

COMBAT TRAINING SYSTEMS

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MISSION SUPPORT SERVICES

COMMUNICATIONS AND ELECTRONICS

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AUTOMATED FARE COLLECTION SYSTEMS AND SERVICES

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(Amex: CUB) occupies leadership positions

in two technology-driven businesses; defense and

transportation. Cubic is an innovative supplier of defense products,

systems and services to U.S. and allied governments in more

than 50 nations. It also is an important intermodal and

regional electronic fare systems and services

company in more than 40 major markets.

# FINANCIAL HIGHLIGHTS AND SUMMARY OF CONSOLIDATED OPERATIONS -

	Years Ended September 30,								
	 2006		2005		2004		2003		2002
	 (amounts in thousands, except for per share data)								
Results of Operations:									
Sales	\$ 821,386	\$	804,372	\$	722,012	\$	634,061	\$	559,604
Cost of sales	687,213		672,541		549,170		493,377		426,012
Selling, general and administrative expenses	97,166		110,644		107,139		87,888		85,459
Interest expense	5,112		5,386		4,658		3,659		3,538
Income taxes	12,196		453		19,394		18,514		11,484
Net income	24,133		11,628		36,911		36,519		29,437
Average number of shares outstanding	26,720		26,720		26,720		26,720		26,720
Per Share Data:									
Net income	\$ 0.90	\$	0.44	\$	1.38	\$	1.37	\$	1.10
Cash dividends	0.18		0.18		0.16		0.14		0.13
Year-End Data:									
Shareholders' equity	\$ 323,226	\$	297,158	\$	298,767	\$	255,292	\$	213,163
Equity per share	12.10		11.12		11.18		9.55		7.98
Total assets	548,071		547,280		542,924		460,226		374,459
Long-term debt	38,159		43,776		50,037		47,142		48,571

This summary should be read in conjunction with the related consolidated financial statements and accompanying notes.

# MARKET AND DIVIDEND INFORMATION

	Sales Price of Common Shares			Dividends	Dividends per Share			
	2006		2005		2006	2005		
Quarter	High	Low	High	Low				
First	\$20.56	\$15.63	\$25.92	\$21.36	-	-		
Second	23.94	20.74	24.15	18.35	\$0.09	\$0.09		
Third	24.40	18.27	19.80	16.53	-	-		
Fourth	20.74	18.30	19.47	16.61	\$0.09	\$0.09		

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#### **DEAR FELLOW SHAREHOLDERS,**

Our performance improved in 2006 with sales growing to \$821 million and profits more than doubling compared to 2005. While our profits improved substantially from the disappointing level in 2005, we will continue to remain focused on additional opportunities to significantly improve our performance and return to shareholders.

#### **DEFENSE APPLICATIONS SEGMENT**

We believe we are unique in the defense industry. Our wide breadth of live-virtualconstructive training technologies and services, and our focus on network centric communications set us apart from other defense companies our size. Assessing the outlook for defense spending in light of the new Congress and potential shifts in U.S. strategy in Iraq, we do not expect the market for our technologies and services to diminish. We also see increasing opportunities in the international market.

I recently visited our Threat Technologies division based in Kingstowne, Virginia. This division is a growing provider of

modeling and other software support services involving chemical, biological, radiological, nuclear and high-yield explosives incidents, as well as related training exercises for multiple governmental agencies and our allies. As C.E.O., it was particularly gratifying for me to see the dedication of our employees in this emerging division develop technology that can make a difference for Cubic and positively impact our national security. Created in 2003, our Threat Technologies division has grown from less than \$4 million per year in revenue to approximately \$20 million in 2006. We expect the division to continue growing at 20 to 25 percent per year, reflecting the high priority of their work.

Threat Technologies is part of our Mission Support Business Unit, which continues to enjoy strong growth as a top-tier performer in the defense services marketplace. In 2007, Mission Support will be bidding to renew its

largest contract, which provides full-spectrum support services to the Army's Joint Readiness Training Center at Fort Polk, Louisiana. We are optimistic we will be successful in this competition and will continue to grow this important aspect of our defense business.

Our Communications and Electronics Business Unit continued to field next generation data link technology. Since initial efforts to transform our position in this marketplace four years ago, Cubic data links have been adopted for multiple U.S. and international

> programs including the Navy Common Data Link System now being deployed on major surface warships, the U.S. Fire Scout and U.K. Watchkeeper unmanned aerial vehicle systems, and a Marine Corps man-portable system. It is also being flight demonstrated on the U.S. Army's Shadow unmanned aerial vehicle system. I believe we will continue to find growth opportunities in this market area; and as these programs mature, our profit performance in communications and electronics will greatly improve.

Our Training Systems Business Unit is the global leader in live instrumented

training systems for air and land forces, and is bolstered by multiple long-term contracts. In addition to the 10-year P5 U.S. air combat training system, for which we have booked more than \$100 million in orders, we are under contract to provide and/or support ground systems in nine nations and are pursuing similar work in eight other nations.

We have established a record of continuous innovation through technology upgrades that has kept our training customers up-to-date with the latest training technologies. These include a new wireless personal area network for our MILES simulation system; a bilateral and interoperable training system between the U.S. and Australia; and portable combat training systems that allow training anywhere troops are located. We continue to see significant opportunities involving live-virtual training technologies in U.S. and foreign markets.

