



**WE ARE**

**CUBIC**

**CUBIC™**

# CEO Message

At Cubic, we're pioneers and disruptors; we are proud of our history of many firsts. For over half a century, Cubic's innovative approach has helped revolutionize the transportation and defense industries. Our products were instrumental in remapping the planet; introducing contactless payments on public transit in Europe, Australia and North America; training every fighter pilot in the U.S. and its allies since the early 1970s with our "Top Gun" system; and providing the most mobile satellite ground terminal through our GATR acquisition.

What sets Cubic apart from other technology companies is our laser focus on the customer – our *Winning the Customer* philosophy. We aren't simply integrators and providers of solutions, we're partners. We empathize with our customers as we own our customers' challenges. We understand the trials, limitations and aspirations of commercial, government and military clients and work with them to deliver world-class solutions that make a difference in the world.

Our strength is our people. We leverage the talent and know-how of our employees from across our businesses to provide the best results for our customers. This cultural identity based on sharing knowledge, experience, people, tools,

processes and ideas is called *One Cubic*. It enables us to draw on our global expertise, while allowing us to focus on developing solutions that work locally.

We are creating a culture that drives value for all stakeholders by focusing on customers, teamwork, candor and innovation. We believe that with our global team being "all in" with our strategy of *Winning the Customer* and living *One Cubic*, we will deliver superior value to our shareholders and fulfill a purpose that makes a difference in the world.

Today, our tradition of innovation continues as our cutting-edge research and development delivers robust solutions for our growing global customer

base. As the defense and transportation industries evolve, we will work relentlessly with our customers to help them solve complex problems that meet the challenges of tomorrow.

Sincerely,



**Bradley H. Feldmann**  
Chairman, President & CEO



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# WE ARE DISRUPTORS

Founded in 1951 by Walter J. Zable, Cubic began as a small electronics company operating from a modest San Diego storefront. With a name that reflects both engineering and precision, Cubic became a company with 'many firsts' – innovating to meet the needs of our customers and disrupting the industries we operate in.

Revolutionizing industries is what we know best. From public transportation ticketing gates to secure satellite communication systems, Cubic has built leading-edge solutions to complex problems through disruptive technology adoption.



1951 1960 1961 1967 1970 1973 1974 1980 1985 1987 1990 1993 1999 1999 2002 2004 2008 2011 2012 2013 2015 2015

Cubic Corporation is founded by Walter J. Zable at a small storefront in San Diego's Point Loma. Its only product is a device for measuring the power of microwaves

Under a program highly classified until 1995, developed the first (and only) precision tracking system (pre-GPS) used to recover film canisters dropped from spy satellites in mid-air

Cubic acquires U.S. Elevator and is the first company to add microprocessor control to preposition elevators at the next most likely floor call. Three Cubic elevators can do the work of four traditional elevators, and growth is rapid

Cubic wins first major Automated Fare Collection system contract for the Bay Area Rapid Transit system in San Francisco

Developed Joint STARS jam-resistant data link for the U.S. Air Force and the Army

Develop the Army's first fully integrated instrumented tank-warfare ground training system aka Combat Maneuver Training Center (CMTc) in 1993

First smart card fare collection system was launched with Washington Metropolitan Area Transit Authority

Designed and launched the first contactless smart card system for transit in North America with the Washington Metropolitan Area Transit Authority

Develops the largest multimodal system in Europe, the London Oyster® Card

First in the world to deploy a transit agency-branded prepaid all-contactless card, in partnership with the Port Authority Transit Corporation, owned and operated by the Delaware River Port Authority

The first large-scale account-based open payment was deployed by Cubic for the Chicago Transit Authority

Acquired world's first inflatable satellite communications terminal

Cubic's Geodetic Sequential Correlation of Range (SECOR) satellite, the world's first satellite mapping system, helps remap Planet Earth and increase accuracy of ballistic missiles from outer space

Cubic founder, Walter J. Zable, was the inventor of the electronic stadium scoreboard, in which San Diego installed the Nation's first electronic stadium scoreboard for San Diego Stadium

Developed and delivered first-ever air combat instrumented training range for TOP GUN fighter pilot training

