



LEGACY LEDGER

THE OFFICIAL MONTHLY E-NEWSLETTER OF LEGACY NAFC



*A Message from the NAFC Education Foundation
Alumni Coordinator, Sherri McKeen*

As the sun continues to shine brightly, our students and educators are preparing to turn in their beach towels for their backpacks. We hope you are still enjoying summer activities and extra time with family and friends. At the NAFC Education Foundation, we just wrapped up our 16th annual Golf Scramble. Thanks to our community's generous support, the funds raised will go a long way in supporting our NAFC school community. We have exciting updates and stories to share with you this month.

ALUMNI SPOTLIGHT

Do you follow our Alumni Spotlight legends on Facebook, or perhaps even know them personally? If so, you might have seen their exciting travels around the world. Steve Prince and his family spent two weeks in Rome and Florence. Doug Elmore and his wife have been to some of the great National Parks in Wyoming and Montana. And Kelly Watkins explored the Galapagos Islands with her extended family. Have you been on big adventures this summer? Let us vicariously "share the ride" and tag @LegacyNAFCAlumni in your adventures!

This month, we profile two grads whose escapades have been "out of this world" for decades. How? They've sent the fruits of their labors to the rarest destination of all... their work routinely goes into space!

Hall of Famers Mark Deuser (FCHS '70) and Rich Boling (NAHS '85) have logged thousands of earth miles themselves. On countless trips, they have traveled to the Kennedy Space Center in Florida, Houston's Johnson Space Center, Marshall Space Flight Center (Huntsville, Alabama) and Ames Research Center (Mountain View, California). All their travels have served to accomplish one goal: completing scientific missions on dozens of spaceflights.

How did they do all this, right here in Floyd County? Jump in and read their stories. You'll be wondering what space achievements their grandchildren will attain.

Introduction and profiles by Rex Bickers, FCHS '70

MARK DEUSER
FCHS 1970



Mark Deuser earned his B.S. degree in mechanical engineering in 1974 from the University of Evansville (UE). For over a decade, he worked in two corporate engineering positions. But he always dreamed of starting his own company as an engineering consultant. So, when a new job opening was posted... at Kentucky Fried Chicken, it was pure serendipity. KFC was seeking an engineer... one with enough experience... to be able to oversee "an unusual project." Quite unexpectedly, KFC had teamed up with NASA, serving as its commercial sponsor. Mark accepted the position in late 1984.

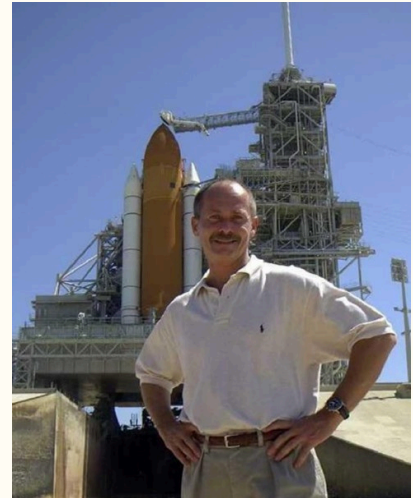
He first met John Vellinger, a freshman Purdue engineering student in early 1985. John had won a high school science competition, connected to NASA in something they called the Shuttle Student Involvement Program (SSIP). His contest entry didn't report on any actual experiments conducted. Rather, it asked just one question: "if a hen's egg was properly incubated in the zero gravity of space how would the unhatched chick develop?"

There was a need to identify private sector partners for SSIP. NASA made a connection to KFC; lo and behold, they said: "Count us in!" and They agreed to a critical funding commitment. Later that same year, Mark, a licensed professional engineer, was paired up with the student for the summer. The two of them rushed into designing and building "the space incubator" while learning (and meeting) NASA's exacting requirements. Despite a very rushed timeline, they got it all done on schedule. Perhaps more importantly, Mark viewed the project as the fundamental concept... the bedrock of the long-hoped-for business that he held in his dreams.

