

Kenneth “Ken” Robinson
2024 2nd Place National AFA Thompson/Mallett Aerospace/STEM Teacher of the Year
Sponsored by Rolls-Royce
Winner of \$2,000 Award

11th-12th grade Career and Tech Education (CTE) IT and Engineering Teacher
[Kaiserslautern High School](#), DoDEA Europe
Kaiserslautern, Germany
Dr. Susan Paul, Principal

Nominated by AFA’s Chapter 507/Ramstein AB/EU Region
Chapter 507 President: MSgt Laura L. Westfield, USAF
EU Region President: SMSgt Erin Lefever, USAF



Ken Robinson is a Troops-to-Teachers educator on a vision quest to inspire students to have a strong conviction toward STEM and a relentless pursuit to achieve that vision. Ken has been a high school Career and Technical Education teacher at Kaiserslautern High School in Ramstein, Germany, for 21 years, teaching engineering, information technology, and, most currently, instructing in education programs.

Ken is an innovative and passionate educator dedicated to advancing STEM education. His entrepreneurial spirit and commitment to community partnerships have led to the creation of numerous impactful programs. Ken’s forward-thinking approach and "if you build it, they will come" mindset continues to inspire and prepare the next generation of global change-makers. Whether planning new initiatives or promoting STEM in the community, Ken is a dynamic force in education, always pushing the envelope for positive change.

- View a [video of Ken co-hosting a “Mandalas-by-Scratch” workshop](#) inspiring 8th and 9th-grade female students to appreciate coding as part of a business process.
- Check out the monthly articles, blogs, and multi-media archives showcasing Ken’s amazing and myriad 2024 STEM work found on his [DoD STEM Ambassador website](#).

Ken attributes much of his STEM education success to his prior experiences in sports. He established three successful sports organizations while working in Europe ([DPL](#), [A4](#), and [HCL](#)). His most notable accomplishment, however, would be the creation of the DPL “Die Players Liga” (the largest amateur hockey league in Germany, with over 1,000 members). Ken credits his success to having a bold vision, strong leadership, and effective community partnerships ([Adler Mannheim](#), [Andy Hedlund](#), and [Wings of Germany](#) respectively).

Ken applied this same philosophy toward building successful STEM programs. His “if you build it, they will come” mentality spawned numerous STEM initiatives such as the school’s first STEM Club, AFA’s [Cyberpatriot](#) and [StellarXplorers](#) programs (which included a new summer 2024 StellarXplorers Camp), [Project Horizon](#) (High-Altitude Balloon Program), [IT4U](#) (Community Cybersecurity program), [Junior Science and Humanities Symposium \(JSHS\)](#) (a DoD program to encourage high school students to conduct original STEM research), [eCybermission](#) (virtual STEM competition that challenges students in grades 6-9 to identify and solve community problems), plus his [National Technical Honor Society \(NTHS\)](#) chapter (educational non-profit that exists to honor, recognize, and empower students and teachers in CTE), STEM Academic letter, and numerous cross-disciplinary STEM projects.



AFA’s 2024 CyberPatriot (with Tech Student of the Year, Jack Salzman) and StellarXplorers Team Winners

As Ken’s programs increased in both number and attendance, so did his mentorship program. Through his professional connections with both the local [AFA](#) and [AFCEA](#) chapters, Ken had an abundance of community SMEs. It was at this point that Ken recognized the true potential of community-learning practices and the power of mentorship. He developed his first official outreach program – the [Community Partnership Program](#). This initiative aimed to create a community of connectedness between the local military community, industry professionals, and DoDEA teachers. His program enabled teachers to connect with local SMEs based on specific competencies, with volunteers assisting in various capacities such as guest speaking and co-teaching.

Recognizing the full potential of community participation and professional capacity, Ken established Europe’s first [SkillsUSA](#) regional presence. Here, he began exposing students to industry and military-

developed STEM and CTE challenges. Utilizing local AFCEA resources and teacher support, Ken established the first [New York SkillsUSA Area VII](#) (European) region. For the past six years, he expanded the range of SkillsUSA contests for students throughout central and south Germany, allowing them to win scholarships specific to their technical competencies. For the [2023 Championships](#), Ken introduced six competitive Skills USA STEM contests, including the new [DoD STEM Challenge](#) (Atmospheric Study via HAB), [STEM Debate](#) (AI), Engineering, Computer Programming, Cybersecurity, STEM Bowl, and [Drone Challenge](#).