Introduces a computerized bus fare box

Developed a Personnel Locator System to covertly find downed aircrew. The system is now the standard for every Combat Search and Rescue (CSAR) aircraft, which was later used in Operation Desert Storm

Cubic develops the first ISO 14443 compliant multi-protocol smart card reader

Cubic rolls out the first fully operational intermodal systems in the U.S. (Washington, D.C. and Chicago)

Rolls out first wholly contactless fare system in the U.S. (Atlanta)

Launched the world's first large-scale open payment deployment in 2012 for Transport for London

Launched the first mobile app for fully integrated regional transit services for the Chicago Transit Authority



**At Cubic, we've never been comfortable with the status quo.** Since our founding, innovation is at the heart of our corporate culture and is pervasive within our social mindset. Innovation fuels our collaboration and our relentless commitment to improve, enhance and discover better solutions for our government and commercial partners around the world.

### London Innovation Centre Leading change through imagination

Opened in London in 2015, Cubic's innovative state-of-the-art facility provides a highly collaborative environment for our employees, partners and academics around the world to connect, create and drive advances in urban transportation and defense systems and solutions.

Whether it's doing research, building prototypes or designing

software, our Innovation Centre is always filled with new ideas that will make a positive impact in our communities.

### IdeaSpark Creating great products and services together

Innovation is everywhere at Cubic and we pride ourselves in fostering a sense of community around ideation and cultivating these efforts through our innovation ideation platform, IdeaSpark. Through IdeaSpark, we harness the power of the total Cubic workforce to solve customer challenges and maximize our competitive

advantage via disruptive technology discriminators. IdeaSpark provides the ideal highly collaborative environment for the Cubic community to connect with internal technology teams and experts across Cubic locations worldwide to work together to create and drive advances in Cubic's products and our customers' systems and solutions.

It allows our community to submit their innovative ideas. We are empowered to launch a researched concept into a rapid prototype, and then invite feedback from our customers so that the matured end product provides real, observable value. Through IdeaSpark, not only can we focus our efforts on the best ideas, but also connect our innovators, simplify technology transfer, co-create with our customers and accelerate results.

# WE ARE ONE CUBIC

**We share a common goal** – provide our customers with situational understanding, leveraging innovative technology to help them make better use of data, optimize time and effectiveness and make the right decisions, always.

**We are *One Cubic*** – we collaborate and share people, ideas, technology and resources across the organization to help our customers achieve the best results, regardless of the industry they operate in.



## Transportation

Cubic Transportation Systems is an industry-leading integrator of payment and information solutions and related services for intelligent travel.



## C4ISR

Cubic Mission Solutions provides networked and secure Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance (C4ISR) solutions for defense, intelligence, security and commercial missions.



## Training

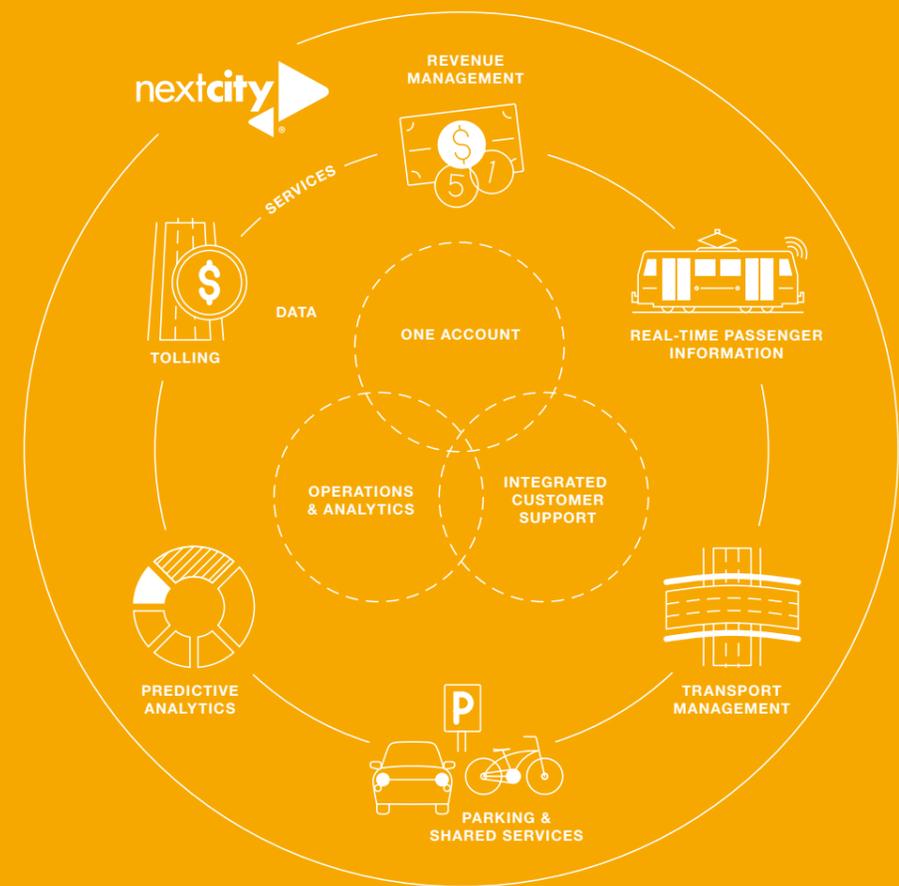
Cubic Global Defense is a leading provider of live, virtual, constructive and game-based training solutions for the U.S. and allied forces.

