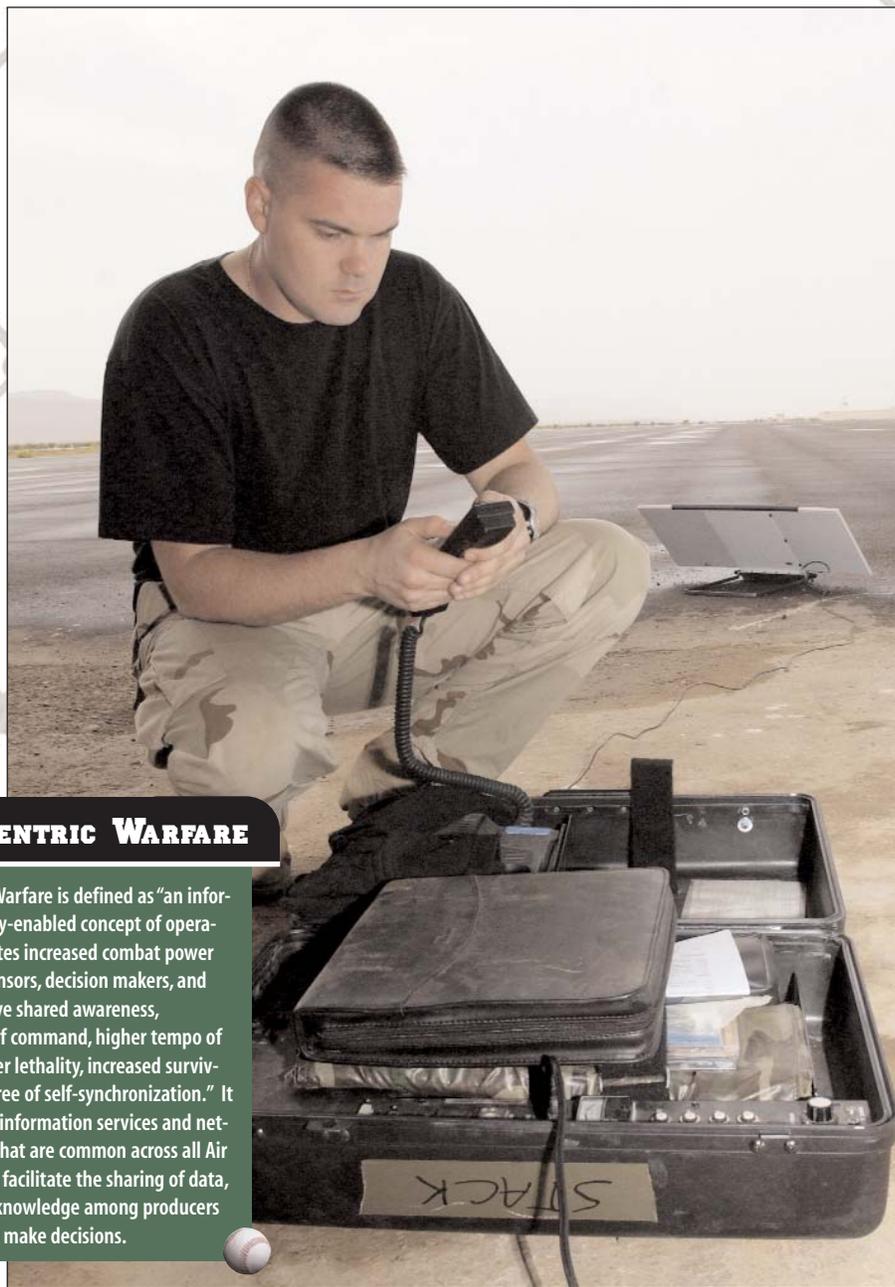


# THE STARTING LINEUP

The *intercom* staff put our collective heads together to come up with concepts all communicators should have in their playbooks. From the young Airman and the new lieutenant, to the seasoned master sergeant and the senior officer, understanding these concepts will ensure that when it's the bottom of the ninth with two outs, you're armed to take one over the fence.



## NETWORK CENTRIC WARFARE

Network Centric Warfare is defined as "an information superiority-enabled concept of operations that generates increased combat power by networking sensors, decision makers, and shooters to achieve shared awareness, increased speed of command, higher tempo of operations, greater lethality, increased survivability, and a degree of self-synchronization." It encompasses the information services and network operations that are common across all Air Force activities to facilitate the sharing of data, information and knowledge among producers and consumers to make decisions.