SkillsUSA Leadership

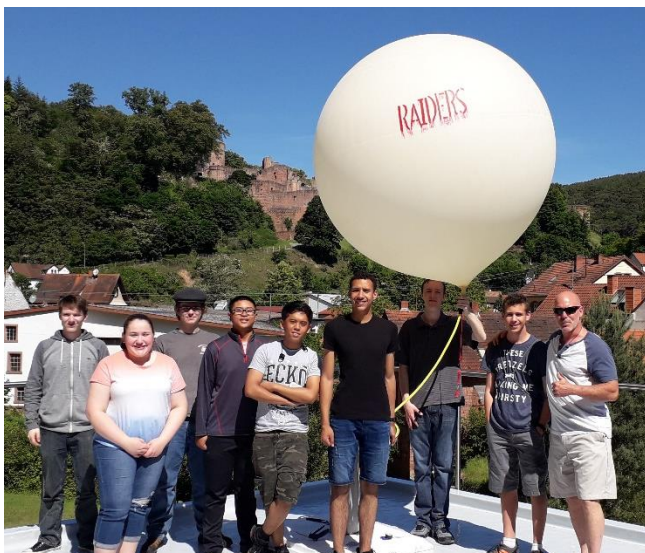
Ken's [DoD STEM Challenge](#) was a tribute to his newly-appointed [DoD STEM Ambassadorship](#) and based largely upon his [Project Horizon HAB program](#). His strong belief in science, reinforced by empirical research and a project management approach, has been a driving force behind many of his STEM initiatives, including the [2021 AFA Near Space Challenge](#). Through these immersive near-space encounters, Ken hopes to ignite the passion of aspiring engineers and scientists while exposing students to personally relevant global issues.

The DoD STEM Ambassador program has been a huge inspiration for Ken. His desire to expand his awareness of STEM opportunities and work with like-minded educators truly became a reality. For Ken, this was a chance to expand and enrich the STEM ecosystem he had already established. The new [AFCEA STEM Olympics](#) scheduled for the 2024/25 school year will be a testament to that vision as he leveraged the best attributes of SkillsUSA and created a more holistic competition model. This new model will include both teachers and schools as part of its competition framework, allowing teachers to win STEM grants and schools to compete for recognition ([STEM Excellence and STEM Spirit awards](#)). The AFCEA STEM Olympics not only recognizes STEM excellence throughout DoDEA Europe but also provides students the opportunity to compete for \$20k in scholarships.

The 2023/24 school year was a monumental milestone in Ken's career. He introduced two new initiatives: the AFCEA STEM Olympics and the [STEM Lender Program](#). Additionally, he was honored and challenged to teach a subject close to his heart, educational pedagogy. Ken took on the responsibility of preparing future educators, aiming to develop their ability to create and conduct evidence-based, inquiry-driven lessons designed to excite interest and maximize student engagement. His goal was also to highlight the significance of authentic learning and to cultivate a STEM mindset that appreciates cross-disciplinary connections for integrated learning.



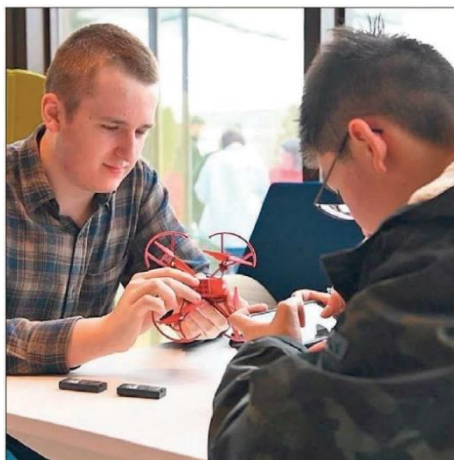
**Flight computer build with solderless board containing a humidity sensor --
- and flight computer completed with 3-D printed cases**



Project Horizon High-Altitude Balloon Launch



STEMposium 2024



Drone Challenge

Strategic Planner; Provides Real-Life Experiences for Students

Jason Ter Horst, Department of Defense, Community Superintendent, Kaiserslautern Military Complex

“Ken is driven. self-confident. proactively helpful. and smart. He is a very strategic planner. He has started multiple Career and Technical Education programs to prepare kids for postsecondary and the workforce. His AFA StellarXplorers teams have competed with great success at the national level. He began an AFA Cyberpatriot program. where, again, students demonstrated mastery at the national level. He has developed multi-disciplinary, STEM-associated, project-based learning projects. established a brand new Biotechnology program, established a National Technical Honor Society, and ensured that each of his programs resulted in certification for his students. His resume and commitment to kids is unparalleled.

“He also understands the importance of providing students with real-life experiences. In addition to the national competitions, he has provided dynamic guest speakers and has taken students on over a dozen relevant field learning opportunities. utilizing both our host country resources, as well as our military partners. These experiences for our students will drive their continued interest in STEM-based degree programs and the workforce in the future.”

Champion for Career Tech Education

Johanna Brenner, parent of two students

“Mr. Robinson is a top-notch, future-oriented educator and his enthusiasm for science and technology is contagious. I have known Mr. Robinson for three years as a parent of two students attending Kaiserslautern High School.

