

Missiles and Fire Control

2012

Malcolm Baldrige National Quality Award Application



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National Quality Award

2012 Award Recipient

LOCKHEED MARTIN



Preface: Organizational Profile

The employees and leadership of Missiles and Fire Control (MFC) serve with a special passion. We are acutely aware that the very lives of soldiers, sailors, aircrews and marines who protect and preserve freedom depend on us. MFC employees develop systems and solutions to increase the probability that our warfighters will come home. Their mission is our mission – and the mission never ends.

With that in mind, MFC designs, develops, manufactures and supports advanced systems for military customers worldwide. We do this with an unwavering conviction – **“Business is not the objective...It is the result. Performance is the objective.”** That is our Fundamental Business Principle.

This conviction rings true. From our beginning in 1999, MFC has grown from two successful but fiercely competitive \$1B enterprises into a single, cohesive, even more successful \$7B business with over a decade of sustained growth and a \$12B backlog of work that is scheduled. The formation of MFC brought two former competitors into an organization that is now the premier designer and manufacturer of advanced combat, missile, rocket and sensor systems for U.S. and allied militaries. This marriage followed the creation of MFC’s parent corporation Lockheed Martin, which was born from the 1995 merger of the world’s two leading aerospace and technology corporations: Lockheed and Martin Marietta.

From inception, the MFC leadership recognized the critical need for radical change. The consolidation of the defense industry and the decreasing Department of Defense (DoD) budgets were sure to increase competition. In order to achieve our emphasis on performance, MFC must continuously change, and the rate of internal MFC change must exceed the rate of external change.

Toward this goal, MFC’s President James (Jim) Berry led MFC to establish the Enterprise Excellence System (EES). The EES integrates over 500 processes and comprehensive metrics to provide a common foundation for operating, managing, reviewing, analyzing, evaluating and improving almost every aspect of our business (Fig. P.1-1). As a part of this effort, we re-engineered the business model, improved performance through rigorous measures and focused the Enterprise on disciplined business processes. It fully integrates all processes and sub-processes and maximizes the use of internal and external best practices.

We augmented the EES with a Business Rhythm Process (Fig. 4.1-2), which includes simulation activities for dynamic strategic planning, talent development and product performance. The EES and Business Rhythm Process positioned MFC to be agile and evolve rapidly as our industry continually changed.

Continuous improvement is now an ingrained part of the MFC culture. Our business processes and metrics framework evolve to increase our performance. The EES and Business Rhythm Process established early in our journey allow us to quickly assess the external environment, evaluate our business position, determine the appropriate business focus and formulate a strategic response to guide our business (Fig. 1.1-2). MFC is now the highest performing company within the Lockheed Martin Corporation, and a leader in our industry (Figs. 7.1-10, 15, 17, 7.2-2, 7.3-2, 13, 20, 7.5-1, 2, 3).

More important than *What we do* or *How we do it* is *Who we are*. We perform with pride and a sense of honor that we are doing the right thing for the right reasons. We do this all for the soldiers, sailors, aircrews and marines who defend us.

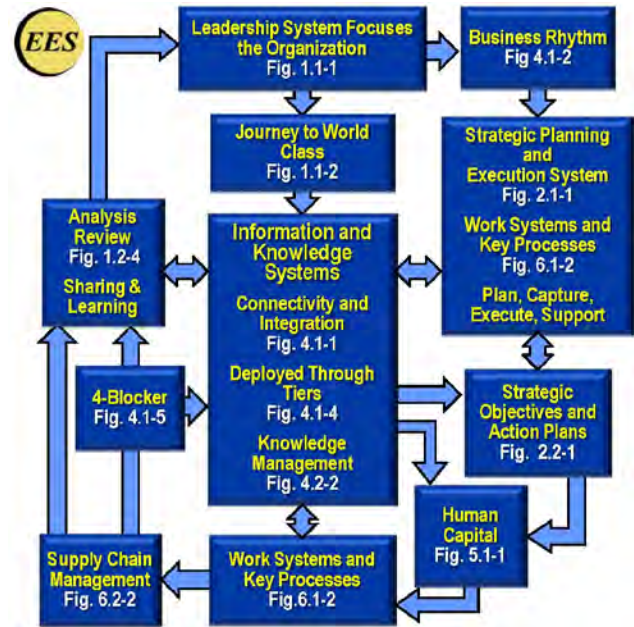


Figure P.1-1 The Enterprise Excellence System is a “System-of-Systems” that Integrates Our Major Processes, Data, and Data Management Capabilities to Drive Performance

P.1 Organizational Description

P.1a Organizational Environment

P.1a(1) Product Offerings: Figure P.1-2 shows MFC’s key product offerings segmented by Lines of Business (LOBs), the importance to our business and how we deliver our products to our customers. Because the primary end user of our products is the warfighter, we are dedicated to delivering these products on time while meeting all other requirements. We deliver more than 100 different products through 825 active contracts in more than 60 countries.

