



NETWORK SYSTEMS
&
INFORMATION SERVICES

GENERAL DYNAMICS
C4 Systems



Ground to Space, Core to Edge

EVOLUTION TO INFORMATION CONNECTIVITY

Throughout history, people have used various methods to determine their position on Earth and to navigate and communicate from one location to another. The oldest and simplest form of navigation involved “fixing” one’s position by using familiar landmarks as reference points.

Today, technology is driving revolutionary changes in military, commercial, and civil enterprise operations. Decision makers have an increasing need for timely, relevant information to make important decisions that impact their organization’s future. General Dynamics C4 Systems is a world leader in providing network-centric assured information in the right place, at the right time, and in the right format.



General Dynamics' combined commercial strength and military expertise enable us to provide total systems solutions resulting in lower cost for our customers. Agile program management in a dynamic environment and the ability to design and produce complex systems are core competencies that enable our organization to retain its position as a leader in the communications industry.

We are a full-service systems integrator providing voice and data network design, engineering, installation, integration and logistic support.

General Dynamics' Network Systems and Information Services team provides end-to-end communication network solutions; SATCOM operations, services and products; and Blue Force situational awareness that enables information connectivity from ground to space, core to edge.



Ensuring Mission Success Through Integration

COMMUNICATION NETWORK SOLUTIONS

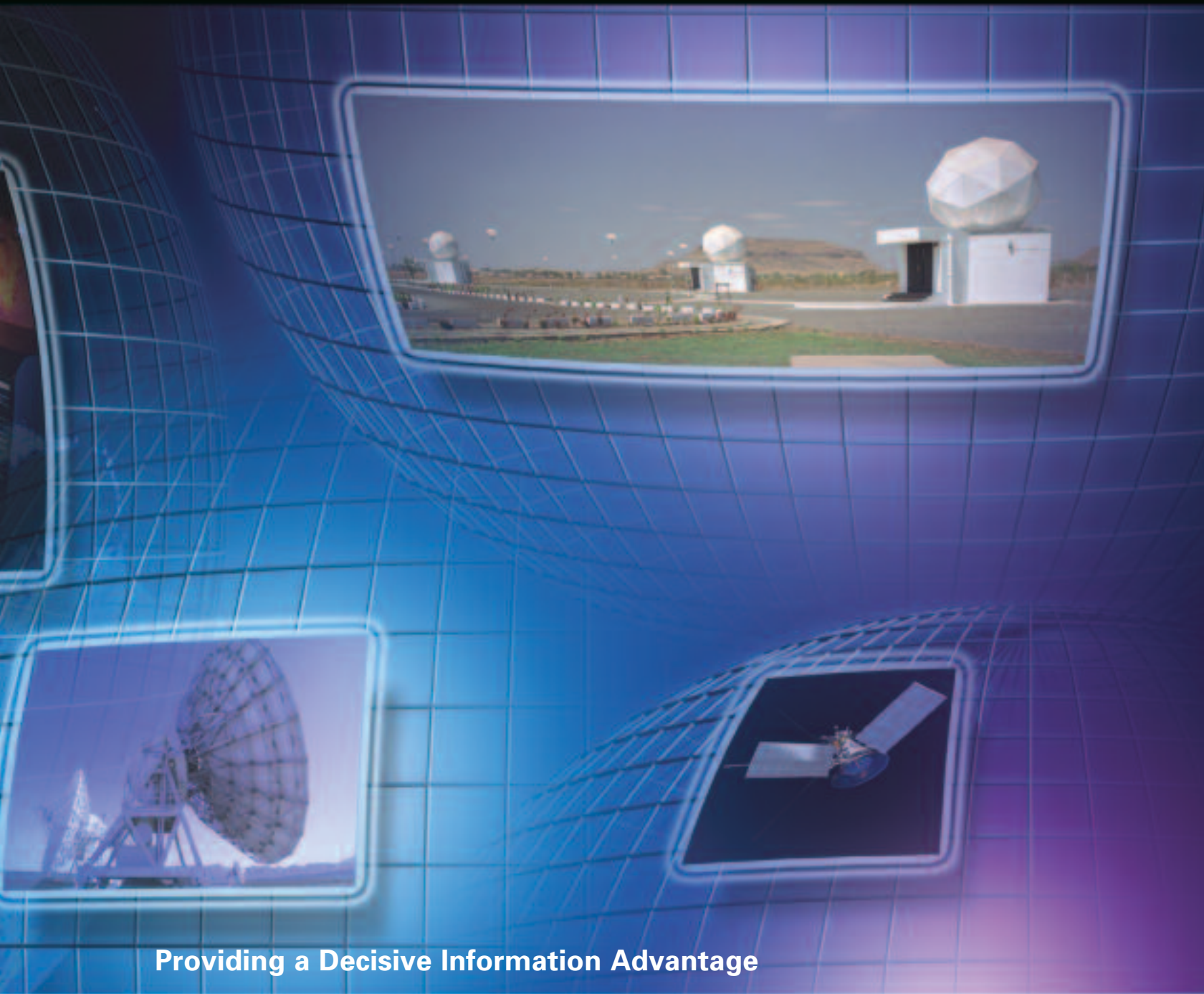
Creating an environment that enables network-centric operation is a priority. Our focus on providing systems, products and services helps to take our customers to the next level. We provide our government customers a wide range of enhanced communication network solutions to meet the growing global information needs of their missions.

