



THE SECURE BORDER SOLUTION



NEW THREATS.
NEW THINKING.

EXECUTIVE SUMMARY

ICx Technologies has a long history of supporting a wide range of perimeter and border security installations. Our tower, sensor and software solutions are deployed by many border security forces, and provide flexibility to accommodate an array of new and legacy sensors and communications equipment. These solutions are utilized daily with proven results. ICx solutions are mobile and rapidly deployable with seamless networking capability to support the common operation picture. They are available now.

ICx has a long term, ongoing commitment to its customers, integrators and prime contractors. Our partners share that same commitment and we believe ICx can be an important contributor to any security program. We understand that many countries are dealing with new and emerging threats that require an extremely broad set of tools. Such a scenario can strain resources and impact schedules. With ICx, our customers can be assured of low-risk availability of field-proven technology that has been accepted, and is already preferred by front-line officials and users on the border.

ABOUT ICx TECHNOLOGIES

ICx Technologies develops effective solutions for homeland and military security. Our sensors detect and identify chemical, biological, radiological, and explosive materials. Our surveillance products discern people and objects invisible to human senses and conventional cameras. Our software and systems connect, command, and control security devices. ICx has manufacturing and research facilities in the United States, Canada and Europe.

Company overview;

- Diversified innovator of advanced technology solutions
- Founded in 2003, with operations going back to 1975
- Headquartered in Arlington, VA.
- ~800 employees, 200+ engineers/scientists, including 50+ PhDs
- \$150 million invested in leading-edge technologies and products
- \$60 million of government-development funding
- Numerous contracts with CBP, HSARPA, HLS, DHS

Detection Division

We offer advanced capabilities to detect threats in all of the critical CBRNE segments — chemical, biological, radiological, nuclear and explosive. Our CBRNE units are compact, portable and simple to use. Their sensitivity, accuracy and low false-alarm rates compare favorably to other units designed for use in the field.

Surveillance Division

Our surveillance products secure perimeters such as around airports, seaports, critical facilities and nuclear power plants, as well as monitoring borders and sensitive areas. These products incorporate technologies we have developed to create and fuse images in the infrared, visible light, microwave and millimeter wavebands.

Solutions Division

ICx has the experience and capability to understand the threats, define the requirement, design the integrated solution and then deploy, train and support our products in the field.

ICx ON THE BORDER

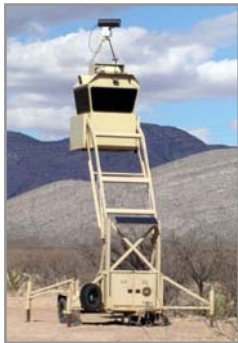
ICx has proven border surveillance solutions with command and control capabilities. These products are integral to effective daily border operations. For more than 12 years, ICx has had a direct relationship with the U.S. border forces, supporting surveillance operations through camera, radar and tower products. Our solutions are capable of being seamlessly integrated into existing system architecture with minimal risk, lead time and cost.

Described below are some key ICx installations:

- More than 100 SkyWatch™ towers deployed (manned or unmanned)
- 10 Cerberus™ unmanned surveillance towers specifically designed for borders
- Long range STS 12000 (formerly RDTs) radars deployed in Arizona
- Cameleon video command and control software in Laredo
- DefendIR™ thermal and CCD cameras deployed on selected SkyWatch towers
- Flexible integration, supporting a wide range of new and legacy sensors and equipment

SKYWATCH MANNED OR UNMANNED TOWERS

More than 100 SkyWatch towers have been deployed along the southern and northern U.S. borders. The CBP has been making annual purchases of SkyWatch towers for more than 10 years. These units have been customized with a variety of sensors, as specified by the CBP.



The SkyWatch is a self contained, highly mobile platform that can support a broad range of sensors, communication equipment and other surveillance or law enforcement equipment. SkyWatch towers are configured for varying heights, cab configurations, ballistic protection levels and power sources. Due to its proven effectiveness, the ICx SkyWatch tower has become an icon symbolizing border security.

CERBERUS UNMANNED SURVEILLANCE TOWER SYSTEM

ICx is under contract with the U.S. Army Night Vision Laboratories in support of the CBP, to deliver four different Cerberus configurations. The inherent flexibility and portability of Cerberus allows its adaptation to a wide range of sensors and command and control options, depending upon mission requirements.

The systems provided to the CBP, and subsequently deployed on the southern border, include integrated ground-based radars, thermal and CCD cameras, unattended ground sensors (UGS), command and control software, and communications equipment. Each unit can be networked and operated remotely.



While the original Cerberus configuration is for a mobile platform, the design is readily transferable to a fixed solution. In practice, a mobile Cerberus platform provides the advantage of being able to confirm sitting parameters in an early deployment, then transitioning it to a fixed solution.