Lines of Business (LOBs) (Product Categories)	2011 % of Business	Delivery Method
AMD (Missile Systems, Launchers)	47%	Direct Delivery to U.S. gov., International gov., and Commercial entities
TM/CMS (Missile Systems, Launchers, Guided Projectiles, Vehicle Platforms, Energy)	31%	
FC (Fire Control Sensors and Systems; Intelligence/Surveillance)	22%	

Figure P.1-2 MFC Provides Superior Weapon Systems and Advanced Technologies that Protect the Warfighter

P.1a(2) Vision and Mission: The culture of MFC is a hands-on endeavor that encourages the active participation of every member of the Enterprise. It is based on five key characteristics that are fully deployed at MFC:

- Practicing Full-Spectrum Leadership
- Maintaining an ethical work environment (Fig. 7.4-8, 9)
- Forming a new idea of diversity (P.1a(3))
- Connecting with our changing workforce (Fig. 7.3-23)
- Embracing our social responsibility (Figs. 7.4-11-14)

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<p>ETHOS:</p> <ul style="list-style-type: none"> • A disciplined and balanced execution of our strategic tenets toward consistent achievement...never conceding our professional integrity and commitments to our customers • Unwavering dedication to teamwork, innovation, and the development of talent, new markets, and quality share (which means that our goal is to gain the most market share of contracts that are high quality and profitable) • Universal accountability is the key
<p>VISION: To Be the <u>Most Respected</u> Global Leader in Every Market and Community We Serve Through the Pride, Commitment and Power of Enterprising People</p>
<p>MISSION: To <u>Protect Our Warfighters</u> and Ensure Their Safety by Providing Superior Weapon Systems and Sensors</p>
<p>VALUES:</p> <ul style="list-style-type: none"> • Do What's Right • Respect Others • Perform With Excellence
<p>FUNDAMENTAL BUSINESS PRINCIPLE: Business is Not the Objective ... It is the Result. <u>Performance is the Objective</u></p>

Figure P.1-3 Our Ethos, Vision, Mission, Values and Fundamental Business Principle Keep Us Focused on Customers and Results

The Ethos, Vision, Mission, Values (VMV) and Fundamental Business Principle of MFC are shown in Figure P.1-3. The “Ethos” is the set of principles that the president reinforces with the Enterprise. Our Core Competencies, which are market discriminators for MFC, and their relationships to our Mission are shown in Figure P.1-4. We review our Core Competencies during the Strategic Planning and Execution System process (SPES, Fig. 2.1-1) to ensure they are current with our strategic direction and that we are staffed with the appropriate talent with the critical skills required to support these Core Competencies (Fig. 7.1-25). Our VMV are greatly influenced by the very nature of the defense industry, where a small number of companies compete vigorously to develop and manufacture sensitive military products for a small number of customers.

P.1a(3) Workforce Profile: MFC is a highly advanced technology company, which is reflected in the profile of our workforce. Approximately 60% of our employees have at least a bachelor’s degree, normally in a technical field. Our non-exempt employees are highly skilled to meet the demanding requirements of our customers. Our workforce profile is shown in Figure P.1-5.

Three of our 15 locations have organized bargaining units. In Dallas, TX, UAW and IBEW have 267 members; in Orlando, FL, UAW has 394 members; and in Ocala, FL, UAW has 615 members.

At MFC, the definition of diversity has become much broader than its traditional focus from the standpoint of race, ethnicity, gender and age. Although these are important to us, our definition of diversity also emphasizes inclusion, which means embracing employees with different working styles, capabilities, communication styles, and generational differences. Members of the Executive Leadership Council (ELC) serve on the Diversity Council, and we have 62 exempt

Core Competencies	Examples Include (*MFC innovation or uniqueness)	Mission Relationship
Creating Innovative Technological Solutions	Hit-To-Kill Technology* Infrared Search & Track (IRST)* Simulations (Top Scene, Layouts, Mfg, Hardware-In-The-Loop)* Advanced Sensors*	Providing the most innovative and affordable weapons to keep the Warfighter safe
Cultivating Customer Relationships	Face-To-Face Meetings Soldier Campaigns VoC in Product Development Deployed Customer Field Reps Customer feedback & ratings Program Teambuilding initiatives with customers and suppliers	Ensuring a thorough understanding of needs and customer integration into the development design, manufacturing and support of critical weapon systems
Managing the MFC Brand	Dynamic Strategic Planning Relentless Execution – works first time, every time Dynamic Enterprise Leadership Culture of Product/Process Improvement (LSS, PMT*, SIA) 100% Quality, 100% Delivery Culture Optimization Initiative	Ensuring product excellence and affordability that meets the customer requirements for affordability, schedule and reliability
Developing Talent	Leadership Development Programs Mentor Program Emp Engagement & Recognition Strategic Talent Development Diversity Program LM Voice Action Planning	Ensuring talent resources (capabilities & capacity) are available to develop superior, innovative systems

Figure P.1-4 MFC Core Competencies Enable Us to Achieve Our Mission and Maintain Our Competitive Edge

Segments	Exempt		7,592
	Non-Exempt (Non Union)		1,749
	Non-Exempt (Union)		1,239
	Management		7%
Education Attained	Bachelor's 3,697	Master's 2,344	Ph.D 122
Gender	Male 71.9%		Female 28.1%
Tenure	0-5 32.52%	6-15 29.05%	16-25 13.34% 26+ 25.09%
Ethnicity	American Indian 0.56%	Asian 4.62%	Black 6.27% Hawaii/Pac 0.17%
	Hispanic 6.21%	Two/More 1.45%	White 80.71%

Figure P.1-5 MFC’s Diverse and Dedicated Workforce Leverages Multiple Perspectives to Provide Best-Value Solutions for Our Customers

and non-exempt employees who rotate service on the Council for 12-18 months as Diversity Ambassadors. Every member of the ELC participates in at least one of our Employee Resource Groups (e.g., Asian Heritage Association) (5.2a(2)).

Promoting diversity and inclusion is more than just the right thing to do. It’s critical for our success. With the demographics of society changing and an anticipated shortage of top-quality engineers and scientists on our horizon, diversity and inclusion are imperative to remaining competitive and fostering innovation.

