



**Raytheon**

**ACULink**

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Decades of Proven Communications Solutions.

**A BRIEF LOOK INSIDE**

**Raytheon partners with ICOP Digital, Inc. for National Road Show**

pages 1-2

**New mobile video solutions overview**

pages 3-4

**Software/Firmware updates now available online**

page 5

**Raytheon at APCO**

page 6

**Training schedule**

page 7

**Upcoming events**

page 8



page 3



page 4

**Raytheon Civil Communications Solutions with ICOP Digital, Inc. to begin National Road Show**



**Software/Firmware Updates Now Available Online**

We are pleased to announce that our software and firmware updates are now back online. Software and firmware updates are available for many of our products and modules to ensure you are benefiting from the latest technology we offer.

(continued onto page 5)

**Interested in learning more about our new mobile video solutions?  
Email us at [civil.communications@raytheon.com](mailto:civil.communications@raytheon.com).**

Raytheon Company (NYSE: RTN) has partnered with ICOP Digital, Inc. (NASDAQ: ICOP) to market mobile video solutions. Raytheon has purchased units to install and demo on a national road show for its clients including public safety, military, law enforcement, transportation, homeland security and other government agencies.

(continued on next page)

## **"Raytheon to begin National Road Show"** continued from page 1

The Raytheon/ICOP road show currently includes stops in twelve cities and will feature a product demonstration as part of the agenda.

Raytheon and ICOP signed an agreement on July 15, 2009 to market mobile video solutions to customers in the public sector and military. Available immediately, the solutions provide high-quality video and audio to mitigate risks, reduce losses, and improve safety and security.

**"This road show will allow our sales team to introduce our mobile video solutions directly to the customer, allowing first responders a chance to see how our solutions will work in their environment" said Dave Camin, Video Solutions Product Manager for Raytheon's Civil Communications Solutions. "We'll work together to provide product demonstrations in order to demonstrate we have the best mobile video solutions offering agencies the ability to achieve higher conviction rates, reduce liability costs, and improve officer field training."**

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"We'll work together to provide product demonstrations in order to demonstrate we have the best mobile video solutions offering agencies the ability to achieve higher conviction rates, reduce liability costs, and improve officer field training."

As part of the road show tour, product demonstrations will include mobile solutions with an in-dash recording system ideal for mass and public transit in addition to, live streaming video allowing for real-time situational awareness and support.

**"With sales training now complete for Raytheon's regional sales team, we are very excited to get into the field and help them to hit the ground running," said Bob Bradley, ICOP Director of National Sales and Marketing. "Since making the products available through Raytheon in the last month, we have built some great momentum and we are hopeful that the road show will accelerate orders through this channel quickly." Bradley continued.**



**Raytheon's new mobile video solution,  
Powered by ICOP.**

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ICOP Digital, Inc. is a leading provider of mobile video solutions for law enforcement, fire, EMS, military and transportation markets worldwide. The company protects people, assets and profits through its surveillance and communications solutions for public and private sectors. For more information, please visit <http://www.ICOP.com>.

For more information, please e-mail [civil.communications@raytheon.com](mailto:civil.communications@raytheon.com) or continue reading about our new mobile video solutions on the next pages.

## New Mobile Video Solutions

We have partnered with ICOP Digital, Inc. to bring you new mobile video solutions.

These products include the 20/20-W, a ruggedized, in-dash recording system ideal for public safety; the 20/20 VISION which allows law enforcement agencies to interface the Model 20/20-W into their laptops; the Model 4000, a solution designed with the flexibility and extended coverage required for mass and public transit; and LIVE, a live streaming video option allowing an unlimited number of simultaneous viewers to watch and share live video for real-time situational awareness and support.

Please find below a summary of each of the new solutions available immediately.



### 20/20-W

Raytheon's 20/20-W, powered by ICOP, is an in-dash recording system that integrates up to three video cameras, a global positioning system and a wireless microphone. With a 40GB shock resistant hard drive and ruggedized design, the system is ideal for public safety agencies as it can run continuously while allowing easy access to its recorded files using software management tools with the highest level of security offered in the industry.

