



ITT Defense  
Electronics & Services

We Do Essential Things  
in Extraordinary Ways

Communications  
Sensing and Surveillance  
Space  
Advanced Engineering & Integrated Services



*Engineered for life*

## OUR MISSION:

- Be our customers' trusted partner and support their mission with solutions that make a difference.
- Provide mission-critical products and services for land, air, space and sea applications.
- Create advanced technologies, deliver engineering excellence and superior customer service.



OUR SOLUTIONS

Help Create a Safer, More Secure World

## About ITT Defense

ITT is a top-10 U.S. defense contractor and a leading supplier of sophisticated defense solutions. Leveraging more than 60 years of experience, we provide communications, sensing and surveillance, space, and advanced engineering and integrated services for government and commercial customers.

International resources, combined with agility, continuous improvement and advanced technologies, allow us to help protect, support and empower all our customers and end users.

ITT Defense is one team with one mission, providing our customers with world-class solutions.



Today's battlespace is becoming more global, complex and increasingly asymmetrical in nature. Into this challenging environment, ITT provides products and services for high-priority areas of national defense and security.

Our capabilities align with emerging trends to meet our customers' transformational needs.

<b>FUTURE ENVIRONMENT</b>	<b>CUSTOMER PRIORITIES</b>	<b>ITT DEFENSE CAPABILITIES</b>
Joint Operations	Net-Centric Operations	Communications
Growing Asymmetrical Threats	Situational Awareness	Sensing & Surveillance
Image and Information Collection, Processing and Dissemination	Need for Real-Time Data	Space
Force Modernization / Reset, Leaner, More Agile Force	Outsourcing Non-Core Capabilities	Advanced Engineering & Integrated Services

# Communications

Successful missions require clear, immediate, secure and net-centric communications.



The global nature of military operations requires a strongly networked force.

Powered by our communications systems and technologies, ITT translates an information advantage into a competitive warfighting advantage.

ITT has engineered solutions to help its customers manage and facilitate communications on the ground, in the air and at sea. Ranging from satellite communications systems to diverse network operations services to VHF Combat Net Radios, ITT's communications solutions allow warfighters to remain connected almost anywhere in the world. Our products and technologies assist in enabling better quality and more effective sharing of information, dramatically increasing situational awareness and mission effectiveness.

## RANGE:

Antennas

C4I Engineering and Integration

Communications Engineering

Communications Operations and Maintenance

Integrated Communications Systems

Tactical Communications Networking

Voice and Data Communications

SUPPORT CUSTOMERS WITH SOLUTIONS THAT MAKE A DIFFERENCE

**THE MISSION:**  
Provide networked  
situational awareness down  
to the soldier level

ITT continues on the leading edge of communications with the Soldier Radio Waveform (SRW®) – the next generation capability to support net-centric operations. Our fully programmable radio systems; SINCGARS SideHat®, Soldier Radios and Sensor Radios, are supporting transformational experimentation by the U.S. Army. Using ITT's SideHat module, mounted and dismounted soldiers can exchange vital data – for the first time, in real time.

**THE RESULT:** A more accurate picture of the battlefield, enabling troops on the move to cut decision time and improve operational tempo.



**SCOPE:**

- » Widely fielded and highly reliable military radio families represented by nearly one-half million systems in more than 30 countries.
- » Technologies at the core of the world's largest military digitization programs – the U.S. Army's tactical Internet and the U.K. Bowman program.
- » Total integration, operations and network management for U.S. and Joint Forces C4I communications infrastructures at forward deployed locations worldwide.
- » More antennas than any other manufacturer, with more than one thousand products in operation, for the most demanding requirements.
- » Satellite ground station communications systems design and service – including programs to improve system performance and life cycle.
- » 24/7 engineering, operations and maintenance for the defense information infrastructure and total Army communications missions in Southwest Asia and Africa.

# Sensing and Surveillance

Situational awareness is the foundation for effective decision-making in the battlespace.



When the stakes are high and there is no time for doubt, equipment and information must be reliable and dependable. ITT develops and fields the sensing and surveillance solutions that help protect and guide military personnel and first responders as they complete their missions.