WIDE AREA SURVEILLANCE GROUND BASED RADARS

ICx radars are deployed on the border in Arizona on the Barry M. Goldwater Range (BMGR) and around the Douglas, Ariz. border crossing. These STS-12000 radars provide long-range, 360° surveillance with low false alarm rates. The STS-12000 deployments are combined with existing thermal and CCD camera assets and provide integrated slew-to-cue capability to aid the detection and identification of activity on or near the border.



Already in use by the Marines and SPAWAR at BMGR, these ICx long-range radars can be integrated into the Yuma sector Project 37, providing a proven, operational element to border security. The STS-12000 employs elevation motion during each azimuth sweep and is programmed to maximize detection range in variable terrain situations.

The STS-350 short-range radar is a widely-deployed, 360° surveillance radar with low false alarm rates. The STS-350 is the radar of choice by the U.S Air Force for air base perimeter/force protection via the IBDSS Program. The STS-350 is the only radar that has passed the USAF air-base detection and false-alarm testing for walking and crawling intrusions.

The STS-350 provides a rapidly deployable, portable or fixed radar design in a variety of roles such as mobile deployments; critical radar coverage between long-range radar emplacements; and installation/tower self-protection. It is readily integrated with camera systems (as shown) to provide slew-to-cue capability.



All ICx radar offerings are interoperable to optimize every deployment scenario. Line-of-site characteristics vary considerably along the border and a combination of linked short-, medium- and long-range radars provide the best solution. ICx provides the only radars ever to have passed the stringent Air Force false-alarm specifications, thus allowing multiple linked radars to maintain an acceptable false-alarm rate for the entire network.

CAMELEON SENSOR CONTROL SOFTWARE

The ICx Cameleon command and control software is deployed with the CBP at Laredo, utilizing a video display wall (see figure below). Cameleon provides ease of control for multiple cameras,



alarms and event management, recorders and situation-awareness sensors. Cameleon is scalable and compatible with legacy and new equipment – simultaneously controlling analog and IP inputs. Cameleon supports the seamless integration of new and existing assets to support the larger common operating picture (COP).

Cameleon is widely deployed to manage the command and control security infrastructure for critical military and government facilities as well as for municipalities and state-wide transportation systems. Its architecture supports multiple users, complex privilege hierarchies, and hundreds of sensors and output devices.

LONG- AND MEDIUM-RANGE THERMAL AND CCD CAMERA SYSTEMS

The DefendIR thermal and continuous zoom CCD pan-and-tilt imaging systems are deployed on the border on selected SkyWatch and Cerberus towers (as shown below). The DefendIR provides 24-hour surveillance using a high-performance uncooled thermal imager. It is highly modular and configurable with different lenses, sensors and controllers to match mission requirements. An optional high-lumen spotlight and strobe non-lethal weapon is also available for illuminating and deterring border incursions.

Also available are long-range and ultra-long range high-performance Orion camera systems. Orion is a high-resolution, cooled long-range thermal imager with continuous zoom, stabilized pan and tilt, and CCD integration options. Both the DefendIR and Orion integrate seamlessly with radars to provide slew-to-cue capabilities that have had proven results in multiple deployments.



FLEXIBILITY AND INTEGRATION

The flexible and configurable design of our towers, sensors and software allow ease-of-integration with a wide array of new and legacy surveillance equipment. Our solutions have the versatility to be scalable as threats and required coverage expands.

ADDITIONAL ICx SOLUTIONS FOR BORDER SURVEILLANCE AND PROTECTION

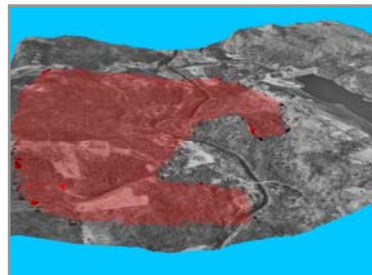
ICx continues to advance the capability of its diverse range of proven solutions. Our customers can expect ICx to innovate and create new and more effective surveillance and detection solutions. Examples of initiatives that can enhance future integrated solutions include:

- Additional radar models with varied detection ranges, high revisit rates and our heralded low false-alarm rates. The STS-1400 (1.4 kilometer radius) model has been in production for several years and a longer range STS-4400 (4.4 kilometer) is now available. Both radars operate in ranges between the existing STS 350 and STS 12000. An extended range STS-12000 (STS-30000) is capable of providing up to a 30-kilometer detection range.
- “Radar fence” – ICx is developing a fence-assist radar sensor for short-range, high assurance protection along fence lines
- Advanced low-frequency techniques for personnel detection in non-line-of-site situations
- Advanced imaging solutions – ICx is developing cameras for differing missions, including triple-band sensors for wide spectral coverage
- Cameleon advancements, including Tactical and Geo variants, incorporate tracking tools for cooperative and non-cooperative targets
- Tower options for longer-term deployments using renewable energy sources
- Mobile surveillance solutions from our integrated ‘Cerberus’ range of products provide flexibility and customization
- Vehicle-mounted radar/EO sensor solutions for both flatbed truck and rapid response vehicle configurations