#### Key Benefits/Features:

- Officer-safe installation - mounts in standard AM/FM radio slot; alternate mounting locations are also possible

- Built-in AM/FM radio
- 40 GB vehicle-grade, removable hard drive in shock-resistant case, providing up to 16 hours of real-time recording in high-resolution mode (30 fps)
- Support for multiple video upload methods: removable hard drive, wireless (using 802.11g/n) or Ethernet
- Connects up to 3 cameras and 3 audio sources; recording up to 2 cameras and 3 audio sources simultaneously
- Highest quality, high resolution video capture on each camera (D1, full VGA or 1CIF, at 30, 15 or 10 fps)
- Pre-event recording of up to 60 seconds (with 2 cameras simultaneously)
- Built-in GPS, with continuous latitude/longitude display; also provides GPS data output
- "Mark" exact event locations (with GPS)
- In-vehicle classification codes for easy video search and retrieval
- Wireless Mic - uses 900 MHz transceiver, with automatic activation (minimum range = 2,000 feet, direct line of sight)
- "Officer HELP" button sends alert to dispatch, with GPS coordinates and Vehicle ID
- Multiple activation triggers – manual, or automatic in conjunction with lights, siren or wireless microphone, collision, or up to three additional auxiliary inputs
- Proprietary software prevents unauthorized access and editing of video and protects Chain of Custody
- Multi-lingual menus

### 20/20 VISION

Using Raytheon's 20/20 VISION, powered by ICOP, law enforcement agencies worldwide can interface the 20/20-W into their existing mobile data terminals (MDTs). With flexible installation options, the 20/20 VISION delivers full, high performance, digital video recording capabilities controlled through an officer's MDT via keyboard or a touch screen interface.

#### Key Benefits/Features:

- Provides full DVR functionality through your MDT/MDC via a keyboard or touch screen interface
- Operates without the MDT/MDC in the event of a power loss or failure

## “New Mobile Video Solutions” continued from page 3

- Initiates recording via quick keys, touch screen, or using the auxiliary control unit to record, mark or stop triggers
- Provides full video to the MDT/MDC and audio to vehicle’s speakers
- Offers complete variable video window resizing
- Installs easily and provides great flexibility in mounting options
- Multi-lingual menus

### Model 4000

Raytheon’s Model 4000, powered by ICOP, is a mobile video solution available in four or eight camera configurations. The system can record up to four or eight cameras simultaneously depending upon the configuration.

The system is ideal for school buses, commercial transport, public transportation and long-term surveillance applications. Its increased flexibility and extended coverage allows surveillance of passenger cabin areas, driver areas, bus entrances and includes windshield-mounted cameras for recording areas in front of the bus such as cross walks and intersections.

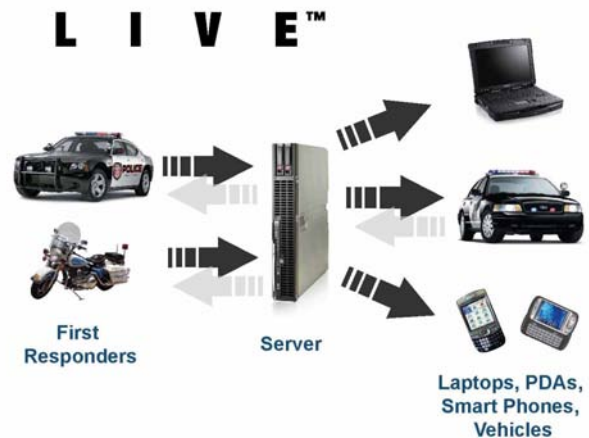


Raytheon’s Model 4000, powered by ICOP

### Key Benefits/Features:

- Simultaneous live viewing and recording through local and web interfaces
- Variable recording speeds up to 30 frames per second on all channels
- “Hot Swap” hard disk drive bay with up to 1 TB of recording storage
- 10/100/1,000 Base-T and 802.11b/g network interface
- No tapes to manage, clean or replace

- Easy search and retrieval of stored video
- Extensive search by date/time, trigger, video loss per each active camera



Raytheon’s LIVE, powered by ICOP

### LIVE

Raytheon’s LIVE, powered by ICOP, delivers real-time situational awareness from mobile cameras, via live streaming video, to multiple viewers and devices simultaneously. This allows headquarters, vehicle laptops, and smart phones to watch the action unfold live to provide the best support to optimize the end result.