#### **TRANSPORTATION SYSTEMS SEGMENT**

Our transportation business is the world's leading provider of automated fare collection systems. We have long established operations in both the U.S. and U.K. In 2005, profits in our U.K. business were offset by costs on several U.S. contracts. These costs, including development related to our Nextfare<sup>™</sup> software suite, customer directed changes and acquisition of two parking companies, resulted in an overall loss in the transportation segment.

In 2006, we turned this around and made a small profit of \$2.8 million despite additional development losses on several U.S. contracts. While the development of Nextfare has been more costly than we anticipated, it is now successfully operating in six different locations. We made an investment in Nextfare because we believe it will prove to be a competitive advantage for Cubic in the future.

Since most large cities in the U.S. have recently purchased new automatic fare collection systems, the market for large new systems in the U.S. will decline in the near term. However, the operation and maintenance of technically complex regional smart card systems is creating a growing market for outsourced support services. In 2007, we will begin providing support services for systems we have delivered in Minneapolis, Los Angeles, Atlanta and Brisbane.

The multiple award-winning PRESTIGE/Oyster<sup>™</sup> card system continues to deliver high standards of performance and customer satisfaction in London. It is the largest and most complex fare collection system in operation in the world with more than six million Oyster cards in circulation.

Subsequent to our fiscal year end, Transport for London, Cubic via the TranSys consortium, and Barclays Bank commenced on a new endeavor that will result in the first-of-its-kind smart card. In 2007, we will develop a new card incorporating the Oyster transit application and Barclay Visa on one card, creating a 'Wave and Pay' Oyster/Visa. We are enthusiastic about the potential of this new application to provide greater convenience and increase the use of smart cards by public transit patrons in London. Recently our transportation business was honored with a prestigious award for its more that 30-years of contributions to the transportation industry. Frost and Sullivan, an established leader in business analyses and forecasts of market trends, named Cubic as the recipient of the 2006 Smart Card Industry Innovation and Advancement of the Year Award. This award recognized Cubic's leadership in creating state-of-the-art ticketing technology for mass transit.

Today we see opportunities to integrate security features into existing transportation infrastructure, which will help transit agencies protect their systems and patrons from terrorist acts. We are working with General Electric and the Department of Homeland Security on solutions that we believe will enhance returns for our shareholders and extend our reputation for innovative leadership.

#### LOOKING AHEAD

Solving tough problems is the driving force behind much of our success. It is what makes Cubic tick. Solving these tough problems is dependent on experience, leadership and our 6,000 dedicated employees.

Cubic's future depends on good leadership at many levels in the organization. This year we expanded our management development program by instituting a comprehensive leadership-training course. I would like to thank Dr. Robert Sullivan, one our directors and Dean of the Rady School of Management at the University of California, San Diego, for assisting in this very important endeavor.

The growth prospects for Cubic remain very favorable. We look forward to improving results in 2007 and beyond.

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Walter J. Zable Chairman, President and Chief Executive Officer December 20, 2006





MISSION SUPPORT SERVICES

TRAINING SYSTEMS

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COMMUNICATIONS AND ELECTRONICS

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#### FISCAL YEAR 2006 REVENUES

\$563 million

# 2006 YEAR END BACKLOG

\$763 million

#### EMPLOYEES

 4,800 in 25 states and 19 nations

#### PRINCIPAL LINES OF BUSINESS

- Training Systems
- Mission Support Services
- Communications & Electronics

#### CUSTOMERS

- U.S. Armed Forces
- Other U.S. agencies and departments
- 46 nations

#### STRATEGIC FOCUS

- Maintain long-term customer relationships
- Sustain product and service innovations
- Meet growing international demands for training and communications systems
- Strengthen the business through acquisitions

#### **Key Discriminators**

- Breadth of live training capabilities
- Unique position as a "fullspectrum" provider of training systems and training support services
- Aggressive technology upgrades for existing markets
- Innovative new products
- Strong reputation in mission support services
- Platform independent
- Common Data Link (CDL) certified

#### **MARKET DRIVERS**

- Global war on terror
- Domestic and international defense and security budgets
- Department of Defense budget and prioritizations
- Technology advancements
- Joint warfighting
- Interoperability among allied and coalition forces
- Network operations

#### FUTURE GROWTH OPPORTUNITIES

- Data links for manned and unmanned platforms
- Live, virtual and constructive training
- Joint and multinational training
- International ground combat training centers
- Systems to counter the threat of improvised explosive devices
- Modeling and simulation of the effects of weapons of mass destruction
- Optical communication solutions for friendly force identification on the battlefield
- Logistics, operations, and maintenance services

# **KEY INNOVATIONS**

- Integration of live, virtual and constructive training domains
- Personal area network for tactical engagement simulation systems
- Integration of terrestrial and satellite communications into combat training systems
- Advanced weapons for small arms virtual training
- Incorporation of fighter aircraft and combat helicopters into joint combat training systems
- Cost-efficient mission rehearsal exercises for deployed troops
- Simulation of weapons of mass destruction effects in training environments
- Adaptive communication jamming system
- Tactical data links and advanced C4ISR networks
- Tactical application of optical communications technology
- Airborne geolocation and secure transmission system for intelligence applications

# FISCAL YEAR 2006 REVENUE MIX



# Market

Military Training69%
Intelligence Surveillance and Reconnaissance
Operation and Maintenance5%
Force Modernization and Transformation

# **U.S. and International**

Domestic76%
Direct International20%
FMF/FMS International



#### **Business Unit**

Mission Support Services44%
Training Systems 41%
Communications and Electronics 11%
Strategic Operations/Other4%

#### GLOSSARY

*Live Simulation* – *Live simulation involves real people operating real systems, and it is the training domain that most closely replicates the actual combat environment.* 

Virtual Simulation – In virtual simulation real people operate simulated systems.