ITT's sensing and surveillance technologies help define the disposition of forces and threats to enhance situational awareness: night vision systems that turn night into day, powerful radars that track missile threats, electronic systems to analyze, interpret and respond to enemy signal traffic, biological and chemical detection systems that define areas of danger, image and data processing and dissemination that support quicker, more accurate decisions, and technologies to defeat threats to aircraft, ships and ground personnel.

## RANGE:

Electronic Warfare

Force Protection

Night Vision

Nuclear, Biological, Chemical Detection

Reconnaissance and Surveillance

Radar

Under Sea Systems

OUR CUSTOMERS ARE CENTRAL TO EVERYTHING WE DO

**THE MISSION:**  
Prevent the detonation  
of improvised explosive  
devices (IEDs)

Defending the warfighter against the deadly threat of improvised explosive devices (IEDs) is a priority. Under a fast-tracked technology program, ITT is building and deploying thousands of counter-IED devices to current military operations in Iraq and Afghanistan. This vehicle-mounted electronic warfare jammer is designed to prevent activation of Radio-Controlled IEDs by disrupting radio communications over frequencies commonly used with wireless control devices such as car alarms, garage door openers and cellular phones.

**THE RESULT:** The deployment of technologies that assist in neutralizing a devastating battlefield threat.



**SCOPE:**

- » The leading full-service supplier of the most advanced night vision equipment today for military and homeland security applications.
- » Thousands of strategic, tactical and special ops aircraft equipped with ITT electronic warfare systems to counter battlefield threats and pursue electronic attack.
- » Early warning biological and chemical detection technologies including systems for detection, identification, modeling, situational awareness and decision support.
- » Reconnaissance and surveillance systems to interpret a wide range of electronic signals from deep within enemy territory.
- » Systems for underwater threat detection and mine influence including sonar systems, acoustic transducers, and navigation arrays.
- » Air surveillance radars protect high-value ships and air traffic radars provide surveillance and precision approach control at remote airfields.
- » Turnkey electronic intrusion detection systems with smart sensors designed to protect key military and commercial assets.

# Space

Remote sensing and GPS navigation solutions provide the ultimate high ground.



Space has emerged as a crucial global information domain with extensive political, diplomatic, military, and economic implications. Space-based navigation, sensing and imaging technologies are essential for enhancing information and protecting national security.

ITT's presence in space continues to expand. We are a leader in the design and production of space-borne navigation and remote sensing systems and ground solutions. ITT offers a complete range of products and services to help manage, exploit, analyze and interpret images and remote sensing information. We design, build and field instruments and payloads that form the heart of the Global Positioning System (GPS) and meteorological satellite systems.

ITT also provides a gateway to space for government and commercial customers with reliable and efficient range and payload space launch services.