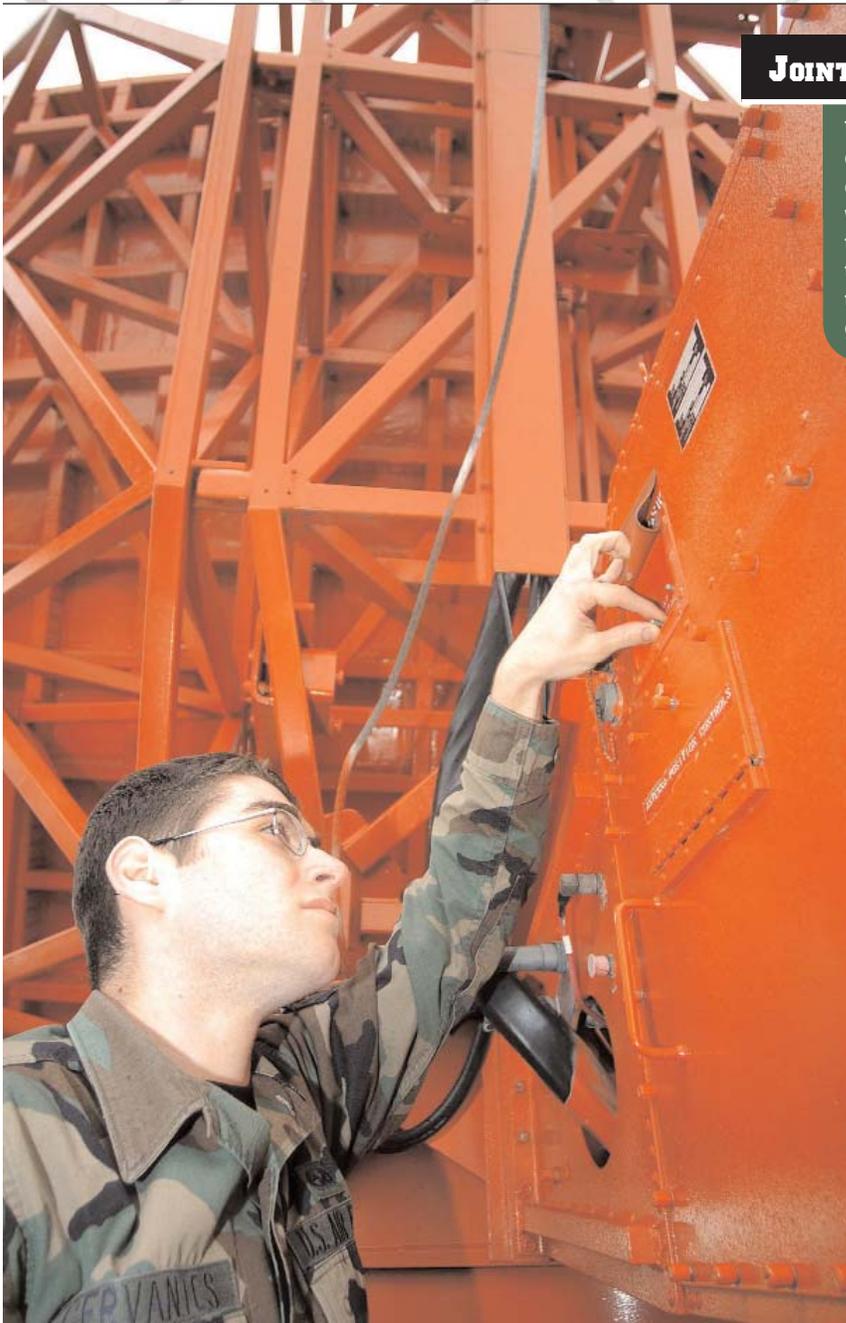
## AIRBORNE NETWORKS



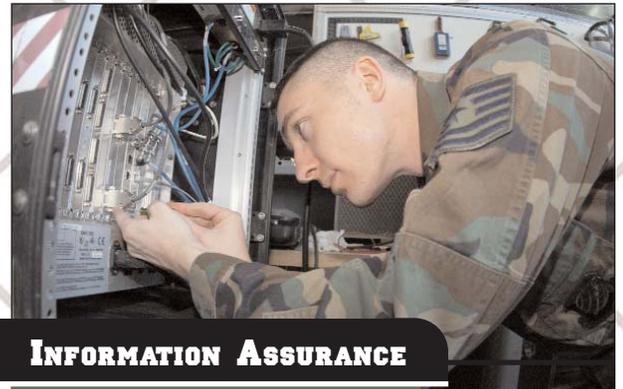
The Airborne Network is a communication infrastructure providing communication transport services to, from, or between network subscribers on platforms that are capable of flight and will provide capabilities to link airborne platforms with surface and space network entry points.



## JOINT TACTICAL RADIO SYSTEM



The U.S. Joint Tactical Radio System represents one of the most ambitious multiservice tactical communications ever undertaken. The system will be a family of software programmable tactical radios tied to satellite communications that provide voice, data, and video communications for mobile military users in the air, on the ground, and on the sea.



