student Payload
"Launch, Land, and Repeat!"

Bobby Russell, CEO/Founder Quest for Stars

Summary

Over the last 3 years, we brought along multiple student payloads to the conference to demonstrate the payload design. Those payloads ended up being signed by many VIPs and space dignitaries for good luck during the shows. So, what happened to the "ComSpace" payload after three years, you might ask?

This session takes you through "The third year and final year in the life" of a commercial space student payload. Join us as we soar over iconic mountain ranges, fly "danger close" to a missile base, stick some miraculous landings, and "go all-in" for recovery from some of the most expensive real estate in the world. And to top this off, we flew over the Neil Armstrong hall of Aeronautics and Astronautics on the fiftieth anniversary of the moon landing.

Now flown 8 times, these near space missions aboard this commercial space research payload utilized state-of-the-art social media tools, FPV streaming technologies, and rich 360VR media to extend its "science excitement reach" coast-to-coast.

Some notable payload accomplishments include:

- FPV live stream video of a Total Eclipse
  - First use of real-time 360VR FPV goggles from the stratosphere
  - Viewed in schools, universities, and at numerous "watch parties."

- FPV live stream video on "MoonDay" 2019
  - Edge of Space Facebook Live video coverage over West La Fayette, Indiai.
  - Two Payloads launched including Wi-Fi based "StratoBridge" HD video downlink with embedded telemetry.
  - Viewed in schools, universities, and at numerous "watch parties."

- SpaceX Iridium Next Launch
  - Live video broadcast during launch
  - Successful serving of "SpaceX" WiFi access from near space

- Launch, Land, & Repeat
  - Flights engaged teachers, students, their families, and members of the community for launch and recovery while increasing excitement for participatory exploration.

Mentoring and Partnerships:

In addition to the "ComSpace Payload," Quest for Stars continued sharing our technical advancements with other numerous non-profits this year. Most notably, our partnering efforts included collaboration on a space-weather glider concept with NASA Armstrong Research Center. We believe everyone in the educational realm should have access to low cost, flight-proven technologies and we are on a mission to share them.

Quest for Stars Program

Quest for Stars was founded as an educational non-profit in 2010. At the core of Quest for Stars' mission is the desire to expose students to the excitement and STEM opportunities regarding the Commercial Space industry. As public interest in commercial suborbital flights accelerates, it is imperative to mentor students while convincing schools to invest in STEM programs.

Quest for Stars is also a credentialed STEM media outlet, which allows us to bring a front row seat to historic space events into the classroom.

How does the Program Operate?

Quest for Stars is a citizen-science based STEM program that operates in two modes. The first mode of the program is an outreach program. The second mode of the program combines the outreach presentation with student design competitions, culminating in flight to the edge of space.

Flight Opportunities and Partnering:

Please contact us at contact@questforstars.com to arrange an educational outreach flight for your school or institution. We partner with schools, agencies, and numerous commercial space organizations to bring spaceflight into the classroom.