Civil Air Patrol
U.S. Air Force Auxiliary


***Civil Air Patrol Set for Lift-Off of Second National High-Altitude Balloon Challenge***

After the highly successful national space science challenge for CAP cadets in 2021, the CAP Aerospace Education division launches the second national event on February 22nd (see highlighted time/link info, below). The 2022 National High-Altitude Balloon Challenge is a STEM based competition for CAP cadets and is planned to be bigger and better than the inaugural event last year thanks to lessons learned and a strong volunteer HAB Challenge team to lead the way.

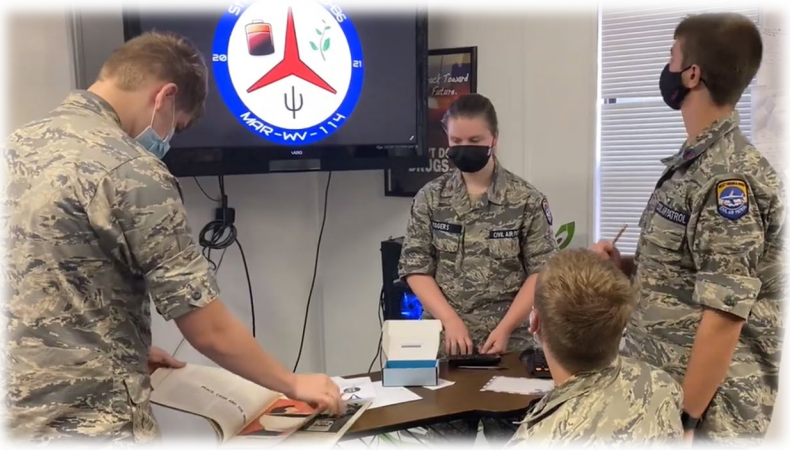
Dr. Jeff Montgomery, Director of Aerospace Education at CAP's national headquarters at Maxwell Air Force Base, Alabama, is excited to be able to offer this opportunity at no cost to any interested composite or cadet squadron throughout the organization. "We took a leap of faith last year to initiate a national science, technology, engineering, and math (STEM) challenge for our cadets. Contracting with the STEM company StratoStar, we were able to conduct a small-scale program with 139 cadet squadrons representing all regions to validate the worth of such a project. The cadets' strong interest and involvement in this space science challenge confirmed the need to continue and expand this exciting program for any interested cadet team."

Entry is open to one cadet team from a cadet or composite squadron. The cadet team will collaborate to develop as many unique experiments as will fit into the physical constraints of a 50 ml capsule, weighing not more than 40g. In early August, teams will ship their test and control capsules, together with flight manifests, to Anderson, Indiana, for the test capsules to be launched as payloads of high-altitude weather balloons to about 100,000 feet. This exciting nationwide livestreamed science event will also include the Indiana Wing conducting a search-and-rescue exercise to track and retrieve the payloads after landing. The test and control capsules will then be repacked and shipped back to the squadrons where the cadets will complete post-flight experiment analyses.

Several criteria of the challenge will be judged to determine national winners, such as hand-drawn and digital team mission patches, individual science experiment report slides, and overall program documentary videos. The award subcategories will mirror the winning categories and prizes as the 2021 awards, seen HERE. And, once again, Col. Joe Kittinger, famed high-altitude balloon space scientist, will be the Challenge Ambassador, contributing another $5,000 prize and the Kittinger Cup to the cadet team with the highest cumulative score from all categories of the challenge. (See a short video of Col. Kittinger's historic jump HERE.) Said Kittinger of his interest in this Challenge, "I care about science and the need for youth to get interested in science. Our country's future leaders are found in CAP squadrons where young people are learning science and are encouraged to do their best and make significant contributions to our nation."

Capt. Bob Roberts, South Carolina Wing Director of Aerospace Education, joins CAP National Headquarters Education Outreach Coordinator Susan Mallett as they become program co-directors again this year, working alongside at least 25 CAP volunteers from around the nation to make the 2022 HAB Challenge a stellar event. Roberts is pleased with the level of expertise the volunteer team will bring to the initiative. "In order to ensure a quality program for our cadets, we identified an excellent team of volunteer leaders to execute the HAB Challenge. We want to encourage the cadets to think and innovate in space science, connect as a true team, learn from the actual balloon launches, and have a good time doing this!"

Cadet/CMSgt. Camden Link of MAR-WV-114, Potomac Highlands Composite Squadron, narrated his team's pre-launch video explaining the experiments they sent as payloads for the 2021 launch. Link felt the project was exciting for him and his team and couldn't wait to see how the experiments turned out after the launch. "We were very excited when we first heard about this project and could not wait to get started. We started brainstorming ideas for our experiments based on variables that would be affected while blasting to the edge of space. We had a ton of fun designing, hypothesizing and preparing our experiments." See his team's 2-minute video HERE.




**For more information about the 2022 Challenge, interested teams should watch the live lift-off video program at 7 p.m. CST on Tuesday, February 22nd on the South Carolina Aerospace Education YouTube channel HERE. This link and QR code will also connect to the recorded session to be viewed any time after the live event.**

**Registration for the 2022 Challenge opens following the live Lift-Off Event on February 22nd, giving every CAP cadet or composite squadron the option to participate!**

- Details will also be updated on the HAB Challenge webpage by the 2-22-22 program launch date.

**2022 Challenge Schedule:**

22 February - Lift-off event at 7 p.m. CST and team registration opens
30 April – Registration closes midnight (your time zone)
2 May - Challenge capsules shipped to teams
22 July - Teams ship test and control capsules to Indiana for launch
6 August - High-altitude balloons launched in Indiana (live-streamed) and capsules shipped back to squadrons
13 August - Back-up launch and ship date
26 September - Teams submit all Challenge reports and documentaries for awards judging
22 October - National Challenge awards event with Col. Kittinger in Orlando (live-streamed)

**2022 CAP National High-Altitude Balloon Challenge Ambassador**
**Retired U.S. Air Force Col. Joe Kittinger**

*As the United States is now competing in the new commercial space race, Kittinger is helping to inspire the next generation to develop unique science experiments related to humans exploring and settling in space.

***For more information, contact HAB@capnhq.gov.***