We strive to create a highly-engaged workforce. Based on extensive analysis of information gathered from employees and outside experts (5.2a(1)), we determined that the elements that engage employees in accomplishing our VMV are:

- Each employee’s relationship with his/her manager

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- The nature of the work the employee performs, as well as development opportunities
- The day-to-day work environment
- Enterprise efforts, programs and initiatives

Our commitment to our workforce is demonstrated through our outstanding benefits and our commitment to provide a safe and healthy environment. The special safety requirements MFC faces as a manufacturing company dealing with chemicals and explosives are discussed in 1.2b(1), and our outstanding benefits are covered in 5.1b(2). We have experienced no incidents with chemicals or explosives.

P.1a(4) Assets: MFC has 15 facilities in the United States and foreign countries (see the information under the tab for the Eligibility Form). Each facility houses the state-of-the-art equipment and technologies that are necessary for us to produce the high-quality products our customers demand. Our senior leadership reviews the facility and technology capacities and capabilities to ensure we meet the requirements of our customers in the most efficient, effective and affordable manner (Figs. 7.1-19, 7.3-6). Our major technologies range from optics grinding and coating to radome fabrication to precision machining to printed circuitry.

P.1a(5) Regulatory Requirements: MFC operates in an extensive and rigorous regulatory environment. We are subject to regulatory requirements from local, state and federal governmental agencies. Over the past decade, the regulations have increased significantly, which can hamper productivity. However, MFC is recognized for our ability to excel in regulatory compliance while providing technically advanced, rapid and cost-effective innovative solutions to our customers (Fig. 7.4-5).

We voluntarily seek certifications relating to engineering, manufacturing, financial, environmental, safety and quality standards, including Capability Maturity Model Integration (CMMI), Management Systems AS9100/ISO 9001, Environmental ISO 14001 and Health and Safety Systems ISO 18001. The key regulations under which we operate, and our measures for compliance, are outlined in Figure P.1-6. Often, our contracts include requirements for certain accreditations and certifications that vary by contract.

P.1b Organizational Relationships

P.1b(1) Organizational Structure: The MFC organizational structure is shown in the tab labeled “Organizational Charts.” Jim Berry is president of MFC reporting to the executive vice president of Electronic Systems, one of four business areas under the Chief Operating Officer of Lockheed Martin.

Regs	Process	Measure	Goal	Result
EPA	Reducing envtl impacts	Critical Regulatory Actions	0	Fig. 7.4-5
OSHA	Maintaining workplace			Fig. 7.4-5
ITAR/EAR	Exporting products			Fig. 7.4-5
ATF	Controlling explosives			Fig. 7.4-5
FAR/DFAR	Acquiring materials			Fig. 7.4-5

Figure P.1-6 When Lives Depend Upon What You Do, The Only Acceptable Compliance with Regulations is 100%

Overall governance of Lockheed Martin is the responsibility of the Board of Directors (1.2a(1)).

MFC’s Governance Board is the Senior Leadership Team (SLT) comprised of Berry and his direct reports (see “Organizational Charts”). Our Governance System is shown in Figure 1.2-1.

P.1b(2) Customers and Stakeholders: MFC operates in highly competitive markets and with customers who have rigorous requirements. Figures P.1-7, 8 and 9 show our markets, customers and stakeholders along with their requirements and expectations for products, support services and operations. It also outlines any differences in requirements and expectations among these groups.

The majority of our business results from long-term contracts through the DoD and its military services. We are also serving selected new military and commercial markets based on our Core Competencies.

Key Market Segments	Key Requirements/ Expectations	Differences in Requirements and Expectations
<ul style="list-style-type: none"> • Core • International • Adjacent 	<ul style="list-style-type: none"> • Cost (Figs. 7.5-4, 7.2-1) • Schedule (Figs. 7.1-1, 7.2-1) • Technical Characteristics (Figs. 7.1-3, 7.1-4) 	Some adjacent markets and customers may not have as much insight into our internal performance and processes

Figure P.1-7 Key Market Segments

Customer Groups	Key Requirements and Expectations	Differences in Requirements and Expectations
<ul style="list-style-type: none"> • Warfighter 	<ul style="list-style-type: none"> • Performance /Reliability (Fig. 7.2-4) • Field Support (Fig. 7.2-5) 	Expect to have the right, most reliable equipment to safely conduct the mission
<ul style="list-style-type: none"> • Program Offices • Procurement • Contracting Agencies 	<ul style="list-style-type: none"> • Cost (Figs. 7.5-4, 7.2-1) • Schedule (Figs. 7.1-1, 7.2-1) • Performance/Reliability (Figs. 7.1-2, 3, 4) • Innovative and Affordable Products (Fig. 7.2-8) 	Expect value, affordability and solutions so that warfighters can effectively and safely perform

Figure P.1-8 Key Customer Groups

Key Stakeholder Groups	Key Requirements and Expectations	Differences in Requirements and Expectations
Board of Directors/ Stockholders	<ul style="list-style-type: none"> • Profitability (Fig. 7.5-1) • Growth (Fig. 7.5-1, 7.1-17) • Sustainability (Fig. 7.5-1) 	Unique requirements and expectations for each stakeholder
Suppliers/Partners/ Collaborators	<ul style="list-style-type: none"> • Building Partnerships (Fig. 7.1-11, 12, 14) 	

Figure P.1-9 Key Stakeholder Groups

P.1b(3) Suppliers and Partners: MFC is primarily a systems integrator, and we rely on a network of over 1,500 suppliers, collaborators and partners who provide 70% of our parts and material. Working with them through mentoring and continuous improvement techniques, we have significantly improved reliability, affordability and delivery (Figs. 7.1-11, 12, 14). Our suppliers, partners and collaborators provide items ranging from standard off-the-shelf parts/hardware to

custom fabricated/machine parts to major sub-systems (e.g., sensors and vehicles). Together they play significant roles that are critical to our ability to meet contractual requirements and supply innovative, affordable products in a timely manner that meet complex system specifications.