January 28, 1986: Mark, his protégé and their families were in the special VIP viewing area with the family of "teacher-in-space" Christa McAuliffe at the Kennedy Space Center launch site. Their incubator would soon be flying on an actual space shuttle. Then, tragedy: Challenger exploded in a ball of fire. No one could predict when space shuttle flights might resume. Mark was crushed, but undaunted. He knew he faced at least one big task.

NASA quickly prioritized a “do-over” for the SSIP projects. so. “Chix in Space” merited a complete re-design before it was re-built. But simultaneously, one huge task was grabbing Mark’s attention. It was time to convert his evolving ideas into a viable plan for a real company. In the 30 month span from February 1986 to the fall of 1988, Mark took on the most strenuous race of his entire life. He immersed himself in crafting a business plan for the company, uniquely devoted to designing and developing equipment for experiments in space. Remarkably, the space shuttle shutdown proved to be “just enough time” with NASA’s “Return to Flight” mission launching in September 1988. They set one more launch date before the end of the year... and then, in March 1989, “the experiment that launched our whole company” (as Mark calls it)... went up aboard shuttle Discovery.

A complete success, it became the stepping stone for the new start-up business. **SHOT**, an acronym of **S**pace **H**ardware **O**ptimization **T**echnology, was chosen as the company’s name in 1988; they incorporated in late 1989. Initially, their path wasn’t easy... a spaceflight business in a “flyover state.” They found a redeeming feature in yet another acronym: a program called **SBIR** (**S**mall **B**usiness **I**nnovative **R**esearch). It was crucially helpful in their early days. During its first nine years, SHOT was awarded sixteen SBIR contracts. In the next eight years, the successes grew to 25 awards, with over \$3 million in 2006. SHOT became Indiana’s leading recipient of SBIR awards, over a span of twenty-some years. Projects evolved and diversified... a mix of space missions, blended with medical, scientific and military projects. SHOT re-branded itself to Techshot in 2007 but kept its roots in space-related work.



After nearly 30 years as president and CEO, Mark transitioned from operations to become Director of the Board. He focused immediately on approaching potential buyers of the company. The outcome was the acquisition of Techshot by Redwire Space Corporation, a leading NASA partner, with twelve US facilities, plus two in Europe.

Mark married his high school sweetheart, Ruth Ann (Smith) Deuser, also a UE alumna (B.S., nursing). Their two adult children, Brett, FCHS 1997 and Lara, FCHS 1999 are both Purdue grads with engineering degrees. All five grandchildren are in the NAFC school system (and all are destined for Floyd Central). Mark and Ruth live in Floyds Knobs; they’re both former marathon runners and avid world travelers... to all seven continents!

Rich Boling has worked for SHOT, (2000-2007), for Techshot (2007-2021) and now for Redwire (2021-2024). Generally speaking, he’s held the same position all along; he just keeps getting better and better at doing it. And generally speaking... well, that’s exactly what he does... he speaks generally. He knows how to read an audience. He can explain almost anything, clearly, at just the level his listeners need. He shifts gears without batting an eye, captivating a room full of sixth graders one day, then de-briefing a dozen NASA executives the next day.

He didn’t stumble upon his communication skills by accident. He’s a proud alumnus of IU Southeast, where he earned his undergraduate degree (1991) in communications. He has shown his appreciation to IUS through tireless service. It began with his leadership role in the IUS Alumni Association, as a board member and then president from 2002-2003, In 2007 the University presented him with its Distinguished Alumni Award. Twenty years later, he’s still at it. Earlier this year, when IUS held its first Young Alumni Conference, he was the keynote speaker, outlining the importance of research and manufacturing in space.

RICH BOLING
NAHS 1985



Rich joined SHOT with a set of skills that included (entry-level) broadcasting (WNAS radio and WHAS-11 TV), public speaking, along with writing and producing virtually every kind of printed communications. He had worked with Louisville's leading PR firms; he got to serve companies involved in manufacturing, transportation, health services and entertainment. Comparing his jobs at those firms... versus doing in-house communications and public relations at SHOT, there were key differences.

