Other Solutions From ITT

Support Services
Our personnel work closely with your people to meet your specific challenges with services that include:
›› Product procurement
›› Services management
›› System refurbishment
›› Systems engineering
›› Systems and product support
›› Maintenance and training

Research and Development
ITT provides talented professionals who think outside the box to solve your most challenging problems. As part of the ITT research network, you maximize your research investment by leveraging work being done across the corporation.

We are a global multi-industry company supplying advanced technology products worldwide. Over a quarter of our business supports aerospace and defense customers. To learn more about all of our defense and related solutions, visit www.defense.itt.com

ITT

Engineered for life

To learn more visit us at www.ssd.itt.com or call us at 585-269-5600

ITT Corporation
Space Systems Division

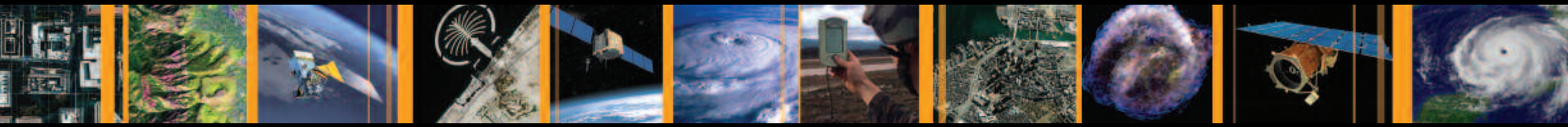
1447 St. Paul Street
Rochester, New York 14606-0488
585-269-5600
www.ssd.itt.com

ITT

Remote Sensing and Navigation Solutions

When...
the margin for error is zero, the time to execute is now, human lives are at stake, and your solutions need to last a lifetime

...your next call should be to ITT.



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Leveraging 50 years of experience,

ITT provides a wide range of innovative remote sensing and navigation solutions to customers in the Department of Defense, Intelligence, Earth and Space Science, and Commercial Aerospace to help them visualize and understand critical events happening – on earth, in the air or in space – in time to take effective action.

Today's rapid pace of technological development is only quickening. By leveraging our heritage of innovation and comprehensive capabilities, we are positioned to deliver a new generation of solutions to meet the ever-changing challenges of today and beyond.

We have engineered remote sensing and navigation solutions for:

- Corona
- Apollo 11
- Hubble Space Telescope
- Mars Pathfinder Surface Rover
- Mars Surveyor
- Chandra X-ray Observatory
- Keck Observatory
- Hobby-Eberly Telescope
- Southern African Large Telescope (SALT)
- IKONOS Satellite
- QuickBird Satellite
- WorldView-1 and 2
- GeoEye-1
- Nimbus
- National Polar-orbiting Operational Environmental Satellite System (NPOESS)
- Geostationary Operational Environmental Satellites (GOES)
- Polar Operational Environmental Satellites (POES)
- Multifunction Transport Satellite (MTSAT)
- EUMETSAT
- All U.S. GPS Payloads

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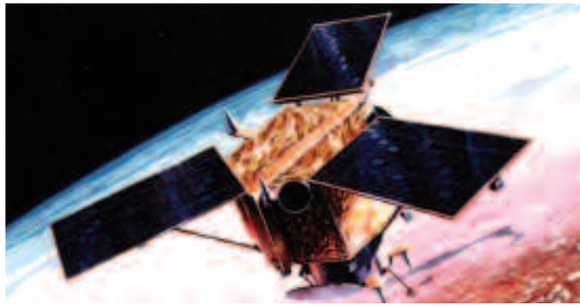
Our Capabilities

IMAGE AND DATA COLLECTION

Image and data collection capabilities support systems used for a variety of applications, including intelligence, surveillance and reconnaissance; GPS navigation; meteorological; high-resolution commercial imaging; and earth and space science:

- Comprehensive Electro-Optical (EO) Payloads (Imaging, Sounding, Active, Hyperspectral)
- IR Interferometric Sensor Payloads Instrumentation
- IR Imaging
- Payload Integration and Systems Engineering
- Active and Passive Control of Dynamic Environments
- Anti-jam Signal Generation
- Calibration
- Spaceborne RF Receiver Systems
- Navigation Waveform Generation



COLLECTING ITT offers a full range of image and data collection solutions. We can design, process, manufacture, integrate and test total payloads, systems, subsystems, and individual components for a wide range of applications.