**Constructive Simulation** – In constructive simulation, real people interact with simulated events, but are not involved in determining outcomes. This training environment is often referred to as "war gaming."



**CUBIC** 

**C**ubic is an established leader in providing air and land combat training systems to the U.S. and allied militaries in more than 25 nations.

Cubic designs, develops and installs instrumented training range systems for fighter aircraft, armored vehicles and infantry force-on-force live training, weapons effects simulations, tactical engagement simulation systems, and precision gunnery.

We are on the forward edge of integrated training systems technology. Our adaptable systems enable military aircrews and land forces to carry out realistic combat training exercises and mission rehearsals as a unified but geographically dispersed force, multiplying their ability to effectively train for any mission.

# 2006 Key Accomplishments -

- Developed and will be delivering Individual Weapon Systems (IWS) to multiple U.S. Army training centers and homestations. This 5-year contract, awarded to Cubic in 2005, will reach \$113 million if all options are exercised.
- Developed and delivered the U.S. Army's first Initial-Homestation Instrumentation Training System (I-HITS). Cubic is now delivering I-HITS at two more locations. This 5-year contract will grow to \$72 million if all options are exercised.
- Received more than \$100 million in task orders since receipt of the single award for the P5 Air Combat Training Systems contract in 2003. The indefinite delivery/indefinite quantity contract, valued at \$525 million, calls for the delivery of the system to potentially 30 sites over 10 years.
- Awarded a \$25 million contract to develop a new personal area network for tactical engagement simulation systems. The new wireless manworn system is smaller and lighter in weight than its predecessor, and is universally configurable to fit on any soldier's vest.
- Received several orders totaling \$15.5 million for virtual training systems and services. Cubic will deliver its systems to the U.S. Army and Air Force, and Department of Energy.
- Received contract to integrate training systems and facilities for interoperable bilateral training between the U.S. and Australia. This is a joint project between the Australian Defence Force and the U.S. Pacific Command, and the U.S. Joint Forces Command.



#### **PROGRESSIVE TRAINING**

Realistic combat training—the cornerstone of operational readiness—is a strategic priority for U.S. and allied military forces. As they transform their mission and warfighting concepts to defeat unconventional threats, armed services worldwide are turning to Cubic for its 21st century training systems.

Cubic is working on the frontier of military technology. We aggressively insert new capability into our training systems, improving the combat readiness and effectiveness of uniformed military services, both individually and collectively.

With our systems, military forces "train as they will fight." Soldiers, marines and aircrews all draw upon the realism gained from using our training systems to help them effectively perform their mission.

Ultimately, our realistic training systems improve the combat readiness of military forces engaged in protecting the national security of the U.S. and its allies.

#### LAND COMBAT TRAINING SYSTEMS

Last year when U.S. Army, Army Reserve and National Guard bases in the U.S. and abroad identified a need for mobile combat training systems, they chose Cubic.

Now Army troops stationed at Camp Casey, Korea, are training with Cubic's Initial-Homestation Instrumentation Training System (I-HITS)—a compact and portable combat training instrumentation system that can be quickly set up for training anytime, anywhere for a variety of missions.

I-HITS is a comprehensive training package. Using satellite-linked communications, I-HITS tracks the

positions and status of troops and vehicles in real time and relays exercise data to command centers for postmission analysis and production of lessons-learned presentations.

At Camp Casey, I-HITS delivers to the U.S. Army much of the same training capability previously available only at major fixed ranges, such as the Joint Readiness Training Center, the National Training Center and the Joint Multinational Readiness Center. I-HITS supplements these ranges by providing additional deployable capability where and when needed, but it does not replace them.

Cubic has also fielded I-HITS at two U.S. Army training sites in Hawaii. In Eastern Europe, Cubic is preparing to deliver the first mobile combat training instrumentation systems to the armed forces of Slovakia and Romania.

A fully ruggedized and modular system, I-HITS adapts to command and control operations conducted in tents, fixed shelters, buildings and vehicles. In addition to providing live force-on-force training, I-HITS is configured to interface with both virtual and constructive simulations.

#### TACTICAL ENGAGEMENT SIMULATION SYSTEMS

Cubic is pushing the limits of technology to significantly advance the quality of tactical engagement simulation systems equipment in use today. We are developing a wireless personal area network for the man-worn system that is part of our family of Multiple Integrated Laser Engagement Simulation systems (MILES). Using infrared lasers, these systems simulate the exchange and effects of weapons fire among ground troops and their vehicles with small, lightweight components.

Our domain knowledge of MILES technology has reliably produced and delivered the standard laser-based





device for the U.S. Army and Marine Corps, and the armed forces of allied nations for more than 10 years.

Cubic's leadership in MILES technology continues. Under a 5-year U.S. Army contract awarded to Cubic in 2005, we are developing the next generation MILES Individual Weapon System (IWS) for infantry weapons, which will be delivered to U.S. Army training centers and homestations located in the U.S. and in allied nations.

