Space CAMP

THE PREMIER SOFTWARE FACTORY FOR THE SPACE FORCE

WHO IS SPACE CAMP

An official branch of the Air Force Research Laboratory (AFRL), Space Commercially Augmented Mission Platform (Space CAMP) is a Department of Defense software factory that provides research and discovery, custom product design, Agile software development training and technology services that transform space operations.

Officially chartered as an Air Force software factory in 2019, Space CAMP created a culture that fosters innovation and utilizes agile development processes, including extreme programming, balanced teams, user-centered design and lean startup practices.

How Space CAMP Work

- **Agile:** allows for quick adaption and innovation to address the dynamic mission and tactical needs of operators in the space domain.

- **Continuous Integration / Continuous Deployment:** CI/CD pipelines enable teams to automatically test and release updates directly to the live production environment at all security levels.

- **User-Centered Design:** UCD is an iterative design process that involves users throughout the development cycle via a variety of research and design techniques.

COLLABORATION DRIVES SUCCESS

Not just building software that space operators need, Space CAMP builds the software that operators want. At Space CAMP, products are developed through close collaboration with the actual people who will be using our software every day.

Space CAMP embraces agile software development, partnering alongside both stakeholders and end users throughout development, inviting them to brainstorm, ideate and validate the product each step of the way. This close collaboration ensures that the product delivered meets the operators biggest needs while remaining flexible enough to grow and pivot as the mission evolves.

Space CAMP Seal, established 2018. Photo Credit: Space CAMP
Website: Spacecamp.dso.mil, Email: spacecamp@afrl.af.mil

HOW SPACE CAMP SERVES

Space CAMP offers a full range of technology services to the Space Operations Command (SpOC), Space Systems Command (SSC) and U.S. Space Command (USSPACECOM). By integrating regular engagements with the Space Force Deltas, combat development teams and other DoD partners within the Space Domain, Space CAMP maximizes its ability to deliver useful products into the hands of the warfighter faster and better than adversaries. Through a close partnership with Platform One and the administration of Space CAMP's own Gravity platform, the organization:
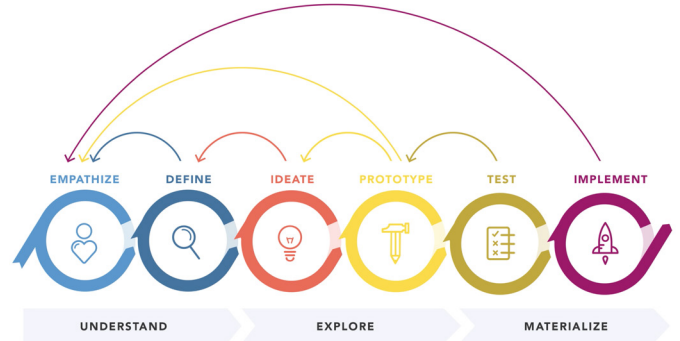
- Avoids vendor-lock by building on an open platform (Kubernetes/Istio)

- Embraces DevSecOps principles outlined by the DoD CIO and AF CSO

- Builds a network of like-minded software shops that collaborate and learn together

CONTINUOUS AUTHORITY TO OPERATE (cATO)

Space CAMP's solutions meet DoD security and DevSecOps standards. Each product developed is deployed with a cATO through Platform One. This allows Space CAMP teams to continue iterating on the application in production.

Design Thinking 101 process. Photo Credit: Nielsen Norman Group, nngroup.com/articles/design-thinking

USSF Supra Coder Guardians work at Space CAMP to develop and deploy software solutions to operators. Photo Credit: Dane Iwata

CONTINUOUS DELIVERY IN PRODUCTION

Space CAMP teams are able to deploy system patches at the speed of need, thanks to CI/CD pipelines that can automatically test and deploy updates to the production environment in as little as an hour. This agile process ensures customer teams have the best tool for the fight.

DEVELOPED LOW SIDE, DEPLOYED ANYWHERE

Products can be designed and programmed in an unclassified environment and then containerized and deployed securely to all applicable DoD networks. This process encourages collaboration and ensures the best solutions reach the operator.

ABOUT AFRL

The Air Force Research Laboratory (AFRL) is the primary scientific research and development center for the Department of the Air Force. AFRL plays an integral role in leading the discovery, development, and integration of affordable warfighting technologies for our air, space, and cyberspace force. With a workforce of more than 11,500 across nine technology areas and 40 other operations across the globe, AFRL provides a diverse portfolio of science and technology ranging from fundamental to advanced research and technology development. For more information, visit: **www.afresearchlab.com**.