# WE ARE GETTING YOU THERE. SMARTER.

## Improving mobility in the world's greatest cities

At Cubic Transportation Systems, we believe that to take the right path, you sometimes have to create it. That's why, even though we helped revolutionize the transportation industry, we're dedicated to reinventing it.

We are the leading integrator of payment and information solutions and related services for intelligent travel applications. We deliver integrated systems for transportation and traffic management, providing tools for travelers to choose the smartest and easiest way to travel and pay for their journeys, while enabling transportation authorities and agencies to manage demand across the entire transportation network – all in real time.

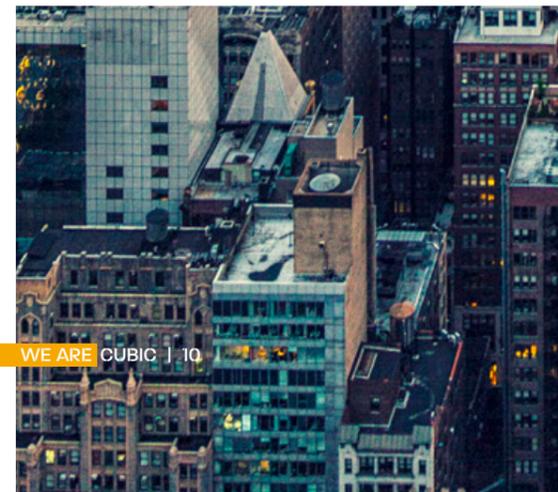


# NextCity®

## Building a smarter tomorrow

The world and how people move about in it is increasingly interconnected and in constant flux, making for a complex landscape. The solutions of the past are no longer enough to keep up with the massive population growth in the world's major cities.

That's why Cubic Transportation Systems created a smarter future with NextCity – our unique philosophy and a revolutionary vision of future city management and integrated traveler payment and information that lays the foundation for all of our transportation solutions. Built on real-time data and centered on three core principles, Cubic's NextCity focuses on the delivery of an integrated customer experience, one account and integrated operations and analytics for a complete, multimodal and seamless travel experience.



## Revenue Management

### Where payments intersect with smarter decisions

At the core of our business is the dynamic revenue management platform that drives many of the world's most complex fare collection and transaction processing systems for transportation. Whether it's paying directly from a contactless bankcard, NFC-enabled mobile phone or a pre-funded transit account – it's about choice.

Our Revenue Management solutions, including individual card-based, account-based, open payment "pay-as-you-go" options or a combination of them all, are future-ready and easily scalable and accommodate the growing demand for integration with third-party service providers. All of our systems are data-driven, ensuring data security, accuracy and integrity, and supported by our industry-leading customer service which helps our customers sustain optimum performance and efficiency.



## Mobile Suite

### The future of multimodal transportation

Cubic's Mobile Suite is a portable, fully integrated ecosystem of transportation information and payment capabilities to support back-end systems that enriches the travel experience for both travelers and service providers. We provide transit operators with mobile capabilities supporting retail networks, ticket inspection and traveler facing experiences – including support for disabled passengers.