#### VIRTUAL TRAINING

This year we successfully executed a strategic move to produce our own weapon simulations for virtual skills trainers. As a result of this investment, Cubic now directly controls and performs all of the design and development for its entire virtual skills trainer product line.

Cubic has delivered EST 2000 systems to the U.S. Army, Air Force, and Department of Energy, and allied militaries and governments. The systems are operational throughout the world, including the Continental U.S., Hawaii, Alaska, Korea, Germany and Afghanistan.

#### **AIR COMBAT TRAINING SYSTEMS**

Cubic has a rich heritage in the design and delivery of highly reliable air combat training systems to U.S. and allied nations. The 60 systems Cubic has delivered to date, including several systems installed more than 15 years ago, remain operational and serve as national training assets that contribute to combat readiness.

We continue this legacy with our 10-year P5 CTS air combat training contract, awarded in 2003 by the

U.S. Navy and Air Force. With this contract, Cubic has secured its long-term future in the evolution of air combat training systems for the U.S. and its allies.

#### JOINT TRAINING CAPABILITY

Joint force training is the future of military training systems and Cubic is actively involved in supporting the U.S. Department of Defense transformation plan.

We participate in the industry advisory committee the Joint National Training Capability Working Group—to help the U.S. military integrate live, virtual and constructive training across the armed services. In addition, we are under contract to help develop the Joint Combined Training Center. It will establish bilateral training between the U.S. and Australia, integrating both air and ground training ranges belonging to the two countries.

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# With a strong footprint in the Pacific Rim, Cubic is uniquely positioned to help the U.S. and Australia move toward integrating their air and ground combat training ranges.

Cubic's expertise in the underlying software technology, which is used to integrate training ranges, strengthens the joint training effort and positions Cubic to be in on the ground floor of emerging training transformation initiatives in the U.S. and abroad.



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**C**ubic is an established leader in a broad spectrum of support services. From more than 100 locations worldwide, we provide technical, training, and operational support services and related domain expertise that help prepare all echelons of U.S. and allied forces for combat and national security missions.

Our principal lines of business include live, virtual, and constructive training and exercise development and implementation; training development, management and support; operations and maintenance; professional military education; knowledge management systems; weapons effects; modeling and simulation; and allied military force modernization.

Outstanding past performance across all its service businesses has earned Cubic a strong reputation throughout the industry as a trusted provider of highly specialized support services.

# 2006 Key Accomplishments=

- Met increased demand for critical mission rehearsal exercises at the Joint Readiness Training Center. Supported training exercises for U.S. troops before their deployment to Afghanistan and Iraq.
- Expanded the scope of support services provided for comprehensive consequence management training worldwide. Supported several major training events worldwide involving multiple scenarios, and international and multiagency first responders.
- Awarded landmark \$24 million Navy contract to provide weapons threat assessment software. This 3-year contract expands our services to now include the design and development of software applications used for military operations.
- Awarded \$33 million Navy contract for flight and tactical instruction over a 5-year period. Cubic won the recompete as part of the Field Training Systems Support II indefinite delivery/indefinite quantity contract received last year.
- Increased support services to U.S. Marine Corps. Significantly extended our live, virtual and constructive training support services for the Marine Air-Ground Task Force Support Program, and was awarded a new \$43 million contract to support all Marine aircrew training systems worldwide.
- Won a new 6-year contract to continue support to U.S. Joint Forces. As part of a team, Cubic won the recompete of the U.S. Joint Forces Command's Joint Warfighting Center (JWFC) contract. JWFC provides operational and training support to U.S. and allied forces worldwide.



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#### INCREASING ROLE OF TRAINING

Driven by the global war on terrorism, including operations in Afghanistan and Iraq, the U.S. Department of Defense (DoD) is executing a training transformation initiative across all its armed services. The initiative will change how, where and when uniformed military forces train for their missions.

Now and in the future, there is and will be a much greater reliance upon the armed services working together as a joint force to accomplish their mission. Ultimately joint forces will train in an integrated live, virtual and constructive simulation environment that is intended to be globally available at anytime, and linked to realworld command and control systems.

As an industry-recognized leader in live-virtualconstructive training, Cubic draws upon a wide breadth of experience. We have designed and executed training and exercise events in more than 45 nations within the past five years. Our reputation for dependability, and high quality operational and maintenance support is a key reason why we have served as a prime contractor for more than 35 military training and support facilities.

Training continues to be a high priority within the U.S. military. Cubic is a trusted support services provider to all U.S. Armed Forces, the joint community, and armed services of allied nations. We are the only contractor supporting three of the U.S. Army's four combat training centers.

#### **JOINT TRANSFORMATION**

The U.S. Joint Forces Command (JFCOM) is the DoD organization spearheading the national military transformation initiatives. In addition to continued support to the Joint Warfighting Center, Cubic is assisting JFCOM to advance the realism and capability of joint training worldwide. Through key development and experimentation activities, Cubic is assisting with development and integration of weapons effects models and simulations across joint live, virtual and constructive training domains.

Cubic support is widespread at JFCOM. Cubic provides on-site support services to both the J-7 Joint Training Directorate and to the J-9 Joint Experimentation Directorate. Cubic on-site support to the J-7 includes the Joint Warfighting Center, the Joint National Training Capability (JNTC) Joint Management Office, the Joint Systems Integration Command, and other offices.