MFC maintains communication with them in a variety of ways, including our Integrated Product Teams (IPT) (5.1a(3)) and our Strategic Performance Management Teams (SPMT, 6.2b(2)). We conduct reviews at various stages of the Product Life Cycle (Fig. 3.1-2), including concept development, qualification, testing, production, field reliability, use and maintenance. We hold supplier conferences (including some concurrent with State Quality Award events), have face-to-face meetings, conduct workshops, initiate joint MFC/supplier Lean Six Sigma (LSS) events/projects, exchange documentation and arrange supplier visits/tours.

They work with us from the design stage through delivering parts on schedule that meet rigorous requirements. And a vital part of their role is to continually improve products in terms of affordability and innovation to ensure that MFC stays ahead of the competition and continues to excel in meeting our customers' expectations.

Our key supply-chain requirements are compliance to technical specifications, quality, schedule, reliability and affordability (Fig. 7.1-11). Our Preferred Supplier Program (PSP) (6.2b(2)) helps us ensure the greatest possible reliability and quality of our products. Being granted MFC Preferred Supplier Status is a demonstration of outstanding achievement, superior performance and a high level of customer satisfaction. This status is reserved for those few companies that have demonstrated exceptional performance and are best in class.

Additionally, we partner with leading colleges and universities for research and education in strategic technologies and commodities applicable to MFC.

P.2 Organizational Situation

P.2a Competitive Environment

P.2a(1) Competitive Position: MFC maintains a major global market position in each of our key lines of business (Figs. 7.5-6-9). We operate in a fiercely competitive marketplace of large aerospace and defense contractors. Our performance, reliability and growth rates exceed those of our primary competitors (Figs. 7.1-5, 7.1-30, 7.3-2, 7.5-6).

In our Core and International markets, we have four major competitors: Raytheon, Boeing, Northrop Grumman and ATK. As a result of market changes, MFC made strategic decisions to compete in several Adjacent markets, including nuclear control stations, power management and ground vehicle platforms. In these areas, we have over 25 competitors, yet we are making significant headway in winning competitive bids (Figs. 7.1-28, 30).

A unique situation regarding competition exists in the aerospace and defense marketplace. We may be competing with competitors for one pursuit and, at the same time, teaming with them on a different contract or pursuit. Therefore, we often know our competitors' strengths and weaknesses well – as they also know ours – and have a good working relationship with them.

P.2a(2) Competitive Changes: In the past 10 years, our competitive orders have increased from \$271M to over \$2.2B, a CAGR of 23%. We project that within 5 years over \$5.3B of our orders will be competitive, representing over 60% of total orders. Other changes that are impacting the competitive environment, including opportunities for innovation and collaboration, include:

- Collaborative agreements between competitors to share business
- Mergers and acquisitions to enhance position or protect intellectual property
- Rapid implementation of technologies and/or inventions
- Innovative benefits to attract and retain critical talent

P.2a(3) Comparative Data: Sources of competitive and comparative data within our industry include Teal, Forecast International, Best Manufacturing Practices (BMP), DoD budget documents, Freedom of Information Act (FOIA) requests, other government agency reports, win/loss data and Lessons Learned inquiries following contract win/loss. We track trends from other industries that potentially impact our business, including the electronics industry and the computer industry. To track competitive and comparative data, our Human Resources department regularly reviews a variety of external benchmarking resources such as The Mayflower Group, the Attrition/Retention Consortium, the Bureau of National Affairs, American Society of Training and Development (ASTD), National Association of Colleges and Employers (NACE), Occupational Safety and Health Administration (OSHA), and APQC, as well as tracking local and national demographic trends that may impact our ability to attract, retain and motivate Human Capital.

We are limited because competitive financial and performance data are not publicly available at the division/company level for our competitors. Neither MFC nor any of our competitors release this type of information.

P.2b Strategic Context: Today, MFC and the entire defense industry is facing changes and challenges that are similar to those of the 1990s that propelled MFC into the Journey of re-inventing our company. Once more, we have anticipated these changes and are creating the culture and tools to ensure our internal rate of change exceeds the rate of external change. Based on our Core Competencies and Strategic Advantages, some of the steps we are taking to mitigate these challenges include:

- Optimizing the Culture
- Shifting to an Offensive Marketing Posture
- Engendering an Entrepreneurial Mindset
- Increasing Our Business Agility
- Mining New Opportunities
- Expanding and Developing Our Talent Base

Our key Strategic Challenges and Advantages in terms of business, operational, societal responsibility and human resources are shown in Figs. P.2-1 and P.2-2.