Our Mobile Suite solution offers complete user account management, mobile-operating-system agnostic functionality and accurate real-time information, backed by our back office systems for travelers, merchants and inspectors. It leverages modern technologies such as Near Field Communication (NFC) and Bluetooth Low Energy (BLE), to accelerate transit operations to the speed of life.

# NextBus®

## Transit Management as a Service

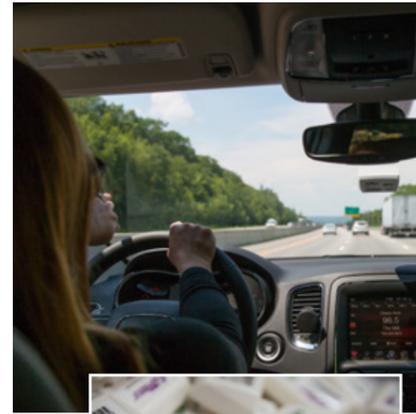
Cubic's NextBus is a cloud-based solution that provides real-time passenger information systems to over 100 transit agencies, organizations, institutions and airports. It also helps more than 300 million riders each year, offering a host of arrival information options, including apps for mobile devices, a full-featured website and signage.

Deployed as a Transit-Management-as-a-Service (TMaaS) platform, our NextBus solution provides operators with access to real-time transportation data, helping them improve on-time performance, simplify scheduling and dispatching, as well as facilitate access to on-vehicle systems. A powerful agency operations management service incorporates artificial intelligence (AI) prediction engine and real-time maps to simplify and optimize operations.



# Road User Charging

## Innovation that keeps people and businesses moving



The Cubic Road User Charging solution provides a modern alternative to the proprietary, legacy tolling systems by using best-in-breed flexible and modular tools. It is designed for multi agency use while giving each entity control over its own business rules, revenue apportionment and general ledger. It lays a solid foundation for account-based payment processing and customer services across entire states or multistate regions for any number of agencies or types of operators.

When it comes to road user charging, we combine the scale of a big payment processor with public transportation expertise that safeguards public funds and the public trust. We are uniquely positioned between traditional tolling suppliers and large payment processors and already manage \$18 billion in revenues for the transportation industry.



# Surface Transport Management

## The future of transportation management

Cubic's Transport Management Platform is an innovative, next-generation cloud-based traffic and transportation management, information and control platform designed to collectively support all aspects of transportation. By replacing out-of-date components with current strategic level technology, our Transport Management Platform enables the management of all customers' assets such as road, train, light rail, buses and ferry through a single open platform and shared operational view.

Supported by data analytics and visualization, our Surface Transport Management solution is a flexible and scalable environment that allows transportation management centers to proactively manage multimodal transportation networks and provide safe, secure and reliable journeys for all users.

# WE ARE DELIVERING SITUATION UNDERSTANDING FROM THE ENTERPRISE TO THE EDGE

## Reliability for mission critical situations

Cubic Mission Solutions helps customers accomplish their desired effects through networked Command, Control, Communications, Computers and Intelligence, Surveillance, and Reconnaissance (C4ISR) capabilities for defense, intelligence, security and commercial customers.