### Key Benefits/Features:

- High quality video streaming: Stream quality video and audio to multiple viewers simultaneously.
- No software required: View video streams from virtually any device (including laptops, cell phones, PDAs, etc.)
- Viewable anywhere: Video streams can be shared locally, across agencies, nations and even worldwide.
- Real-time live video/audio: LIVE supports proactive decision making capability based on real-time situational awareness in crisis situations.

For more information, please e-mail us [civil.communications@raytheon.com](mailto:civil.communications@raytheon.com).

## “Software/Firmware Updates” continued from page 1

The following software and firmware updates are available online:

- ACU Simulator (used with the ACU-2000 IP, ACU-1000, ACU-T products)
- ACU Controller Software (ACU-2000 IP, ACU-1000, ACU-M, ACU-T)
- ACU-M Software Upgrade (ACU-M)
- ARA-1 Software Upgrade (ARA-1)
- CPM-3 Module (SNV-12)
- CPM-4 Module (ACU-1000, ACU-T)
- CPM-6 Module (ACU-2000 IP)
- DSP-2 Module (ACU-1000, ACU-T)
- DSP-2 IP Module (ACU-2000 IP, ACU-T)
- ETS-1 Software Upgrade (ETS-1)
- MacNXU (ACU-2000 IP, ACU-1000, ACU-M, ACU-T, NXU-2A, NXU-2)
- NXU Setup Utility (NXU-2A, NXU-2)
- NXU-2 Software Upgrade (NXU-2)
- NXU-2A Software Upgrade (NXU-2A)
- PCNXU (ACU-2000 IP, ACU-1000, ACU-M, ACU-T, NXU-2A, NXU-2)
- SCM-1 Module (ACU-2000 IP)
- SCM-2 Module (ACU-2000 IP)

To request the software, please visit <http://www.raytheon.com/businesses/ncs/civilcomm/s/firmware/>.

You can request up to four software or firmware updates at a time.

You will need to fill out the form and agree to the statements at the bottom of the form.

I agree with the [End User Software License Agreement](#)

I understand that the software received is subject to the U.S. Export Administration Regulations (EAR) and may not be used in the design, development, production or use of missile technology or chemical and biological weapons, or nuclear explosive devices, nuclear reactor or nuclear fuel. For more information, visit <http://www.bis.doc.gov>.

I will not transfer, export or re-export any product, hardware, software or technology received under this authorization to Cuba, Iran, North Korea, Sudan and Syria without express U.S. government authorization in the form of an export license.

I acknowledge that I am not a citizen or representative of Cuba, Iran, North Korea, Sudan or Syria.

**Agree to the statements at the bottom of the form by checking the box and hit Submit.**

Once submitted, you will be contacted by our customer service department (typically within a few hours) with a link to download the encrypted software and a security key to decrypt the software provided.

Should you have any questions, please e-mail us at [civcomms.firmware@raytheon.com](mailto:civcomms.firmware@raytheon.com) or call our Customer Service department at 919.790.1011.

### Software/Firmware Request

Please fill out the form below to request our software/firmware updates. Should you have any questions, please e-mail [civcomms.firmware@raytheon.com](mailto:civcomms.firmware@raytheon.com) or call 919.790.1011.

*\* Indicates required field*

Select the software/firmware you are requesting to download (may select up to 4)

\*Firmware

Firmware

Firmware

Firmware

\*Select the purpose (end-use) of the download

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\*First Name:

Middle Name:

\*Last Name:

\*Company/Organization Name:

\*Email Address:

\*Phone Number:

\*Address 1:

Address 2:

Software/Firmware Request form found online

## Raytheon Civil Communications Solutions at APCO

As a systems integrator, Raytheon's Civil Communications Solutions is focused on providing customers with maximum flexibility and ease of use.

Raytheon's Civil Communications Solutions participated in APCO taking place in Las Vegas, Nevada from August 16th to the 20th. Presentations included our P25net product line with demonstrations of the integration of our P25 open-standards technology using P25 ISSI protocol. We showed that by utilizing the ISSI, best-of-breed solutions can be seamlessly integrated to achieve interoperability, enabling first responders to choose high value technologies with confidence and avoid becoming locked into a proprietary system.

