The 10 Things You Should Know About CAISI and CSS VSAT

Knowing these things about the Combat Service Support Automated Information System Interface and the Combat Service Support Very Small Aperture Terminal will help you make the most of the Army's sustainment information systems.

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What do stock car racing and the Global Combat Support System–Army (GCSS–A) have in common? Communications dependence. Watch any NASCAR race and it quickly becomes obvious that success can be achieved only through constant, uninterrupted communication between the driver and his pit crew. A driver's dependence on communication is not much different from the communication required for the Army's automated sustainment systems, especially GCSS–Army, the enterprise resource planning (ERP) system that is now being fielded.

The Combat Service Support Automated Information System Interface (CAISI) and the Combat Service Support Very Small Aperture Terminal (CSS VSAT) were developed to be user owned and operated to support existing sustainment information systems and the evolving GCSS–Army. Thanks to them, sustainment transaction and status updates are now available across the sustainment domain in just seconds instead of the long lag times—sometimes days—that were experienced during Operation Desert Storm and the first months of Operation Iraqi Freedom.

To ensure your success in using sustainment information systems, here are the top 10 things you need to know about CAISI and CSS VSAT.

1. The CAISI and CSS VSAT systems are found everywhere an Army sustainer works; they are used in support of combat training center rotations, field training exercises, garrison operations, and contingency operations. They are found in ammunition transfer holding points, motor pools, supply shops, support operations shops, brigade S–1 shops, and battalion or unit aid stations. A typical brigade-sized element has an average of eight CSS VSATs and 73 CAISIs.

2. The CAISI and CSS VSAT systems are easy to deploy and set up. In 20 to 30 minutes, CSS VSAT can go from being "fully stored for transport" to being able to successfully transmit automated sustainment data. A sustainer can shut down, store, transport, and set up the systems at a new location without assistance.

CAISI does not require the use of long cable runs. CAISIs communicate wirelessly with each other and provide connectivity even if the CSS VSAT is miles away. This is important because motor pools and supply support activities do not normally fit within a brigade, battalion, or company command post area.

3. CAISIs can extend communications support up to 35 miles. CAISIs can be deployed to establish connectivity using a combination of grid, dual-band, and omnidirectional antennas. Using a grid-to-grid line of sight configuration allows a sustainer the freedom to operate up to 35 miles away from the CSS VSAT. A grid-to-omnidirectional combination extends the range six more miles, and an omnidirectional-to-omnidirectional combination extends the range up to four miles.

Once the CAISI and CSS VSAT network has been established, clients are connected using an Ethernet cable up to 100 meters away from the CAISI switch. DSL [digital subscriber line] bridges in the CAISI systems support representatives kit can be used whenever mission, enemy, terrain and weather, troops, and support available, time available, and civil considerations require their use.

4. The CAISI and CSS VSAT are user owned and operated. They can be set up by the owner, who may be military occupational specialty (MOS) 68G (patient administration specialist), 68J (medical logistics specialist), 88M (motor transport operator), 92Y (unit supply specialist), or 92A (automated logistical specialist). No additional MOS is required in the using activity to maintain and deploy the systems. With constant use and training, both in garrison and in field environments, users quickly become self-sufficient in deploying the CAISI and CSS VSAT.

5. CSS VSAT bandwidth is provided by the Product Manager Defense Wide Transmission Systems. Satellite access time is provided year round, assuring sustainers that their

communications needs will be met. Satellite access requests are not required in order to conduct sustainment operations over the CAISI and CSS VSAT network.

6. CAISI and CSS VSAT can be palletized and transported in one vehicle. Each CAISI consists of a transport box and antenna carrier. The CAISI bridge module's shipping weight is 54 pounds, and the total weight for the CSS VSAT is 494 pounds. Read the fine print and follow directions. Do not put it away wet; properly pack and store it. Inspect the connectors before and after operation.

7. CAISI is the communications interface for sustainment information systems and GCSS–Army. CAISI has the technology to create secure wireless bridging and wireless local area network services. CAISI incorporates two radios and is dual-band frequency capable.

8. CAISI and CSS VSAT provide built-in level 2 security (as outlined in Federal Information Processing Standards Publication 140–2, Security Requirements for Cryptographic Modules) and voice over Internet protocol. The centrally managed "call manager" provides sustainers with the ability to communicate worldwide with any other voice over Internet protocol phone that is connected to a CSS VSAT.

9. CAISI and CSS VSAT are supported by unit sustainment automation support management office (SASMO) personnel. With an average of 10 system specialists, including supply, medical, signal, maintenance, and aviation, SASMOs can support the brigade CAISI and CSS VSAT network. They ensure the brigade's automated sustainment information systems are fully operational.

No additional workload is placed on unit S–6 shops to support these systems. External CSS VSAT support is just one phone call away.

Two Combat Service Support Very Small Aperture Terminals and a Combat Service Support Automated Information System Interface are set up outside a 4th Infantry Division sustainment automation support management office at Camp Buehring, Kuwait. (Photo by Chief Warrant Officer 2 Daniela Davies)

While users may call the SASMO, satellite communications field engineers, or Inmarsat (a communications contractor) directly for assistance, the SASMO should always be the first choice.

10. Perhaps most importantly, a CSS VSAT and CAISI pocket guide application for mobile devices is available in the Apple app store for Apple devices and the Google Play app store for Android devices. Search for "CAISI-VSAT" on both store sites. This application includes valuable information to the operator in the field. It includes links to technical manuals, setup configuration videos, and contact information that can be used by sustainers needing assistance worldwide.

Drivers and pit crews constantly test and train with all the same equipment they use on race day to ensure that everything works and to afford the team the best chance of a win. Automated sustainment information system users must do the same with their CAISI and CSS VSAT systems if they are to be successful in their missions.

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