“Cognizant of the limitations of textbooks, Mr. Robinson champions Career and Technical Education (CTE) and promotes real-life learning based on current content and forecasted trends. He integrates a multiverse of STEM classwork, hands-on projects, and extracurricular STEM Clubs that the students understand are relevant and purposeful. In a classroom that is more like a busy laboratory workshop, he provides a fresh, student-centered approach to STEM education.

“As a DoDEA teacher and a military veteran, Mr. Robinson brings extraordinary insight into the direct applicability of STEM skills to growing technological sectors. His skillful networking with the local military, as well as university and business leaders, has enabled him to deliver programming that influences the entire regional school system.

“As a retired Navy Nurse Corps Officer (20 years), I have worked in a technical field that is constantly in need of a pipeline of hands-on problem-solvers who seek answers through evidence-based research. I heartily recommend Mr. Robinson as a teacher who ensures all students are afforded an education that cultivates their curiosity and prepares them as STEM professionals to help fulfill that need.”

True Professional and STEM Leader

MSgt Laura L. Westfield, Air & Space Forces Association Chapter 507, President

“Mr. Robinson is a true professional and leader in the field of STEM. Getting to know him and see the platform at which he contributes to STEM and the growth of young professionals, I feel extremely confident, proud, and thankful to have him on my team. His ability to tap into the talents of the students and amplify their critical thinking skills in STEM is unmeasurable.

“I believe it is imperative to highlight and recognize the contributions of Mr. Robinson, a DoD STEM Ambassador, to the region and Air Force-wide. Not every individual can grasp the future of STEM and scaffold upon the potential our young generation will bring to tomorrow’s technologies. Ken is innovative and open-minded and goes beyond the walls of the classroom. His guidance and instruction directly impact the Kaiserslautern Educational community. He does this through AFA’s StellarXplorers teams and competitions and the AFA Cyber Patriot program. His team of students has won numerous awards and recognition.”

Pushes the Envelope to Empower and Prepare Students for the Future

AFA Ramstein AB/EU Region President and Special Assistant, Europe, SMSgt Erin Lefever, USAF

“Kenneth Robinson is not only a kind-hearted individual with infectious energy, but he devotes his time to ensuring the students at Kaiserslautern High School are empowered and prepared for the future through STEM education. He is actively involved beyond his duties as a teacher, pushing the envelope from additional STEM programs at all levels to sports coaching. He not only established the STEM initiative at his school, but incorporates multiple other programs such as StellarXplorers, CyberPatriot, and STEM Ambassadorships. On top of that, he is creating bonds with the local Kaiserslautern community to introduce his students to both the military and industry which aligns directly with AFA's mission and goals.

“Mr. Robinson is the kind of teacher that is making an impact on his students and community. He is a true example of the kind of educator the Air & Space Forces Association should endorse and showcase across the nation.”



AFCEA STEM Olympics Inaugural Event – May 2024

As an AFA STEM Education Ambassador, Ken’s message is clear: “You are not alone!”

Ken is the ultimate collaborator and alliance builder on a mission to create, fund, and implement stellar programs to promote a greater interest in STEM career exploration. His message to other educators is that there is a community of organizations wanting to support programs that fulfill that same mission for their benefit. They are interested in supporting and sponsoring educational programs of value. Subject-matter experts, funding sources, internships, mentoring programs, and professional development opportunities are out there if teachers will look, listen, and ask. Excerpts from Ken’s message:

“The Programme for International Student Assessment (PISA) has consistently identified a concerning deficiency in our nation’s math and science domains. Our ability to maintain a competitive edge in the current global market is in question. Something must be done, and time is of the essence.

“Now more than ever teachers are being summoned to increase student achievement through any means possible. It is overwhelming to see the number of new educational initiatives coming from both state and national levels with a myriad of recommended pedagogical practices designed to develop innate higher-order thinking skills.

“The ‘Battle Cry’ for help is clear; however, teachers cannot fight this battle on a single front. This is a national crisis and although teachers are on the front line, they need to know that there is a full brigade waiting to support their every move. As teachers often feel they are left to fend for themselves, it is very important for them to understand that there are hundreds of like-minded supporters eager to join the fight and help put our national education system back on top where it belongs, ensuring we maintain that competitive edge across all disciplines.”



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Ken Robinson, a DoD STEM Ambassador, Shares How to Create a STEM Ecosystem from Scratch

What is a STEM ecosystem and how do I participate? Where is the brigade, and how can they help? A STEM ecosystem is a network, consortium, or multisector partnership of heterogeneous organizations sharing a common STEM vision. A brigade consists of all STEM partners within the STEM ecosystem. This blog outlines the steps for finding or creating the right STEM ecosystem for you.