## RANGE:

Intelligence, Surveillance and Reconnaissance

High-Resolution Commercial Imaging

Space Science

Climate and Environmental Monitoring

GPS Navigation

Image and Data Processing and Dissemination

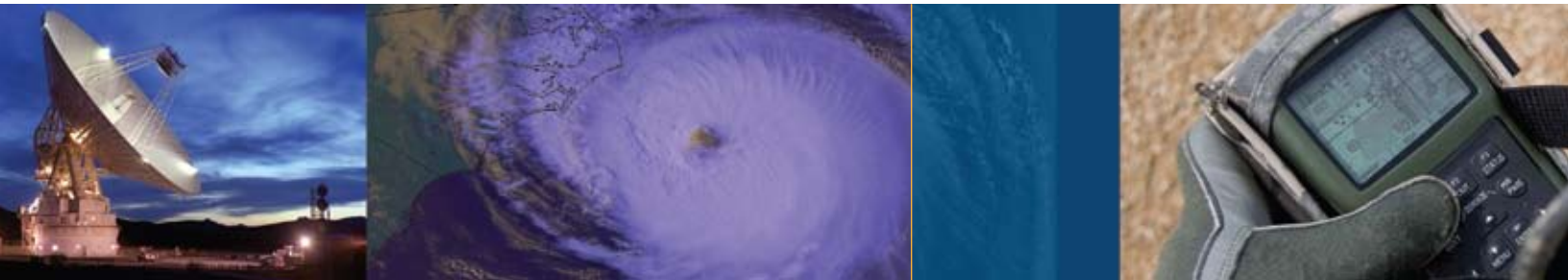
Space Control and Missile Defense

MAKE THE WORLD A BETTER PLACE THROUGH NEW IDEAS

**THE MISSION:**  
Accurately measure  
atmospheric CO<sub>2</sub>  
concentrations from space.

As mapping and monitoring the earth from space grows in importance, ITT engineers are designing the next generation of space-based, active remote sensing instruments for accurately measuring atmospheric CO<sub>2</sub> concentrations. As part of the Active Sensing of CO<sub>2</sub> Emissions over Nights, Days, and Seasons (ASCENDS) mission, ITT sensors will provide all seasons, all latitudes, and day-night regional monitoring. The data received from the ASCENDS mission, scheduled for launch in 2013, will provide information on how carbon dioxide is emitted and absorbed, a key to measuring greenhouse gas.

**THE RESULT:** Research data that will enhance our understanding of the role of CO<sub>2</sub> in the global carbon cycle.



**SCOPE:**

- » Intelligence, surveillance and reconnaissance systems provide intelligence and defense customers with the ability to collect data that enhances information superiority and contributes to national security.
- » GPS navigation systems enable precise, round-the-clock, worldwide, 3D positioning and precise time-keeping for defense and civil applications.
- » Image and data software products and solutions help customers manage, visualize, exploit, analyze, and disseminate images and data.
- » Satellite and airborne high-resolution commercial imaging systems to view and monitor earth.
- » Meteorological payload systems to track the world's weather.
- » Technical and communications support to a worldwide system of antennas and tracking facilities for NASA's Deep Space Network.
- » Space-, air- and ground-based systems and sub-systems to support U.S. space control, anti-missile defense and operationally responsive space programs and initiatives.

# Advanced Engineering & Integrated Services

Readiness is a requirement for success  
in all operations and missions.



In an era of global threats and worldwide operations, military forces must be ready to deploy with the confidence that there will be the logistical support, supply lines and force protection needed to complete the mission.

Whenever and wherever duty calls, ITT people and solutions are a vital part of the mission. ITT works side by side with customers to provide an unmatched skill set for the development, support and implementation of advanced engineering and integrated services. Whether providing maintenance and logistics support for combat equipment or conducting advanced research to meet future challenges, ITT creates responsive, cost-effective and dependable solutions for defense, intelligence and government initiatives.

## RANGE:

Acquisition and Logistics Management

Advanced Composite Structures

Communications, Engineering and  
Systems Support

Enhanced Logistics and Readiness

Homeland Defense

Information Technology

Operations, Maintenance and Technical Services

## SOLUTIONS TO HELP ENSURE A SAFER, MORE SECURE WORLD

### THE MISSION: Manage the crowded commercial airspace of the United States.

With 5,000 planes in the sky at any one time over the U.S., ITT is working to develop solutions that will help alleviate airspace gridlock. ITT was chosen by the Federal Aviation Administration (FAA) to lead a team to develop and deploy the Automatic Dependent Surveillance – Broadcast (ADS-B) system. ADS-B is a key component of the FAA's program to improve the nation's air transportation system and will give pilots and air traffic controllers faster access to better data.

THE RESULT: More efficient and safer use of airspace and faster travel for air passengers in the future.



#### SCOPE:

- » Operations and maintenance, and acquisition and logistics management for surveillance systems, communications electronics, combat service support, and base and range support.
- » Weapons release technologies for manned and unmanned aircraft to safely carry and/or release stores such as weapons, external fuel tanks, and pods.
- » Enhanced maintenance processes and regeneration support for critical tactical combat vehicles and equipment to help counter harsh military environments.
- » Research, analysis and testing for national missile defense systems and training systems for every major U.S. nuclear, chemical and biological detection program.
- » Information technologies enabling secure computing networks including cyber security, information assurance and computer intelligence.
- » Spectrum management, analysis and communications, ensuring that quality RF spectrum is available to NASA missions.

## ITT Defense Electronics & Services

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