IMAGE AND DATA PROCESSING AND DISSEMINATION

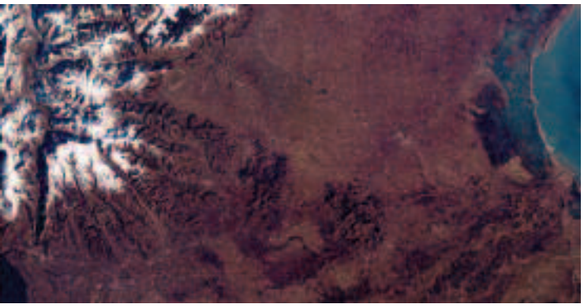
Image and data processing and dissemination capabilities enable decision support solutions that help you quickly and accurately manage, exploit, analyze, visualize, interpret and disseminate images or data:

- Information Systems Engineering
- End-to-end Performance and Image Simulations for all Payloads
- Image Evaluations and System Performance Modeling
- Image Quality and Exploitation Algorithms
- Compression Analysis and Design
- Information Fusion and Visualization Tools
- Image Chain Analysis
- Digital Video Processing, Analysis and Design
- SAR (Synthetic Aperture Radar) Image Quality Support
- Multispectral/Hyperspectral/MASINT Processing, Analysis and Design

DECIDING Imagery and data are just the beginning. ITT offers a complete range of decision support solutions that help you effectively process and disseminate images or data so you can take quicker, more effective action.

Our Solutions

INTELLIGENCE, SURVEILLANCE AND RECONNAISSANCE SYSTEMS

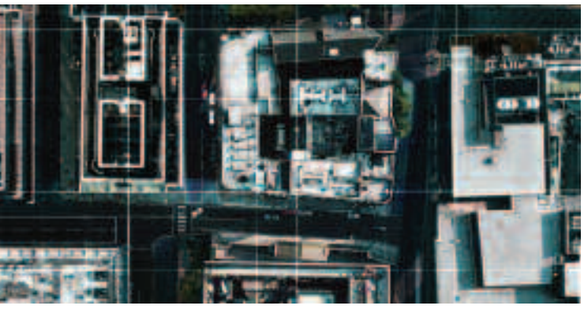


SECURING We provide the defense and intelligence communities with intelligence, surveillance and reconnaissance systems that collect images and related information critical to our national security.

Our mission-critical systems are built on decades of experience and expertise in designing solutions for image and data collection, analysis, visualization, exploitation and dissemination. Our specialized capabilities include:

- High-reliability remote sensing payloads for ground, air, and space, offering active and motion imaging in multiple spectra
- Spaceborne RF receiver systems and anti-jam signal generation
- GPS time generation subsystems and navigation waveform generation
- Data encryption, information processing and information product generation
- System performance modeling and simulation
- Compression analysis and design
- Information fusion and visualization tools

GPS NAVIGATION SYSTEMS



GUIDING Our GPS satellite payload technology enables precise, three-dimensional position, navigation and time information on a 24/7 worldwide basis for land, sea and air defense and civil applications.

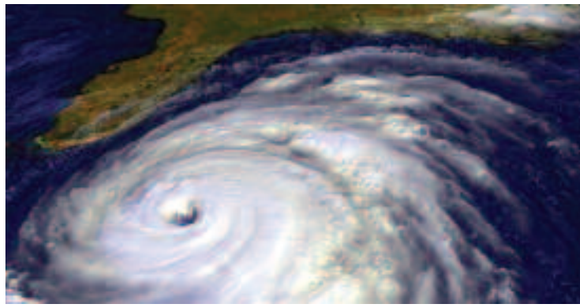
What do a Special Operations troop and newlyweds on a road trip have in common? They can depend on Global Positioning System (GPS) satellites. Our more than 50 GPS satellite payloads have accumulated over 500 years of orbit life without a mission failure. Advanced military applications of this GPS technology range from guiding cruise missiles and smart bombs to helping soldiers locate their precise position in deserts devoid of landmarks. Commercial GPS applications include land surveying, route mapping, transportation monitoring and precision navigation.

Currently, ITT has completed delivery of the latest generation of GPS satellites (IIR) in the government inventory using ITT-developed technology to provide for more secure military implementations and stronger civil signals. There are currently six IIR-M satellites on orbit. These satellites provide a more capable GPS constellation, which adds additional capability years earlier than previously planned, even as ITT designs a whole new generation of payloads for GPS III with increased capabilities and security.

METEOROLOGICAL SYSTEMS

At the very beginning of space-based meteorology, ITT was there, working with NOAA and NASA. Since then, we've been at the forefront of weather forecasting. Today, ITT offers half a century of experience with meteorological remote sensing capabilities, from image and data collection through processing and dissemination to bring us from forecasting to nowcasting.

Our capabilities are demonstrated by the Geostationary Operational Environmental Satellites, including our Imager and Sounder. They form the backbone of the U.S. civil early-warning weather system, tracking hurricanes, tornadoes and other severe storms in order to alert residents of approaching danger. These are joined by Polar Operational Environmental Satellites where our instruments help significantly improve weather forecasting, provide land and sea data and enhance longer term climate prediction. Our technology will also drive the next generation of these systems setting new precision and timeliness standards for weather forecasting data.



PROTECTING Our sophisticated geostationary and polar orbiting imaging and sounding instruments are helping the National Oceanic and Atmospheric Administration and military organizations track weather.