#### **MISSION REHEARSAL EXERCISES**

Preparing armed forces for their mission on short notice and before deployment is a top priority within the U.S. DoD. Cubic is at the forefront of supporting this critical training, particularly in support of the U.S. Army's Combat Training Center program. At the Joint Readiness Training Center in Fort Polk, Louisiana, Cubic helps military leaders plan, coordinate and execute the most realistic and complex training exercises, which often include units from the U.S. Air Force, Navy and Marine Corps, and military units from allied countries. The exercises employ highly realistic battle scenarios played out in the center's comprehensive training facilities.

# Cubic helps ensure that mission rehearsal exercises provide the maximum training effectiveness to exercise participants.

Cubic replicates the realism of actual combat in the settings, characters, scenarios, battlefield effects, and opposing force intelligence situations we devise; and in turn, expose participants to the uncertain threats of combat during a "practice run." We provide similar mission rehearsal support to the U.S. Marine Corps





through Cubic's contract for the Marine Air-Ground Task Force (MAGTF) Staff Training Program.

#### **EXPORTABLE COMBAT TRAINING**

The U.S. Reserve components continue to bear a heavy load in the ongoing global war on terrorism. To assist in final preparations prior to deployment, Cubic is helping them define and satisfy an urgent need for mission rehearsal training that was previously available only at major combat training centers.

Now, National Guard, Army Reserve, and Marine Corps Reserve units can improve their readiness for combat, security and peacekeeping missions at or near their base locations. This past summer, Cubic supported two Exportable Combat Training Capability exercises for the Army and Marine Corps. We bring the training exercise to the soldiers, and deliver much of the same training experience troops receive at the Joint Readiness Training Center.

#### SAFEGUARDING AGAINST WEAPONS OF MASS DESTRUCTION INCIDENTS

Multiple federal, state and local agencies rely upon Cubic to help them prepare for and defend against threats from weapons of mass destruction. Cubic has specialized expertise in chemical and biological modeling and related threat prediction analysis, and extensive experience supporting emergency training exercises worldwide. Cubic is a leading services provider to the Defense Threat Reduction Agency (DTRA). In 2003, the agency awarded Cubic and four competitors a five-year indefinite delivery/indefinite quantity contract with a \$1.26 billion ceiling value. Cubic continues to receive significant task orders under this contract.

Growing demand for our services is a direct result of Cubic's technical capability and user-oriented high quality support.

Under a separate competitively awarded DTRA contract, we continue to support the agency's globally significant Chemical, Biological, Radiological, Nuclear, and High Explosives (CBRNE) Exercise Support Program. Our "full circle" support services train and test the capabilities of decision makers and others down to and including first responders from the DoD, other federal agencies, state and local governments, and U.S. allies to respond to a broad range of disasters and events caused by terrorist activities, natural disasters, and accidents. In the past year, Cubic supported several key DTRAsponsored exercises, including Eagle Resolve 06, 'A Kele, and CAPEX 06. CAPEX 06 included participation by Russia and was the most comprehensive nuclear response exercise ever held on U.S. soil.



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**C**ubic is a strategic supplier of advanced electronics for use in military applications. Our products and systems include high bandwidth data links, high power amplifiers, signal intelligence/electronic warfare systems, and search and rescue avionics.

Cubic applies more than 40 years of expertise to design, develop and manufacture critically important equipment that reliably operates in the harshest environmental conditions encountered on the battlefield.

We are transitioning from a specialty products provider to a systems supplier. To that end, we strive to integrate our innovative equipment into systems that not only extend the military's technical capability but also interface with legacy systems in use today.

# 2006 Key Accomplishments -

- Achieved final acceptance for Communications Data Link System (CDLS). Successfully completing this milestone means CDLS is approved for additional production under Cubic's 2003 contract with the U.S. Navy, potentially worth up to \$93 million.
- Completed initial design for data links onboard Fire Scout MQ-8B. Our tactical common data link system will be integrated into the most advanced rotary wing unmanned aerial vehicle used by the U.S. Navy for situation awareness.
- Met Watchkeeper's design standards for network enabled data links. Cubic's data links will interface with network enabled capability for the largest unmanned aerial vehicle program in the United Kingdom.
- Adapted data link technology for transport by foot soldiers on the move. Cubic is under contract to demonstrate its man-portable ground data link terminals for use in Marine Corps' applications.
- Applied our technologies to high-priority signal intelligence and electronic warfare programs. As part of a team on several U.S. Navy contracts, Cubic is supplying a combination of its products and systems to create new or significantly upgraded intelligence and communications systems.
- Developed next generation combat search and rescue equipment. We are now fielding our next generation combat search and rescue avionics for the U.S. Special Forces, Navy and Air Force, and allied forces.



#### **NETWORK ENABLED COMMUNICATIONS**

U.S. and allied military forces are becoming more reliant upon data communications to network their battlespace—and increasingly Cubic's data links are a core element of these networks.

Our data links quickly and reliably transmit information between military assets. Our technology enables any airborne platform—manned or unmanned to communicate with other military assets in the air, at sea, or on the ground. Warfighters rely on Cubic's highspeed data transmissions to help them transmit, receive, assess, process and decisively defeat threats on the battlefield before the enemy can take action.

#### DATA LINKS

Cubic's data links are improving the U.S. Navy's capability for sharing information across the battlespace.

# Our data link system has demonstrated interoperability with legacy systems and received approval from the Department of Defense Joint Interoperability Test Command.

This achievement was recently earned in a series of sea trials onboard the USS Dwight D. Eisenhower and in flight tests.