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Strategic Challenges	Areas Impacted
1. DoD Acquisition Trends, including increased focus on affordability, increased oversight, and protracted procurements	<ul style="list-style-type: none"> • Business • Operational
2. DoD Budget Pressures, including declining budgets and fewer new starts that leads to increased competition	<ul style="list-style-type: none"> • Business • Operational
3. Global Economic Conditions including waning defense priorities in Europe	<ul style="list-style-type: none"> • Business
4. Pressure on Development Base	<ul style="list-style-type: none"> • Business • Operational
5. Workforce Transition including shifting demographics, critical skills/competencies; expertise for new markets	<ul style="list-style-type: none"> • Business • Operational • HR
6. Environmental Regulations (Go Green)	<ul style="list-style-type: none"> • Societal Resp

Figure P.2-1 Strategic Challenges

Strategic Advantages	Areas Impacted
1. Enterprise Excellence System which fully integrates Action Plans, Processes, and Metrics to drive performance	<ul style="list-style-type: none"> • Business • Operational
2. Leadership Team's Business and Market Acumen	<ul style="list-style-type: none"> • Business
3. Relevant Product Portfolio and Skills/Competencies	<ul style="list-style-type: none"> • Business/HR • Operational
4. Performance-Oriented Workforce	<ul style="list-style-type: none"> • HR • Operational
5. Quality- and Innovation-Focused Culture	<ul style="list-style-type: none"> • Operational • HR
6. Charitable Giving, Exec Boards, Go Green	<ul style="list-style-type: none"> • Societal Resp

Figure P.2-2 Strategic Advantages

P.2(c) Performance Improvement System: MFC is committed to continuous process improvement and management. Our MFC Performance Improvement System is dynamic, driving all aspects of the company at all sites and setting our performance apart from nearly every other company worldwide. Fact-based systematic evaluation, improvement and organizational learning are key management tools providing clear evidence of refinement resulting from analysis and sharing.

The EES (Fig. P.1-1) provides the over-arching framework for systematic continuous improvement at MFC. The state-of-the-art EES integrates all aspects of the Enterprise and houses objectives, action plans, goals, measures (metrics), and all ongoing results and data are automatically entered into the system. It is also stored electronically, and most of this information, with the exception of certain sensitive financial data, is available to management and staff throughout the organization. There is direct line-of-sight alignment through the EES and its integrated systems from the Strategic Plan through every team and individual in the organization, even to the production floor.

The EES provides the dynamic modeling/simulation for our business process and continues to be a catalyst for our business process improvements. It guides the Enterprise in the actions that must be taken to get the desired results. Over the past decade, MFC has revised 62% of the metrics in the EES during 11 cycles of refinement and enhanced the overall System with 14 cycles of improvement (Fig. 7.1-20).

Our main process improvement mechanism is the LM21 Path to Excellence Process shown in Fig. 6.2-3. It integrates several industry-proven process improvement principles, including the concepts of Lean Manufacturing and Six Sigma (LSS). All of our executives have received LSS training. Green Belts, Black Belts and Master Black Belts are responsible for leading change activity within MFC. They are provided the training, skills and experience necessary to lead successful, sustained improvements.

This harmonization enables us to increase product throughput while improving quality and creating innovations. Engineering, manufacturing, financial, environmental, safety and quality standards, including Capability Maturity Model Integration (CMMI), Management Systems AS9100/ISO 9001, Environmental ISO 14001 and Health and Safety Systems ISO 18001 audit activities serve as a backstop to all these activities by taking a systems approach to evaluating process activities in order to preserve the gains made by improvement initiatives.

Performance data are reviewed and actions taken at regularly scheduled times and as-needed to address any problems that may arise unexpectedly. These meetings and their regularly scheduled times are shown in Figure 1.2-4.

The ELC ensures that all performance goals are set at high performance levels, even if the current performance is considered world-class. Goals are rarely lowered; they are raised or maintained. Internally we are “tough graders,” thereby ensuring we meet our external commitments. During monthly ELC reviews of performance data accumulated from all parts of the organization, action plans are required for any element that shows “red.” These action plans are set in a “4-Blocker” format (Fig. 4.1-5). The ELC member and the team selected to work on a 4-Blocker issue use a number of tools – including LSS kaizen events and tools, and analysis tools such as root cause analysis to identify and resolve the problem and/or innovate solutions.

The latest evolution of the EES is the Enterprise Performance Index (EPI), which leverages algorithms to analyze Products, Processes and Talent to inform the leadership about the state of the organization (Fig. 7.1-10). Using this Index, we can model potential changes to evaluate their impact and contribution to value-added results. We can view performance by Health Indicators, flag statistical risks, identify variation in business processes and identify trends in business processes, as well as

- Predict business performance through trend analysis
- Predict program performance using strategic and performance correlation
- Predict external factors based on Business Development and Long Range Plan forecasts

In summary, continuous improvement is ingrained in every program, process, system and function of our business, as evidenced by our results (Figs. 7.1-9, 13). Every employee, from the President to the new hire just completing on-boarding, knows that we must perform flawlessly. That’s because we all know what’s at stake when our products and systems are called into action.

Category 1: Leadership

“Business is not the objective...it is the result.

Performance is the objective,” is the Fundamental Business Principle at Lockheed Martin Missiles and Fire Control (MFC). We honed this Principle during the late 1990s and early 2000s as our leadership took bold initiatives and re-engineered MFC to meet external challenges to our continued success (P.1). With a pervasive executive emphasis on quality and performance, our Senior Leadership Team (SLT) along with the Enterprise Leadership Council (ELC) developed the Enterprise Excellence System (EES, Fig. P.1-1). The EES integrates over 500 processes and comprehensive metrics to provide a common foundation for operating, managing, reviewing, analyzing, evaluating and improving almost every aspect of our business. It enables the SLT, the ELC and employees to measure the performance of our internal operations and those of our suppliers. This common foundation ensures consistent terminology, approach, objectives and goals that are aligned throughout the Enterprise. It enables senior leaders to effectively guide and sustain MFC as predominant in a highly competitive marketplace. We believe that the powerful EES moves MFC management and leadership from an art to a science.