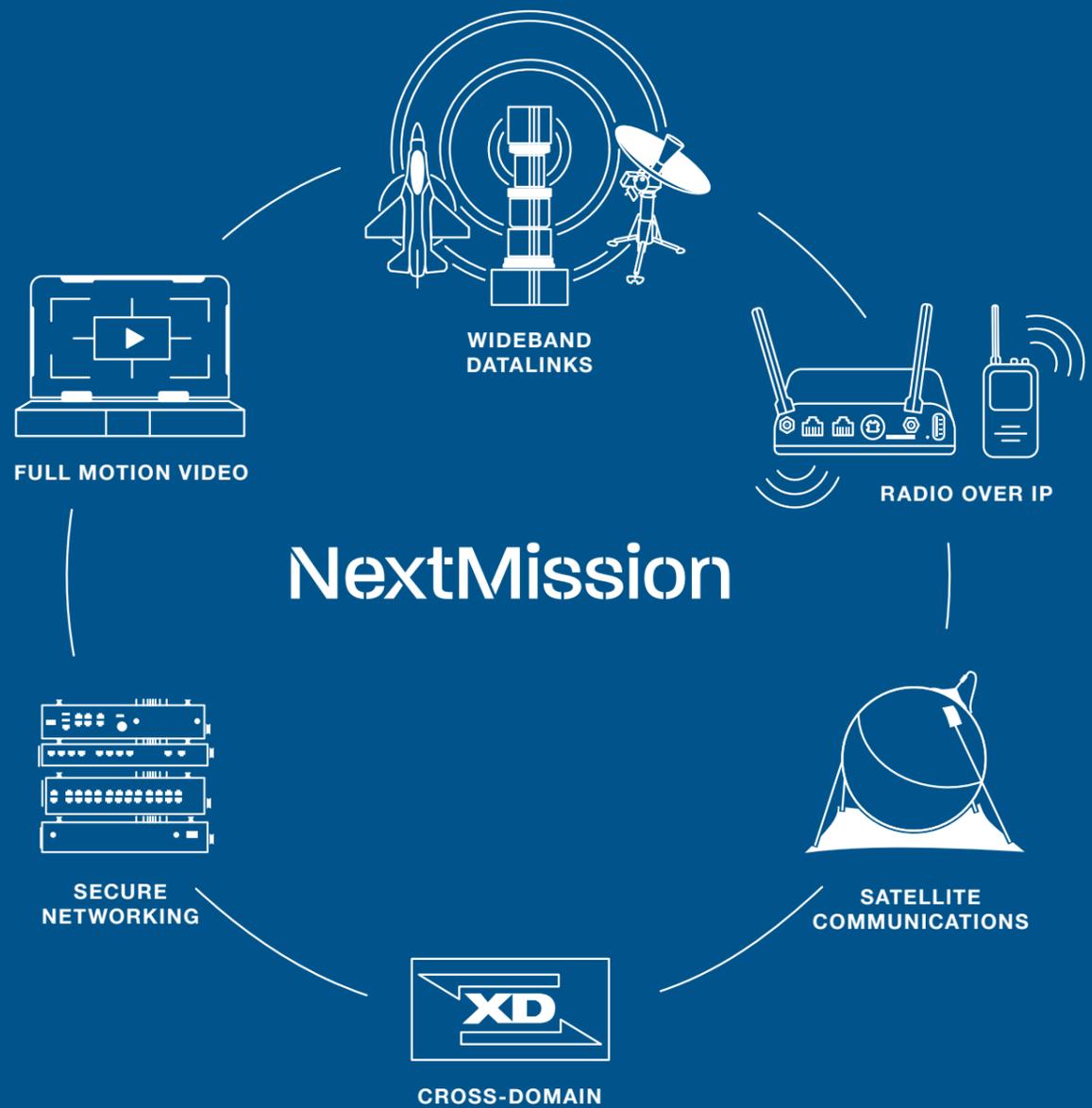
For more than six decades, we have been a leading innovator in providing resilient, scalable and secure solutions that enable our customers' Next Mission.



# NextMission™

A holistic approach to mission success

As a leading C4ISR innovator, Cubic Mission Solutions provides integrated mission capabilities to solve our customers' most challenging problems in secure communications, secure networking and C2ISR. Our solutions provide decisive advantage in the most demanding multi-domain environments with up to 90 percent less Size, Weight and Power (SWaP) while reducing lifecycle costs greater than 50 percent.





## Secure Communications

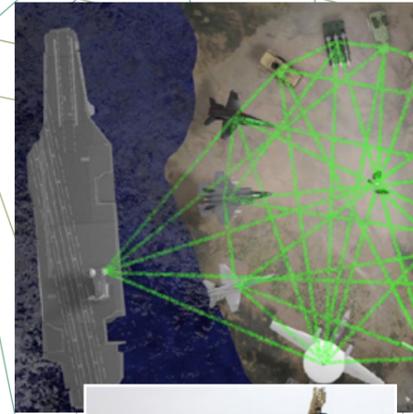
Protected communications for every mission

We specialize in providing wideband, protected communication solutions for military and civilian organizations yielding information superiority in mission critical situations.