The Raytheon team also presented features of our new WAIS-2 dispatch software, the DSP-3 interface module, and demonstrations of how Radio over IP and Bridging System Interface (BSI) compliant SIP protocols can be used for the integration of LMR and IP. You will find brief descriptions below of the products of the products we featured during APCO this year.

### **P25net: Distributed IP Core Radio Network Architecture**

Raytheon's P25net provides full P25 capabilities on a robust standard IP network platform over distributed architecture. The P25net system is fully compatible with all P25 radios via the industry standard ISSI. The system's IP core soft switch works in single site, multi-site, conventional, trunked, and mixed system environments.

#### **Benefits/Features:**

- APCO P25 fully compliant without compromise providing a P25 Common Air Interface and an integral ISSI
- Interoperability in single or mixed frequency bands
- Easily installed system with multi-agency support
- Composite channel trunking which provides a scalable upgrade for P25 migration while reducing channel capacity required for remote locations, resulting in cost savings and a flexible deployment for the customer
- Meets requirements for interoperability grant funding

- Optional P25net Network Management Software (NMS) which allows first responders to monitor their P25net digital land mobile radio network for optimal system performance.

### **Wide Area Interoperability System**

Raytheon's WAIS system is a wide area interoperability solution that links multiple communication devices through an IP network using Raytheon's proven ACU technologies. The WAIS and WAIS-2 platforms allow users that operate on several different types of radio systems and frequencies providing the ability to connect locally, regionally, statewide, or nationally using IP network infrastructure. Raytheon's WAIS systems are managed via the WAIS controller software using an ergonomic touch screen graphical user interface (GUI) which is accessible from any point on the network.

#### **Benefits/Features:**

- Provides a wide area interoperability communications platform for critical incident command and control that is easily scalable.
- Allows efficient use of existing network resources with commercial-off-the-shelf (COTS) equipment and proven Radio over IP (RoIP) and Voice over IP (VoIP) technology.
- Provides remote access from any point on the network. Authorized users may configure, control, and monitor unselected audio and communicate with any entity via selected audio.
- Allows disparate radio systems to be connected locally, regionally, statewide, or nationally over IP network infrastructure.
- WAIS Controller software presents clearly the state of the system and allows operators to make and break connections swiftly and easily.

Should you have any questions, please e-mail us at [civil.communications@raytheon.com](mailto:civil.communications@raytheon.com).

## 2009 Training Schedule

We offer open training classes at our facility in Raleigh, North Carolina.

The next available classes for the ACU technology (including ACU-M, ACU-T, ACU-1000 and ACU-2000 IP products) and Wide Area Interoperability System (WAIS) courses are listed to the right. These classes include lectures and hands-on training.

Class student minimums pertain. Travel, room and board expenses are the responsibility of the trainees.

Dealer training is also offered. For more information, please e-mail [acu.sales@raytheon.com](mailto:acu.sales@raytheon.com).

### 2009 ACU Technology Classes

September 15-16

October 13-14

November 17-18

December 15-16

### 2009 WAIS Classes

December 8-9



Training facility in Raleigh, North Carolina.

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## 24-hour Customer Support Hotline:- (800) 498-3137



Our 24-hour customer support hotline, available to U.S. and Canadian customers only, is designed to offer customers an outstanding level of service. Customers can call (800) 498-3137 for immediate assistance with any technical problems, day or night.

The 24-hour customer support hotline is available to customers needing assistance with our voter equipment, ACU products, NXU-2A, VoIP/RoIP products and to the customers who purchase the 24-hour support with system installations.

## UPCOMING EVENTS

WE WILL BE PARTICIPATING AT THE FOLLOWING UPCOMING INDUSTRY EVENTS:

### SEPT '09

NGAUS General Conference  
Nashville, TN September 11-12

ASIS International Anaheim, CA  
September 21-24

Raytheon  
Civil Communications Solutions  
5800 Departure Drive  
Raleigh, North Carolina  
27616

<http://www.raytheon.com/civilcomms>  
Phone: 919.790.1011  
Fax: 919.790.1456  
[civil.communications@raytheon.com](mailto:civil.communications@raytheon.com)