During these government tests, Cubic's system demonstrated its ability to network with other tactical data communication systems, and interface with legacy systems used today by the U.S. Navy.

Now that our data link system has passed acceptance testing, Cubic is approved to manufacture and install additional systems under the CDLS contract. Our air and ground data link terminals are a key part of the United Kingdom's premier network enabled unmanned aerial vehicle program called Watchkeeper. Currently, we are in the early stages of the design phase for this program, engineering a robust data link system to meet an array of demanding interoperability specifications.

Under contract on another capstone program, Cubic's systems will be onboard a rotary wing unmanned aerial vehicle—the MQ-8B Fire Scout—enabling it to provide reconnaissance and surveillance, and precision targeting support for the Littoral Combat Ship.

#### MILITARY COMMUNICATIONS AND INTELLIGENCE

In addition to data links, Cubic designs and manufactures communications products adaptable for a wide range of defense and homeland security applications. Our high frequency power amplifiers, direction finders, receivers and transmitters perform multiple functions. They enhance intelligence collection, provide secure position location information, and employ adaptive signal jamming technologies aimed at disrupting enemy communications.

This year, we made further inroads into the signals intelligence and electronic warfare arena. For this market, Cubic equips a variety of U.S. Navy ship classes, and surveillance and fighter aircraft with robust signal processing receivers for the purpose of immediate threat recognition.

Operational commanders assigned to the P-3 Orion aircraft use our receivers to help them search, intercept, identify, and locate potential threats during their missions directed by naval and joint commanders, including support for carrier strike groups and expeditionary strike groups. In the past year, our receivers were selected for two other U.S. Navy programs including the Ship's





Signals Exploitation Equipment - Upgrade F and the EP-3 signal intelligence receiver upgrade program.

Unifying its expertise in air combat training and communications, Cubic designed a prototype networkenabled communications pod for the U.S. Navy. The new communications suite includes our digital receiver, miniaturized tactical common data link and embedded software. Our equipment is packaged into a single, ruggedized instrumentation pod, which is carried below the wings of a fighter jet.

This new communications suite enables fighter aircraft and U.S. Navy combat ships to jointly carry out missions at greater distances. Our system significantly extends an aircraft carrier's radio range, which is limited by the height of the antenna on the ship and the horizon.

# **COMBAT SEARCH AND RESCUE**

During wartime, U.S. and allied combat search and rescue crews rely upon Cubic's personnel locator system to help them covertly retrieve and provide assistance to downed military personnel behind enemy lines. Cubic's system is carried onboard close air support aircraft such as helicopters and fixed wing attack aircraft.

Our personnel locator system interfaces with all U.S. deployed combat survival radios and standard civil emergency distress beacons.

Last year, Cubic released its next generation personnel locator system. It employs advanced microelectronics, delivering improved reliability and performance while providing a significant reduction in both size and weight from earlier versions.

Demand for our new system is increasing as the U.S. Air Force and other services modernize their avionics, extending the life of long-serving combat aircraft.

#### FUTURE COMMUNICATIONS INFRASTRUCTURE

Cubic is taking important steps to shape the future of military communications infrastructure. Working with eight major defense industry companies, Cubic established DirecNet—a consortium pursuing a uniform and open standard for network enabled data links.

Ultimately, the consortium's data link standard will unite and multiply the combat power of the military's battlespace assets, helping them to fulfill a Department of Defense transformation priority.

In the year just ended, the consortium formally defined its mission in its bylaws, and is now focused on developing a high-level standard for a common architecture that is compatible with Department of Defense transformation goals for the global information grid and network centric warfare initiatives.





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# INTEGRATED SYSTEMS

SYSTEMS ARCHITECTURE

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MANAGED SERVICES

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#### FISCAL YEAR 2006 REVENUES

\$244 million

#### 2006 Year End Backlog

\$716 million

#### EMPLOYEES

1,200 in 24 locations worldwide

#### PRINCIPAL LINES OF BUSINESS

- Electronic fare collection, passenger control and transaction management
- Operational services
- Maintenance services

# CUSTOMERS

 175 active transit agency customers

# STRATEGIC FOCUS

- Maintain long-term customer relationships
- Expand support services in key mass transit markets
- Develop and apply technology to improve the efficiency of fare collection systems for mass transit operations
- Augment security infrastructure for mass transit
- Continue to develop opportunities in select international markets

# **Key Discriminators**

- A leader in supplying industry standards for regional and intermodal systems
- Innovative smart card technologies and applications
- Significant installed base of new and legacy fare collection systems
- More than 30 years of experience designing, integrating, installing and supporting highly reliable automated fare collection systems in major cities

# MARKET DRIVERS

- Regionalization of automated fare collection systems
- Intermodal transit systems that link different modes of transportation and parking
- Emerging industry standards for smart card technology used in public transit applications
- Outsourcing of support services by transit agencies to maintain increasingly sophisticated smart card-based automated fare collection systems

#### **KEY INNOVATIONS**

- NextFare<sup>™</sup>—a modular fare collection management system
- Multifunction card processors adaptable to a variety of smart cards
- Low-usage smart card fare collection applications
- High-speed ticketing device technology compatible with multiple transit smart cards
- Security features for mass transit infrastructure

# **INDUSTRY AWARD**

 Industry Innovation & Advancement of the Year Award by Frost & Sullivan (2006)