EARTH AND SPACE SCIENCE SYSTEMS

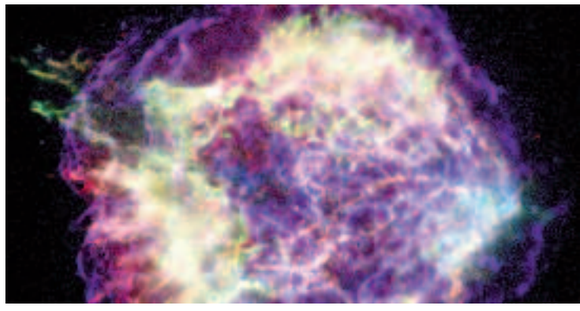
Earth Science Systems

ITT technologies help scientists and researchers gather earth data critical to scientific research, national policymaking and economic growth. Key technologies include hyperspectral and LIDAR, both used for advanced climate and weather applications such as greenhouse gas monitoring, and global winds mapping.

Space Science Systems

Since the first space mission, ITT has been developing space systems that help scientists and researchers unlock the secrets of the universe. Our precision optical components for ground-based telescopes plus electro-optical systems and imaging sensors for space-based observatories help scientists look deeper into space and explore our own planet in greater detail.

ITT can develop components separately and, as system integrators, as part of a completed optical system. From design and engineering, to precision optics fabrication, to complete systems integration and testing, our world-class facilities can deliver a full range of mirrors, mounts and metering structures for ground, sea, air and space-based platforms.



DISCOVERING Our technologies allow the public and private sectors to see farther and look closer at the earth, stars, planets and galaxies.

Our Solutions

HIGH-RESOLUTION COMMERCIAL IMAGING SYSTEMS

VIEWING We design and build high-performance spaceborne imaging systems that capture information used to map and monitor a wide range of man-made and natural features here on Earth.

You can learn a lot about the earth and its environs by looking at it from space. For over 50 years, ITT has provided some of the most relied upon eyes in space. Among other applications, the data collected by our imaging systems help planners determine the path of new highways, climatologists monitor ice caps and scientists hunt for ancient meteor impact craters.

ITT offers complete imaging system solutions. We take our customers' ideas from imaging sensors and imaging subsystems to payload development. We can fabricate precision optics quickly, design the focal plane in-house, and integrate the electronics to deliver systems for test quickly.

DECISION SUPPORT SOLUTIONS

CLARIFYING Imagery and data are just the beginning. Our productivity enhancements better equip analysts to generate, visualize, interpret, exploit and disseminate information from images and data.

ITT offers a complete range of Decision Support solutions that help you manage, exploit, analyze, visualize, interpret and disseminate images or data so you can take quicker, more effective action. Our solutions include:

Mission And Workflow Management
ITT has decades of experience and a sophisticated suite of tools to help you organize and display information and to optimize collection and processing systems to meet your specific needs:

›› Workflow productivity analysis
›› Modeling and simulation
›› Web-based decision aids

Processing Through Dissemination
The value of an image or other spectral data is enhanced by the quality and quantity of information extracted from it with solutions that include:

›› Multi-INT processing, visualization, and analysis software solutions, tools and components including ENVI and IDL software
›› Systems integration products and services
›› Quality assurance and validation techniques
›› Dissemination solutions

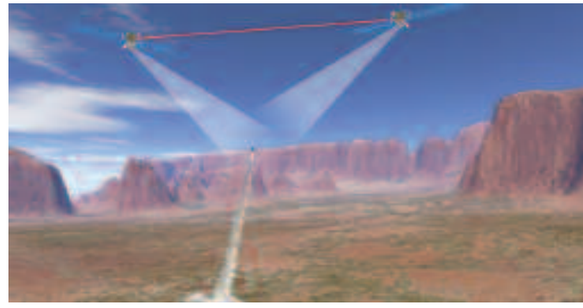
AIRBORNE REMOTE SENSING SOLUTIONS

Leveraging deep knowledge of remote sensing and information handling, ITT can develop and integrate sophisticated airborne capture and information management systems and capabilities for DoD, DHS and commercial customers. Starting with solid image-system engineering, we've built integrated solutions to deliver robust, multi-camera and multi-phenomenology systems to meet a broad range of needs, including broad area persistent real-time coverage. We can deliver end-to-end solutions that can provide imagery in real-time or near real-time to any spot on the globe.

DELIVERING ITT's expertise in remote sensing enables sophisticated solutions that deliver information-rich images in real-time anywhere in the world.

SPACE CONTROL AND MISSILE DEFENSE

With 50 years experience, our space, air and ground based systems/subsystems can be counted on to support our nation's space control, antimissile defense and operationally responsive space programs/initiatives.



CONTROLLING From the ground up, ITT provides the technology to control our airspace and defend our nation against threats from above.

When you need a remote sensing and navigation solution that's engineered for life... your next call should be to ITT.

To learn more visit www.ssd.itt.com or call us at 585-269-5600.