In the corporate world of PR, clients want essentially a "one-lane road" of information flow: from the company to customers or consumers. Preparing a module (or multiple payloads) for spaceflight has many more layers. Researchers seek expertise in the "packaging" of experiments; they require detailed information on what might or might not be possible. Many scientists have limited familiarity with engineering. That's one side of the coin.

The flip side is NASA. Astronauts have to be trained in how to conduct each experiment. There are entire teams of human health and safety; they have questions that need answers. Documentation and contingencies must comply with specific standards. Finally, it all requires explanation to legislative and budget overseers. Rocket scientists and the general public live in different worlds.

The most exciting aspect is this. In 24 years, Rich has never stopped learning about "new business". Sure, ongoing projects have some "carry-over" from one year to the next. But ask Rich about his typical "to-do" lists nowadays. His initial years at SHOT are mostly in his brain's dusty archives. It contrasts sharply with the past twenty years. From 2004 to today... roughly 80% of new projects included something that was "version 1.0".

For Rich, the inflow of new work is huge, particularly in today's (much larger) Redwire world. His strongest suit is simply explaining all the possibilities the company has to offer. That's why his job title is Vice President for Corporate Development. He confers with scientists from scores of universities; add to that, new start-up companies that pop out of the woodwork, month after month.



His community service mirrors his career successes. He's a past president of the Rotary Club New Albany. Since 2014 he's been Vice President of Floyd County's Redevelopment Commission. He is also currently on the board of directors for the Community Foundation of Southern Indiana.

Rich met his wife Dawn at IUS. They've been married since 1992; Dawn is a middle school math teacher. Rich and Dawn have lived in Floyds Knobs for 22 years, and they have two adult children.

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One happy footnote: it would not have been appropriate to attach the most recent news to just one of these two short biographies. It intertwines decades of dedication by Mark and Rich (along with John Vellinger and their many other talented team members).

Before Mark eased fully into retirement, he also led the negotiations with the Floyd County Redevelopment Commission... envisioning a new 30,000 sq ft headquarters / operations facility in Novaparker (Georgetown, Indiana). Since then, Redwire has gone on to confirm its commitment to keep the Techshot business group in Floyd County. An official groundbreaking took place in May 2024, re-uniting Mark, Rich and other stakeholders with "shiny shovels and enormous smiles."

Read more about the evolution of the company, Redwire, in our special blog post [here](#).



Swinging for Success: A Record-Breaking Day at the 16th Annual Play FORE! Education Golf Scramble

We are thrilled to announce the incredible success of our 16th annual Assured Partners Play FORE! Education Golf Scramble! This year, we had a record-breaking turnout with 236 golfers, 75 sponsors, and over 25 dedicated volunteers coming together for a day of fun and fundraising.



Thanks to the enthusiastic participation and generous contributions, we raised over \$100,000! These funds will directly support programs and grants within the New Albany Floyd County Consolidated Schools, helping to enhance educational opportunities for our students.

We are deeply grateful FORE all the support from our community, sponsors, and volunteers. Your commitment and partnership are instrumental in making a positive impact on the lives of our students.

Thank you for joining us in this remarkable achievement. We look forward to seeing you again next year!



JOIN US ON FACEBOOK!

Stay updated on your Floyd County classmates, discover thrilling events in your NAFC school community, and learn firsthand about the NAFC Education Foundation by connecting with us at facebook.com/LegacyNAFCAlumni.



When alumni donate to the New Albany Floyd County Education Foundation, you are investing in the success of all NAFC students and educators. Alumni donors become Legacy NAFC members through an annual donation. [Join Now!](#)

The New Albany Floyd County Education Foundation is a not-for-profit organization that works in conjunction with NAFC Schools to provide privately funded supplemental resources and programs to students, teachers, and schools. Legacy NAFC is the official alumni support group of the NAFC Education Foundation and New Albany Floyd County Schools.

Do you have a recommendation for the Alumni Spotlight column?
Send your suggestions to smckeen@nafcs.org.

www.NAFCEdFoundation.org/alumni

For more information, contact Sherri McKeen
at smckeen@nafcs.org or 812-542-2242 at the NAFC Education Foundation.

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