Our solutions include wideband, expeditionary satellite communications for military and commercial constellations, at up to 80 percent less SWaP and four-times greater performance than competing technologies. This allows our customers to be networked with higher levels and supporting units, enabling shared situation understanding. Additionally, we provide secure, wideband line-of-sight data links for airborne (manned, autonomous) ship and surface platforms enabling rapid exchange of C2ISR information.

For more than six decades, we have been a leading innovator in providing resilient, scalable and secure solutions that enable our customers' Next Mission.



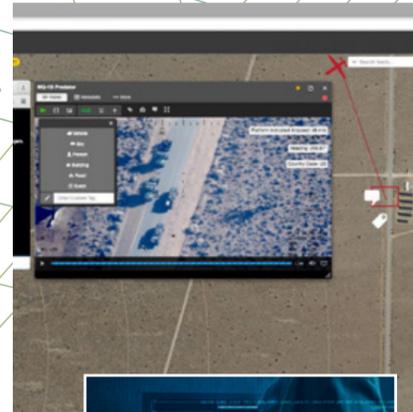
## Secure Networking

Advantaging users at the edge

We provide a variety of deployable, high-performance, secure, tactical computer and networking solutions that meet the diverse mission needs of our military, government, first responder and commercial customers.



Every day, customers across the globe rely on our tactical cloud, high-speed cross-domain guards and communication gateway capabilities to deploy quickly and easily, when and where they are needed most.



## C2ISR

Leveraging situational understanding for decision making

We provide "killer" applications to transform data and information into situation understanding for decision making from the national level to the edge.



Our market-leading cloud platform, computer vision and deep learning capabilities provide real-time video streaming and enhancement, sensor data transport and information fusion to allow military intelligence, public safety and commercial customers to rapidly and continuously understand different situations. This understanding leads to knowledge superiority and the ability to make timely decisions to achieve desired effects.

# WE ARE ENABLING A SAFER WORLD.

## Accelerating combat readiness

Training proficiency and retention of perishable skills is essential for warfighters and law enforcement who must be prepared to face new and emerging threats. Cubic Global Defense provides innovative solutions, leveraging scalable training architectures that enable knowledge development, leading to improved performance-based training outcomes with game-based/virtual solutions and live, high-fidelity air and ground combat training centers.

Our solutions accelerate learning proficiency in support of combat readiness through delivery of multi-domain military training with quantifiable, performance-based results and predictive analytics tailored to fulfill mission-specific training. We provide the critical warfighting skills necessary to achieve mission success in combat under the most unforgiving conditions and against the most determined adversary.



# NextTraining™

## Performance-based training

As a worldwide provider of training systems and solutions for the U.S. military, security forces and ally and partner nations, we recognize the critical role that training proficiency plays for warfighters and law enforcement.

That's why we offer NextTraining – a portfolio of innovative solutions created using the latest developments in learning science and technology, including augmented and virtual reality with applications to additional domains such as social media and cyber, and linked by a common goal – to provide the most realistic, dynamic and advanced training to the nations' elite warfighters.



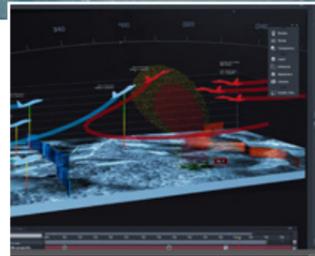


## Air Combat

### A legacy of innovation

Since inventing Air Combat Maneuvering Instrumentation (ACMI) in the early 1970's, we continue to lead the industry as the world's foremost provider of fourth- and fifth-generation air combat training systems, leveraging nearly a half-century of experience and innovation.

Aircrews from the U.S. Air Force, Navy and Marine Corps, as well as our allied partners, rely on our systems to prepare for combat missions more effectively, and with less risk. Our next-generation solutions enable expeditious cradle-to-grave capability from mission planning, rehearsal, mission execution and data collection to visual analytical debriefs in both 2-D and 3-D. All are designed to accelerate pilot training proficiency and ensure air dominance over adversary nations.