#### PRESTIGE/Oyster Card Awards

- RFID Implementation Award, 7th RFID Networking Forum (2006)
- Best Private Finance Initiative, Public: Private Finance Awards (2005)
  - Best Operational Transport
    Project
  - Grand Prix as the Best Operational Project—all sectors
- Gold Award for Technology
  Exploitation by *Management Today*, Britain's leading monthly
  business magazine (2005)

#### ONGOING AUTOMATED FARE COLLECTION PROJECTS IN MAJOR TRANSPORTATION MARKETS



#### London PRESTIGE/Oyster Card<sup>™</sup>

Largest smart card fare collection contract ever awarded

Cubic's work share awarded under the PRESTIGE contract is now in excess of \$1 billion since 1998

#### New York/New Jersey Region

\$468 million in contracts awarded since 1991

#### WASHINGTON D.C./ BALTIMORE/VIRGINIA REGION \$176 million in contracts awarded since 2000

Los Angeles Region

\$134 million in contracts awarded since 2002

#### SAN DIEGO REGION

\$27 million in contracts awarded since 2002

#### **San Francisco** \$68 million in contracts of

\$68 million in contracts awarded since 1999

#### MINNEAPOLIS/ST. PAUL

\$19 million in contracts awarded since 2002

#### Снісадо

\$106 million in contracts awarded since 1993

ATLANTA

\$78 million in contracts awarded since 1993

#### BRISBANE, AUSTRALIA

\$110 million in contracts awarded since 2003

#### SWEDEN

\$33 million in contracts awarded since 2005



**C**ubic is the world's leading integrator of automated fare collection systems and services for public transport. Cubic has delivered over 400 projects in 40 major markets on five continents, totaling approximately \$3.6 billion in installed systems.

We design, develop, supply, install and support complete automated fare collection solutions for public transit authorities. The front-end components of our systems include gates, ticket vendors and card readers that reliably serve millions of passengers every day. Our back-office computers and components make the systems run. We also provide managed services including technical, financial, and operations and maintenance support.

With more than 30 years of experience, Cubic is the most established company in the industry dedicated to delivering and supporting large scale, regional smart card fare collection systems.

# 2006 Key Accomplishments

- Received contract to expand new retail ticketing system across U.K. Train Operating Companies. Cubic will install new Oyster devices, provide data management services and supply a minimum of 3 years of maintenance services.
- Awarded additional contracts to expand regional smart card system in Southern Sweden. Now Cubic's contracts in Sweden cover five counties, connecting bus and rail fare collection operations for public transport through use of a common fare payment system.
- Deployed smart card system for bus and rail commuters in Brisbane. When the fare collection system is completed, Cubic will continue to provide a wide range of support services for 9 years.
- Completed one of the first self-service payment terminal networks in the U.K. Enables passengers traveling on the London underground and some of its light railways to purchase travel tickets with debit or credit cards at ticket machines without assistance from a staff member.
- Awarded add-on contract to link park-andride and regional bus systems to Washington Metropolitan's SmarTrip® smart card system. When completed, patrons will use one card for multimodal rides between regional fare systems.
- Deployed retail merchant network for the Chicago Card<sup>®</sup> program. This enhancement reduced the number of cash fares paid by patrons who favor credit/debit transactions, thereby lowering the service cost incurred by the transit agency.





# System Expansion and Managed Services

Major transit authorities in the United States and around the world are transitioning their magnetic-based automated fare collection systems to contactless smart card technology. These sophisticated electronic systems offer significant operational benefits to transit authorities and unprecedented convenience to their patrons.

Contactless smart card technology helps transit agencies maintain and attract ridership—a primary goal of every transit authority. Passengers are drawn to the convenience of using a single smart card for quick passage in and out of the transit system. As transit agencies and operators progressively integrate multiple fare collection systems to interface with a common smart card, their systems provide more utility to their patrons. For example, using one smart card, a passenger can connect between different modes of transportation and between fare systems belonging to more than one transit authority—a single ticket for multiple journeys.

Smart card technology also helps transit agencies fulfill their common objective to improve customer satisfaction. Contactless smart cards are user friendly. With these cards, transit patrons can automatically prepay their public transit fares and have the assurance of knowing the card is secure.

Improved operational efficiency is another compelling reason why transit agencies decide to introduce electronic fare systems. Contactless smart card technology helps them reduce fare evasion, reduce costly cash transactions and reduce equipment maintenance. They also help transit agencies support a wide variety of fare incentive programs, including corporate-sponsored transit benefits.

Because of the technical complexities of operating an electronic system, the market for managed services is growing. Transit agencies are turning to third parties to supply operational and maintenance services that would otherwise be performed by a transit agency. A key reason for this growth relates to the considerable increase in regional integration of fare collection systems.

Major metropolitan transit authorities have selected Cubic to design, supply, integrate and upgrade their transit systems. Now these transit authorities are recognizing a growing need for managed services to support their 21st century fare collection systems. Our heritage in the fare collection industry enables us to provide our customers with effective support services, including operations and maintenance services, that are transparent to the transit authority staff and customers.

#### FULL SERVICE SUPPORT IN BRISBANE

Cubic is providing full-service support for the design, installation, operation and management of the new electronic fare system in Brisbane.

Transit patrons in Brisbane are now using a smart card system designed by Cubic for bus and rail journeys. The system will eventually link the region's other transport operators, including ferry services and train rides to the airport.