The SLT and ELC have also deployed common values and ethics to ensure a shared culture. By reinforcing our Vision, Mission, Values and Fundamental Business Principle (Fig. P.1-3), our senior leaders have created an unwavering dedication to teamwork and innovation, as well as to developing talent, new markets and quality share, meaning we gain market share with the highest quality contracts in terms of innovation, dollars, time and importance to our customers.

1.1 Senior Leadership

1.1a Vision, Values and Mission

1.1a(1) Vision and Values: When Lockheed Martin established MFC, the leadership team developed the Vision, Mission and Values (VMV) for the new entity. The team considered the VMV of Lockheed Martin Corporation, the current/future customer base, current/future customer requirements, current and desired future core competencies, the VMV of competitors, the VMV of the former companies that now comprised MFC, the desired culture, the Brand and employee needs and perceptions. They also considered the nature of the high-technology defense industry and the critical military products that must operate flawlessly for decades in harsh environments. Each year, as a part of the Strategic Planning and Execution System (SPES, Fig. 2.1-1), the SLT and other members of the planning team exhaustively evaluate our current business environment. Based on these findings, they re-examine the VMV to determine if they continue to represent MFC.

Fig. 1.1-1 displays the MFC Performance-Driven Leadership System. We developed this System in 1999 and analyze and strengthen it each year. In 2004, based on ELC analysis, we strengthened the process step “Empower Workforce to Develop Implementation Plan” by changing the method for establishing, deploying, tracking and adjusting goals. We tightly integrated the Leadership System, an integral part of the EES, with the SPES, the Human Capital Framework System (Fig. 5.1-1), the Communication System

(Fig. 1.1-2) and the LM21 Path to Excellence Process (Fig. 6.2-4).



Figure 1.1-1 The MFC Performance-Driven Leadership System Focuses the Organization on VMV, Objectives, Goals, Measures and Performance Excellence

Senior leaders communicate our Vision and Values in all steps of the Leadership System and deploy them throughout the Enterprise from senior leadership down to the first-line supervisory level. We also share them with employees through the president’s annual “State of the Business” address, bi-weekly briefings by managers at all levels, and annual Business Conduct Guidelines (BCG) training/certification and annual Ethics training for all employees. We augment this further with extensive compliance training and testing (based upon employee responsibilities), scheduled business performance reviews, improvement teams, goal setting employee performance reviews and the meetings and forums shown in Fig. 1.2-4.

The SLT directs that all suppliers and partners abide by our Vision and Values and includes these in contracts and contractor training. We discuss our Vision and Values in supplier conferences, quality improvement teams, supplier performance evaluations and supplier recognition programs. Our suppliers are often members of our process and product improvement teams, and our trainers help suppliers establish Strategic Performance Management Teams (SPMT) in their own organizations (6.2b(2)). Each month, MFC and our suppliers exchange and review performance metrics.

We deploy our Vision and Values and reinforce them with customers during executive discussions and feedback sessions, customer participation in ELC meetings, staff interface with customer oversight personnel and our expansive outreach to support military welfare organizations. Our customers are also active members of our Integrated Product Teams (IPT), working side-by-side with our employees to accomplish our VMV, while building products to meet customer requirements.

We reach consultants and other business partners through contract terms, annual Ethics and BCG certification and training and annual compliance training. International

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consultants receive annual compliance training, briefings and interviews to ensure their adherence to our Vision and Values.

We require that our senior leaders' actions consistently reflect our Values and that they, ***“Do What’s Right, Respect Others and Perform with Excellence.”*** As examples:

- MFC voluntarily disclosed to our customer and corrected at no cost a previously unidentified quality issue that we discovered after delivery and customer acceptance – even though the customer had explicitly declined warranty coverage (“Do What’s Right”).
- Senior leaders terminated a long-term profitable business relationship with a company because the company failed to comply with the legal standards of a foreign customer (“Do What’s Right”).
- The SLT adheres to the tenets of Full Spectrum Leadership, which requires leadership deliver results and inspire and empower our employees (P.1a(2)). Each SLT member mentors and sponsors Employee Resource Groups, as well as high-potential employees (“Respect Others”). They lead by example – engineering, deploying, improving and innovating an Enterprise-wide system that integrates all major processes and sub-processes to achieve Performance Excellence (4.1a).

1.1a(2) Promoting Legal and Ethical Behavior: Led by the SLT, ethical and legal behavior is a cornerstone of our company and supports our Vision “To be the most respected global leader in every market and community we serve through the pride, commitment and power of enterprising people.” The president personally kicks off the annual Ethics training requirement by being the first to complete the course, followed by the SLT. We require annual Ethics training for all employees, suppliers, partners and collaborators. Members of the SLT participate in frequent compliance training, the quarterly Ethics Council, the Disciplinary Review Board appellate process and in comprehensive voluntary disclosure policies. They personally conduct training on sensitive and critical topics like international business capture and export compliance. The president annually certifies MFC’s compliance with the Foreign Corrupt Practices Act and Corporate Hospitality Guidelines. MFC has a zero-tolerance policy for unethical and illegal behavior. The examples shown in 1.1a(1) illustrate our adherence to ethical behavior.

MFC formed an Office of Ethics and Business Conduct whose director reports directly to the president. The SLT fosters voluntary disclosure, requires legal pre-approval of hospitality and gifts for foreign officials, enforces government charging practices and integrates ethical and compliance procedures. The Office of Ethics maintains the Ethics hotline, investigates reports, responds to complainants and takes prompt corrective action. MFC is committed to confidentiality and non-retribution for those who report concerns about ethical or legal breaches.