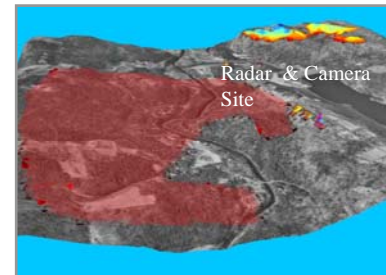
ICx BORDER SECURITY DESIGN AND SIMULATION

Perimeter or border surveillance solutions that include radar sensors and cameras require line-of-sight (LOS) access to the surveillance area. In feature-rich environments, a detailed site design is required. The main objective of site surveys is to determine the optimum location for radar sensors and cameras. ICx uses proprietary site design software to establish optimal placement of sensors taking into account a range of factors. The site survey tool utilizes proprietary GIS tools for “virtual” site analysis and evaluation. The initial design is then used in conjunction with on-site survey capabilities to account for factors that can only be assessed through physical on-site surveys. The result is an optimized solution that defines and quantifies necessary surveillance and sensor solutions.

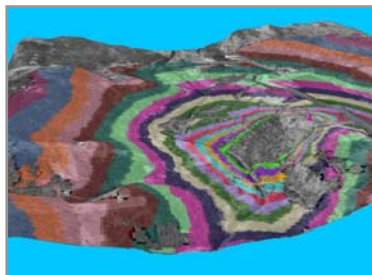
Sample figures are shown below for the design of a surveillance system protecting a dam. The blue area in the Elevation Profile Analysis shows the expected coverage using the STS-12000 radar or an Orion camera with commensurate range performance. The red areas are not covered with the selected site and elevation profile. In these areas additional radar and cameras, such as the short-range STS-350 radars and/or DefendIR cameras are required to obtain the additional coverage.



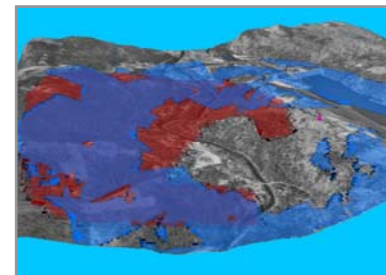
Target Area



Site Analysis



Elevation Analysis



Elevation Profile Analysis

SUMMARY

ICx has shown that it has a long history of providing integrated border solutions. Our tower, sensor and software solutions are:

- Deployed and proven
- In operation by U.S. border forces
- Available now
- Scalable for the extensive length of the border
- Flexible and configurable solutions to accommodate an array of new and legacy sensors
- Mobility for rapid deployment to optimize the broader mission
- Seamless networking capability
- Affordable
- Technology integration path for future capabilities

ICx CONTACT

David J. Smith

T+ 1.978.397.2338

Vice President, International Sales

david.smith@icxt.com

APPENDIX

Sample Case studies

U.S. Border at the Barry M. Goldwater Missile Range, Yuma, Ariz.

ICx long-range surveillance STS-12000 radars help curb illegal border crossings on a live-fire Marine training facility. High-resolution technology detects vehicles at up to 12 kilometers and walkers at up to 6 kilometers. Border Patrol has used the system to intercept illegal immigrants and large drug shipments.

Houston Airport System, Houston, Tex.

ICx Technologies has installed several long- and short-range radars as part of the Houston Airport System's new Perimeter Intrusion Detection System. The linked STS-350 and STS-12000 radars extend the facility's perimeter for complete wide-area surveillance. The deployed system provides automated detection, tracking and classification of intruders, vehicles and low-flying aircraft. This information is communicated to the command post in real time for response determination. The Houston Airport System encompasses the George Bush Intercontinental Airport, the William P. Hobby Airport and Ellington Field.

Nuclear Facilities across the U.S.

ICx Technologies provides security and surveillance hardware and software to protect more than 30 nuclear plants and national laboratories across the United States. We understand the sensitivities involved in providing top-level security for critical infrastructure. Each facility presents a unique set of variables to balance freedom and control – access and non-access. ICx uses a dual approach of technology and threat-analysis expertise to design and implement cost effective security solutions to optimize existing personnel resources and reduce nuisance alarms.

Vancouver Port Authority, Vancouver, B.C

ICx command and control software as well as Cameleon software is deployed in the centralized command-and-control center to monitor and control all devices and systems, including more than 100 video cameras, through a single, consolidated-user interface. Cameleon underpins a comprehensive, integrated security system to monitor, control and ensure safe, secure and efficient vehicular access to the Port's terminals and facilities. Each of the four control zones includes security and surveillance equipment, traffic control systems, dynamic electronic signing and immediate consequence devices.