Achieving information superiority requires assured access, secure, global and interoperable information exchange as provided by General Dynamics' advanced communication solutions. We view our network solutions and products as key enablers toward executing the Joint

Vision 2020 for the Ground-to-Space and Air-to-Space information exchange.

We specialize in the development of high-performance satellite ground systems, providing satellite network/constellation management, gateway operation, customized SATCOM solutions, and Teleport services.

This expertise includes the development of communications networking, information assurance, operations command and control, and resource management solutions.



Providing a Decisive Information Advantage

As an example, our engineers helped design and build the Iridium® satellite communication network, one of the world's greatest system and software engineering feats. We continue to operate and maintain the U.S. Government's dedicated gateway, manage its airtime services, and provide 24/7 customer care.

General Dynamics has fully embraced the implementation of the Global Information Grid (GIG). We have embarked on a long-term strategy to support the DoD with satellite communication services to meet their growing need for interoperability with other U.S. Government entities.

As the provider of the ground segment for the Mobile User Objective System (MUOS) - a narrowband, beyond-line-of-sight satellite communications system designed to support the tactical communications requirements of the DoD and other government agencies, we are developing the ground infrastructure that will interface with the GIG.

In addition to the development of the MUOS ground systems architecture, the ground segment includes satellite operation centers, network management centers, gateways and switching centers, satellite terminal development, and global network management of the System.



Complete End-to-End Services

SATCOM OPERATIONS, SERVICES & PRODUCTS

General Dynamics C4 Systems is committed to delivering cutting-edge solutions to the DoD and NASA that will enable information superiority, leading to the exploitation of warfighting capabilities of advanced platforms: ground, air, and space.

We are a leading provider of satellite operations, satellite services, and ground-based satellite equipment. This includes spacecraft operations and mission engineering, airtime service, equipment provisioning, user support, information assurance, warranty, logistics, and maintenance.

We have supported the spacecraft and ground systems operations for NASA's Tracking and Data Relay Satellite System (TDRSS) for nearly 30 years. Our spacecraft engineering teams also support spacecraft operations, launch and mission planning activities at NASA's Goddard Space Flight Center and those at the Naval Satellite Operations Center (NAVSOC).

We own and operate the Greater Southwest Teleport®, a state-of-the-art space and communications services facility located in Las Cruces, New Mexico. This facility offers Atlantic and Pacific Ocean region visibility, with terminal equipment in C-, X-, and Ku-Bands. We provide traffic monitor/control, up/down and turnaround service, as well as connectivity to terrestrial fiber.



Providing Integrated Battlespace Visualization for Global Warfighter

General Dynamics C4 Systems provides narrowband and broadband services to the U.S. Government. Narrowband service is provided through the U.S. Government's Enhanced Mobile Satellite Service (EMSS) contract for a dedicated Iridium gateway, which we operate, maintain and manage airtime services.

Broadband services are provided through commercial satellites, such as Tachyon and Intelsat. A services solution is developed based on location, satellite provider, coverage area, capacity, level of service management and a quality of service guarantee.

General Dynamics operates a Customer Care Center (CCC) in the U.S. that provides our customers with

worldwide support 24 hours, seven days a week.

The CCC provides a reporting/coordinating interface to the Defense Information Systems Agency and other U.S. Government agencies.

We also develop special products to support the U.S. Government's use of Iridium services. Examples include Type 1 secure handsets, netted satellite voice and data handsets; Reachback™ devices to enable multi-channel Iridium communications, and avionics for the Federal Aviation Administration's Capstone program to enhance aircraft situational awareness.



Creating the Future of Situational Awareness and Tracking

BLUE FORCE TRACKING

General Dynamics C4 Systems creates and integrates Blue Force Tracking (BFT) and situational awareness solutions into products and systems that identify and track "friendly forces", cutting through the fog of war to help save lives.

These systems form a tiered architecture using ground, airborne, over-the-horizon (OTH) relay, and national asset segments to help prevent fratricide, track valuable military assets, provide emergency communication, and allow search and rescue forces to quickly locate, identify, and communicate with at-risk personnel.

As a leader in developing BFT systems, we employ the latest in advanced signal processing and waveform technologies.

Our products include high capacity base station receivers, line-of-sight airborne receivers equipped with multi-tuners and advanced software reconfigurable waveform processing capabilities, handheld transmitters, disposable transmitters, and customized equipment for special applications.