## Maritime

### Delivering high-velocity learning

Our cutting-edge solutions address a range of timely maritime training needs, including port security and shipboard watch duties; all of which prepare sailors to the exacting standards required for qualification and certification.

Our LVC-G learning courseware, set within an immersive shipboard environment, effectively improves operational readiness for our customers. This technology, proven with the U.S. Navy, has broader applicability to other services' training needs by delivering high-velocity learning using 21st century training technology.

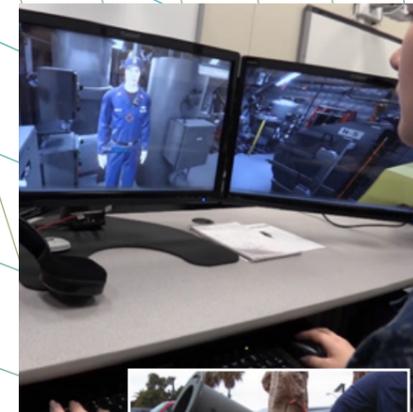


## Ground Live

### A heritage of excellence

We design and develop a broad portfolio of systems and services for both virtual and live ground force-on-force combat training. Our comprehensive solutions include full communications and instrumentation infrastructure for vehicles, platforms and soldiers enabling real-time assessments, data collection and analytics for individual and collective After Action Reviews. Our systems are deployed worldwide at U.S. and international Battle Simulation Centers and Combat Training Centers enabling military and security forces around the world to "train as they fight."

We use Live, Virtual, Constructive and Game-based (LVC-G) training for mission command systems and routinely partner with the U.S. Department of Defense Joint community, all U.S. Military services, the Department of Homeland Security, select allied nations and other government and non-government customers in providing individual and unit training programs in many regions.



## Virtual, Immersive & Game-Based Learning

### Synergizing science and technology

We provide the latest in virtual training solutions for international military and security forces. Built for immersed realism and accelerated learning, our systems are used worldwide by trainees at every level of experience. Our immersive programs accelerate training trainees to react to real-world conditions, environments and situations, preparing them for duty both on and off the battlefield.

From individual skills development to collective/team training, we offer a full range of deployable virtual and immersive trainers designed to generate accelerated learning, increased throughput, improved retention and end-to-end assessment.



# WE ARE WINNING THE CUSTOMER

## We are committed to our vision

Cubic serves as an innovative and trusted partner in more than 60 nations. Our motto (Global, Innovative, Trusted) and values represent who we are today and who we strive to be in the future. As a market leader in all of our domains, we are proud to deliver superior solutions to our customers. We continue to invest our capital and in our talent to expand our market-leading positions. We value each and every customer and go the extra mile to understand our customers' perspectives and find solutions to their most challenging problems.

## Transportation

### Cloud-Based Solution Helping Customers

**Who did we win?** Boston, Miami, Atlanta and Baltimore

**How did we win the customer?** Partnership with Microsoft allows Cubic to provide the option of cloud-based hosting that delivers one-stop shopping for IT system infrastructure, security and monitoring in public transit and other transportation-related markets.

## C4ISR

### Winning Due to Superior Technical Solution

**Who did we win?** AT&T

**How did we win the customer?** Innovative and disruptive Radio-Over-IP (ROIP) technology offers AT&T the most feature-rich and easy-to-use interoperability gateway available today. Cubic completed the arduous AT&T Network certification, which now establishes Cubic's Vocality RoIP as AT&T's only gateway with embedded 4G LTE. Cubic also partnered with AT&T for their National Interop Technology Showcase Tour, where Cubic's Vocality RoIP was featured by AT&T as their Tier-1 primary interoperability gateway in 24 cities across the U.S. In order to build on this strategic partnership and provide localized support to AT&T and its customers, Cubic even opened a new office in Dallas, TX.

## Training

### Game-Based Training Enhances Sailor Readiness

**Who did we win?** U.S. Navy

**How did we win the customer?** Strong indication from customer feedback that Sailors training on Cubic's high-fidelity, game-based learning continuum, referred to as the "Immersive Virtual Shipboard Environment (IVSE) courseware," for the Littoral Combat Ship (LCS) are completing their courses of instruction in record time while also demonstrating a higher degree of proficiency and enhanced knowledge retention.



**WE ARE  
ALL IN**



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