To reinforce ethical and legal behavior, every employee has ethical goals in their annual performance review. The SLT also sponsors quarterly and annual Ethics Awards.

1.1a(3) Creating a Sustainable Organization: MFC senior leaders create a sustainable organization through the EES. Throughout our Journey Toward Performance Excellence

(P.1), senior leaders make strategic decisions and improvements based on data that result in growth, profitability and sustainability. We illustrate the path of our continuing Journey in Fig. 1.1-2. This Figure illustrates multiple aspects of our Journey Toward World-Class Performance Excellence. The pie charts at the top show our focus for the time period relating to our Strategic Tenets of Growth, Profitability and Sustainment (2.1a(1)). The section labeled Environment describes the external environment and challenges. The section “Position” outlines our Enterprise focus toward Talent, Process and Market Posture and our Business Focus on Growth, Profitability and Sustainment. The colors indicate our relative position in each area, with blue = excellent, green = good, yellow = average and red = poor. The bottom section, Response, shows how our strategic direction shifts to mitigate the environmental challenges and internal position to ensure success and sustainability.

Among our leaders’ Enterprise-wide activities to support sustainability are:

- Emphasizing our Fundamental Business Principle: ***“Business is not the objective...it is the result. Performance is the objective”***
- Maintaining universal accountability and optimizing the relationship among the triad of Product, Process and Talent
- Using the SPES (Fig. 2.1-1) to develop a 10-year Strategic Plan and market forecast and an annual 3-year Operations Plan that includes objectives, challenging goals and meaningful metrics that align throughout the Enterprise (Fig. 2.1-1)
- Instituting monthly ELC meetings that include customers to review, analyze and evaluate metrics from every part of the Enterprise and that use a color-coded scorecard system to receive early warning of potential issues, take corrective actions, innovate and ensure Performance Excellence (1.1b(2))
- Requiring root cause analysis and systemic avoidance and/or corrective action to eliminate repetitive mistakes (4.1b)
- Promoting strong customer relationships and soliciting feedback and course corrections from customers, employees, suppliers, partners and collaborators (3.1a(1), Fig. 4.1-2)
- Creating organizational agility, based on timely, reliable data and rigorous processes to support quick action if change occurs or is anticipated
- Managing the new business pipeline to ensure projected financial results during periods of 40% to 50% volatility in annual orders (2.1a(2))
- Supporting workforce learning by requiring that employees and their managers review and plan for development needs annually, offering a multitude of training/education classes (5.2c(1)), sharing best practices and near-misses and maintaining processes to ensure that learning is shared organization-wide
- Annual planning for staff capacity and capability using metrics linked to the Strategic Plan, identifying and developing high-potential employees as future leaders and requiring structured succession planning (5.1a(1), 5.2a(3))

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Figure 1.1-2 Senior Leaders Have Successfully Guided MFC on a Journey Toward World-Class Performance Excellence

- Participating personally in the Talent Review Process, sponsoring Employee Resource Groups and leading the Diversity Council
- Overseeing effective processes, procedures and regulations that ensure the safety and security of employees (5.1b(1))
- Continuing to enhance their own leadership skills through formal and informal training, certifications, annual reviews and peer and employee feedback

1.1b Communication and Organizational Performance

1.1b(1) Communication: MFC leadership uses our Integrated Communications System to engage our workforce. We use digital, print, interactive and face-to-face techniques to facilitate consistent messaging inside and outside the company. The System is deployed throughout the Enterprise, we adapt and adjust our communications to meet the needs of each site, and we evaluate the effectiveness through surveys and focus groups. Fig. 1.1-3 illustrates how and what MFC leaders communicate. In all, they engage employees, encourage frank, two-way communication and take an active role in reward and recognition programs that reinforce high performance and a customer and business focus.

Our Employee Communications offerings have grown and improved based on needs and technology. They include the one-stop *myMFC News*, which started as a printed newsletter and is now sent via email; the MyMFC homepage, started in 2009, where employees get access to online tools useful in their daily job along with information on company initiatives, program news and employees' achievements, along with MFC Chat, its latest addition in 2012; the quarterly *MFC Spirit* magazine (2003), a high-quality color, human-interest news magazine distributed to all employees; and *The Source* (2007), a bi-weekly online and print publication for MFC leaders providing program and business news and important personnel information for sharing in leaders' regular staff meetings.

Other employee communications at the corporate level include the *Electronic Systems Daily News*, *LM News*, *LMC Early News*, LMC press releases, *News Watch* and corporate

social media on YouTube, Flickr, Facebook and Twitter. LMC senior executives also communicate regularly via webinars and all-employee e-mail.

Based upon a review in 2003, we found that employees at some production sites needed more information on productivity and quality initiatives. In response, we launched the *Production Operations Newsletter* in 2003. We augmented this in 2009 with the launch of our Quality News Network (QNN) to further improve outreach to our dispersed workforce. Survey results since that time show that these employees are well informed. We continually assess new communication technology to improve the business.

Topics \ Methods	Recurring Meetings	Employee Recognition Events	Internal/ External Media	Trade Shows
Policy, Procedure, Diversity, Ethics, Safety / Wellness, FSL, Governance	✓	✓	(1)	
Community Involvement	✓	✓	(I & E)	
Customer Program Performance / Feedback, Branding	✓		(I & E)	✓
Employee / Team Recognition	✓	✓	(I & E)	
Strategic Objectives, Goals, Performance, Affordability	✓	✓	(1)	✓

Figure 1.1-3 MFC Communicates with Employees Using Systematic and Widely-Deployed Methods

1.1b(2) Focus on Action: Senior leaders focus the Enterprise on action through the Performance-Driven Leadership System. Every individual and/or team throughout the Enterprise has goals and metrics that align to the Strategic Plan, and they know exactly what must be accomplished to achieve MFC's and customers' objectives, requirements, goals and budgets.