Cubic's NextFare technology enabled Brisbane to be the first of Australia's three major East Coast cities to bring a contactless smart card system into use by transit patrons.

The design of the Brisbane contactless smart card system is similar to other recently deployed Cubic systems. It allows multiple agencies in different cities to exploit a common fare-processing infrastructure to





handle all the back-office fare collection and revenue management functions via a shared communications network.

Cubic's commitment to the success of the system in Brisbane extends beyond its design and installation to managed services. We will be providing services for system operations and maintenance, regional clearing and settlement, card management and cardholder support under this contract.

#### EXPANSION OF THE PRESTIGE System in London

London's PRESTIGE system, the most sophisticated regional and multimodal automated fare collection system in the world, relies on fare collection infrastructure designed, supplied and supported by Cubic. With more than six million cards in circulation, London's highly acclaimed Oyster contactless smart card is now the most widely circulated smart card in Europe.

Under the PRESTIGE contract awarded by Transport for London (TfL) in 1998, Cubic has supplied the automated fare collection system and is now providing maintenance and support services for it.

Having received four prestigious British awards since 2004, the PRESTIGE fare collection system stands as a benchmark of success at every level—design, implementation, operations and customer satisfaction. London has made a significant commitment to continue to improve nearly all aspects of its transport system over the next several years. The plan is partly driven by the need to prepare London's transport system for the city's commitment to host the 2012 Olympics.

As part of London's improvement plan, the U.K. Government is encouraging Train Operating Companies to integrate Oyster validation equipment into London rail stations. When completed, Oyster rides will be available to all trains operating in Greater London.

#### DESIGN AND SUPPORT OF SMART CARD-ONLY SYSTEM IN ATLANTA

The Cubic-designed system in Atlanta is called "Breeze." This smart card-only multimodal fare collection and revenue management system is the first in the U.S. to deploy a "limited use" smart card for occasional riders and visitors to Atlanta.

# Transit agencies in two major U.S. cities are introducing smart-card fare payment systems and Cubic is supporting both of them.

In 2003, the Metropolitan Atlanta Regional Transit Authority (MARTA) chose Cubic to help them implement a multimodal transit system with a contract value of \$72 million. The new system makes it easy for commuters to travel throughout Atlanta with a common smart card to pay for rail, bus, L-van (paratransit) fares and park-andride fees.

Cubic is supplying a comprehensive transit fare collection system to MARTA. We are providing computer networks, communications, software and terminals to form a complete system, including equipment supplied for parking, bus fareboxes, faregates, and ticket vending machines that issue smart cards.

#### INTEGRATION OF REGIONAL SMART CARD SYSTEM IN LOS ANGELES

The Los Angeles County Metropolitan Transportation Authority's (Metro) Universal Fare System is the newest smart card system being deployed in a major U.S. city. Metro awarded Cubic an \$84 million contract in 2002 to implement the Universal Fare System. Since then, Cubic has received \$19 million in contracts from ten Los Angeles County Municipal bus operators to expand and integrate their systems into the regional Universal Fare System with Metro's Transit Access Pass smart cards, further advancing the one card-one system vision for the county.

Last year we completed delivery and integration for the new Van Nuys Airport FlyAway Bus Terminal and debuted the Metro Orange line for bus rapid transit in the San Fernando Valley. In the same year, Cubic received additional service contracts from Metro. We are now providing a full complement of systems and software services to Metro including its regional central data collection system and maintenance of the system.

We anticipate supplying additional services to Metro as their system expands to include all public transit operators in the region, making it California's largest smart card transit fare collection system.

#### INNOVATIONS

We strive to advance automated fare collection technology on many fronts. In partnership with General Electric, we are continuing to explore opportunities to help transit agencies implement explosive detection capability in their transit systems. Our efforts to date have involved pilot tests and demonstrations for select customers and the Department of Homeland Security.

Cubic's innovations are widely recognized for industry leadership. Last year Cubic received an award for developing a Regional Interoperability Specification for the greater New York region. Our work is helping to establish a common industry specification for regional, interoperable smart card transit applications.

In 2005, the PRESTIGE Oyster card project received three awards. All related to modernizing transit operations in Greater London, including its private finance initiative and innovative information communications technology.

In 2006, the PRESTIGE Oyster project was recognized with a Radio Frequency Identification (RFID) Implementation award by the 7th RFID Networking Forum—Europe's largest event dedicated to recognizing breakthrough achievements in RFID across many industries.

# This year Frost & Sullivan selected Cubic for the 2006 Industry Innovation and Advancement of the Year Award in the smart card mass transit market.

The 2006 Industry Innovation and Advancement of the Year award acknowledges Cubic's more than 30 years of contributions in helping progress the mass transit industry from magnetic ticketing to multimodal, regional smart card fare collection systems.



# COMPREHENSIVE ELECTRONIC FARE COLLECTION SOLUTIONS for Multiple Transit Applications



# **CUBIC IS UNIQUE IN THE INDUSTRY** We Provide Full-Circle Systems and Services for Mass Transit

# Front End Systems

- Fareboxes
- Point of sale terminals
- Validators and ticket issuers
- Ticketing machines
- Gates
- Card and ticket media
- Software
- Communications

# **Back Office Systems**

- Central computer systems
- Servers
- Software applications
- Networks

#### **Managed Services**

- Account management
- Patron support services
- Business support services
- Back office systems services
- Front end operational services
- Equipment maintenance
- Software maintenance



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