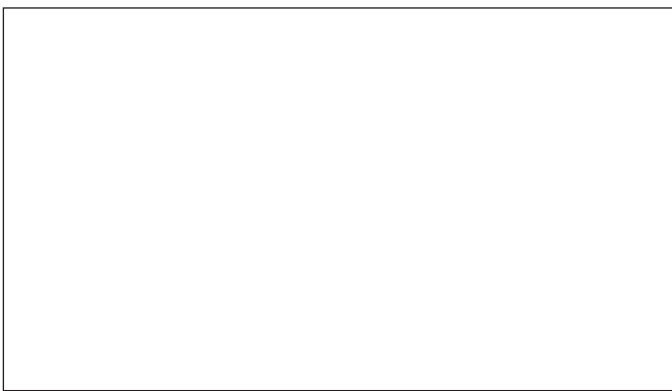
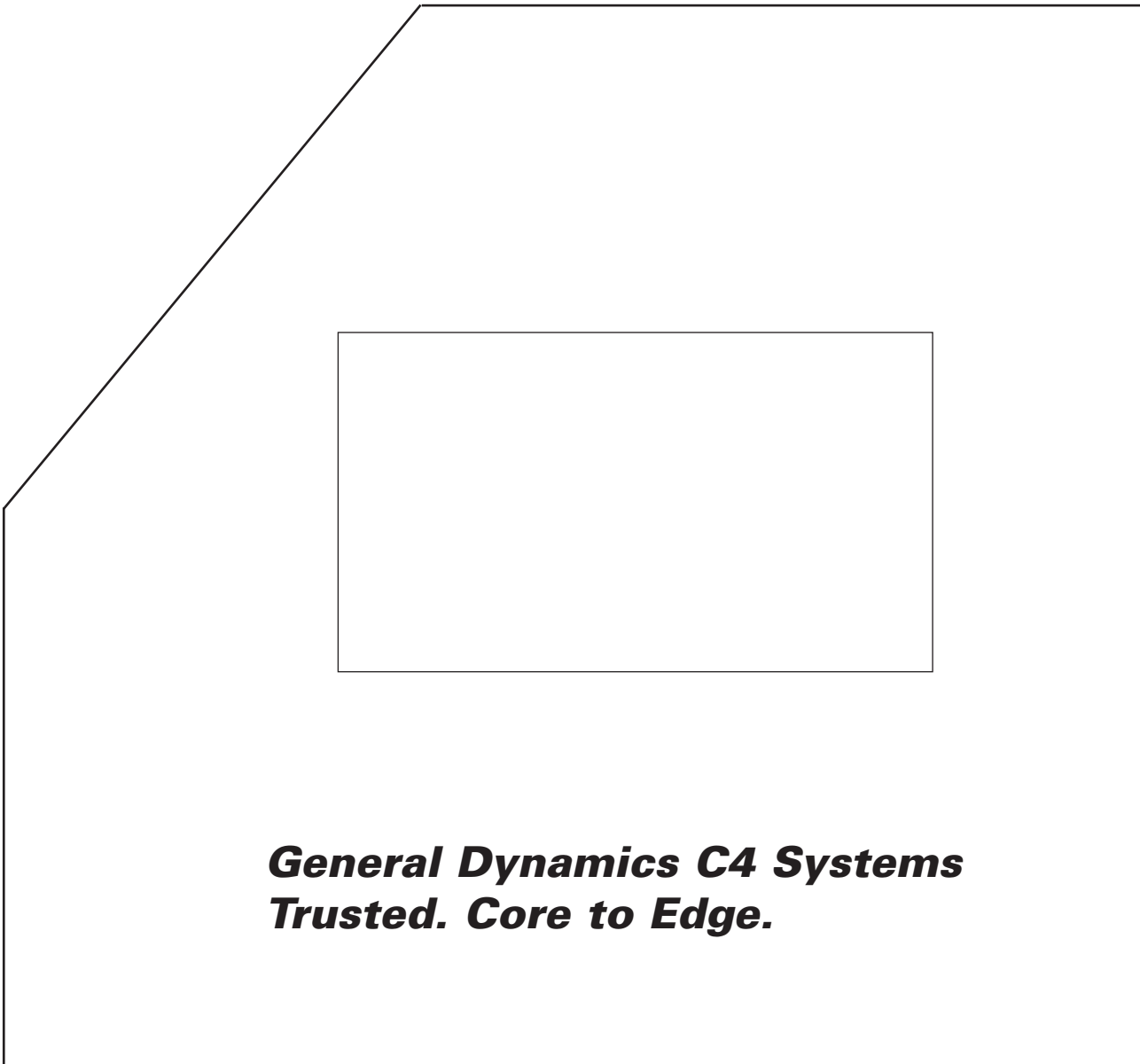


Enabling Global Warfighter Information Superiority

The transmitters generate and the receivers process a specialized BFT waveform that permits thousands of users to share the same frequency. The BFT message contains a user's unique identification; a user's location, based on built-in GPS; and a short message or status code.

The receivers format the processed BFT message for worldwide dissemination in the Common Operational Picture via the standard tactical networks.

With nearly 50 years of innovative technological achievements providing systems and products to the DOD and NASA, General Dynamics C4 Systems is leading the way in addressing the escalating demand for Blue Force Tracking solutions created by recent operations in the Middle East and threats of terrorism.



***General Dynamics C4 Systems
Trusted. Core to Edge.***

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For more information:

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