## INFORMATION ASSURANCE

Information Assurance ensures trust and security in a highly distributed network environment such as the Defense Information Infrastructure, or DII. Information Assurance is the actions that protect and defend information systems by ensuring the availability, integrity, authentication, confidentiality, and nonrepudiation. This includes providing for restoration of information systems by incorporating protection, detection, and reaction capabilities. The IA program includes training of IT system users and IT workforce professionals as well as the protection of all information processed on IT systems.





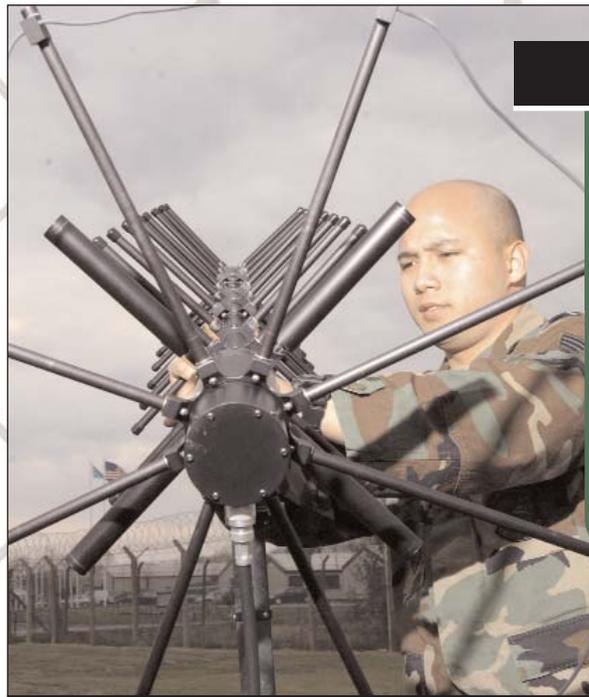
### GLOBAL INFORMATION GRID

The Global Information Grid is a globally interconnected, end-to-end set of information capabilities enabling the collection, processing, storage, dissemination and management of information. The GIG must be thought of and transformed into a truly global, three-dimensional information processing network by developing and integrating airborne and space-based platform networking and information transport capacity. Integrating systems and networks into a unified global system of systems, makes it easier for authorized users to gain access to information, thus enabling dominant battle space knowledge and decision superiority.



### C2 CONSTELLATION

The C2 Constellation is the Air Force's Capstone Concept for archiving interoperability, connectivity and the Air Force C4ISR transformation goals. The C2 Constellation is a family of C4ISR systems sharing horizontally and vertically integrated information through machine-to-machine conversations enabled by a peer-based network of sensors, command centers and shooters. C2 Constellation capabilities will be fielded in Advanced Technology command centers (such as Air Operations Centers), next generation electronic warfare and reconnaissance aircraft, Unmanned Aerial Vehicles, and airborne and space-based intelligence, surveillance and reconnaissance systems.





## GIG-BANDWIDTH EXPANSION

GIG-Bandwidth Expansion, GIG-Enterprise Services, Joint Tactical Radio System, and Transformational Communications System are several OSD sponsored, IP-based transformational initiatives. The vision is to provide ubiquitous, secure, robust, physically diverse terrestrial, airborne, and space based transmission paths and information services between our fixed and deployed operating locations. These capabilities when coupled with the Air Force's fixed based transport and network operations infrastructure from the Combat Information Transport System, the expeditionary base Theater Deployable Communications program, and via connections through DoD Teleport gateways will allow the warfighter to exchange unprecedented levels of information.



## GLOBAL NET

Global Net is the communications network—air, space, and ground—that must allow a free flow of information so that it's rapidly accessible and presented to warfighters at the right time and right place to create the commander's desired effects. The issue is not moving data faster so much as it is moving the right data to the right people. Global Net ties together information generated from a complex array of sensors in air and space, processes and delivers information, and presents the information to the warfighter.





## CONSTELLATION NET

This concept defines the communications network—air, space, and terrestrial—that must allow a free flow of information so that it is rapidly accessible and presented to warfighters at the right time and right place to create the commander's desired effects. It ties together information generated from a complex array of sensors—air, space, and surface; processes and delivers information; and presents the information to the warfighter.



## TRANSFORMATIONAL COMMUNICATIONS

This is an OSD initiative to radically change the future satellite communications architecture. The primary goal is to eliminate bandwidth as a constraint to the warfighter. Transformational comm is designed to integrate DoD, the Intel community, and NASA SATCOM architectures. It eliminates stovepipe SATCOM systems, supports net-centric operations, provides increased capacities, and supports the use of laser communications for Airborne ISR platforms. TC will deliver multi-spectral radio frequency and optical functionality providing the capability to crossband among these spectra and crosslink between satellite constellations. TC addresses the space backbone that provides much of the intra-theater and the inter-theater connectivity that warfighters depend on.