Metrics flow from the Strategic Plan and Long Range Plan (LRP, Fig. 2.1-1) across the entire Enterprise through our internally engineered, integrated EES and span our key Work Systems and key Work Processes (Fig. 6.1-2). We maintain metrics electronically and categorize them into four integrated tiers – Tier I Enterprise-level metrics, Tier II Line of Business

Missiles and Fire Control

(LOB)/Functional-level metrics, Tier III Program-level metrics and Tier IV Team-level metrics (Fig. 4.1-4). We review and evaluate metrics on a weekly, monthly, quarterly and annual basis in meetings and forums as indicated in Fig. 1.2-4.

The ELC requires that all areas use tools such as root cause analysis to identify the source of problems. To develop a solution, improvement teams use the LM21 Path to Excellence Process (Fig. 6.2-3), Lean Six Sigma tools or other appropriate methods for improvement and innovation.

1.2 Governance and Societal Responsibilities

1.2a Organizational Governance

1.2a(1) Governance System: Fig. 1.2-1 outlines the MFC Governance System.

It is systematically reviewed and evaluated annually and as required to achieve optimal performance. With each improvement, learning is shared with the Enterprise through mandatory training and wide-scale distribution of revised company policies and procedures. Recently, the MFC Legal function sponsored a 3-day Kaizen event to improve reporting and remediation associated with individual employee mischarging. This structured improvement activity resulted in a new reporting and remediation process flowchart.

The Governance System is the process through which our SLT ensures ethical business practices and accountability, above and beyond compliance with laws, regulations and policies. We provide access to professional advice, define metrics to evaluate performance of the System, use processes such as the 4-Blocker (Fig. 4.1-5) and LM21 Path to Excellence Process (Fig. 6.2-3) to make corrections and improvements, and require education and dissemination of information for training and sharing knowledge.

MFC reviews and achieves the following five key aspects of our Governance System:

- **Accountability for management's actions:** Universal accountability, including management accountability, is a key aspect of MFC culture. Senior leaders are accountable for achieving annual goals that link directly to the objectives, goals and metrics of the Strategic Plan. During scheduled meetings (Fig. 1.2-4) where senior leaders review performance against the objectives, goals and of the Strategic Plan, the leader responsible for each area reports progress via a color-coded scorecard (4.1b).
- **Fiscal Accountability:** MFC annually establishes financial commitments and metrics for Orders, Sales, Earnings Before Income Taxes (EBIT), Cash, Margin, Capital Expenditures, Return on Investment (ROI) and other financial performance indicators. We have checks and balances built into the financial system. The SLT, Finance and the project teams review metrics on a daily, weekly, monthly, quarterly and annual basis (Fig. 1.2-4) to ensure performance. We also submit our financial results to both internal Corporate and external auditors for independent review. The U.S. government Defense Contract Audit Agency (DCAA) and Defense Contract Management Agency (DCMA) audit our financials for customer contract and federal regulation compliance on a monthly basis.
- **Transparency in Operations:** Our operations are fully

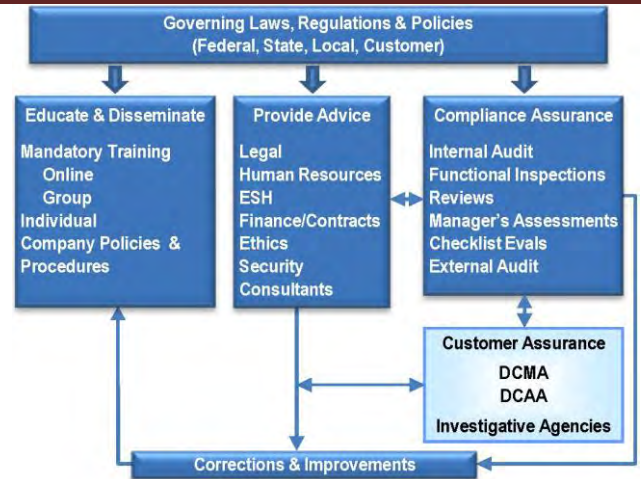


Figure 1.2-1 MFC Governance System

transparent to employees, customers, suppliers, partners and collaborators as appropriate. We have automated our performance metrics at all Tiers and make them available for review through our EES. Our customers participate in ELC meetings, and the on-site customer representative co-chairs the meeting with our president. Customers are also active members of an IPT related to their program/product, so they know of problems and successes as soon as we do. Performance metrics are displayed in work areas. Each PMT can monitor performance against goals and metrics on a daily basis and discuss in weekly meetings.

- **Independence in Internal and External Audits:** We ensure independent internal audits by reporting audit results directly to the SLT. External auditors also report to the SLT. Governmental audit results are reported through the Department of Defense (DoD) chain of command.
- **Protection of Stakeholder and Shareholder Interest:** Our focus on Performance Excellence protects the interests of all of our stakeholders, including the shareholders of Lockheed Martin. By meeting or exceeding cost, schedule and technical performance contract requirements; hiring, developing and retaining the best and brightest employees; and establishing integrated processes, monitoring these processes, making continuous improvement and integrating the learning throughout the Enterprise, MFC protects stakeholder and shareholder interests.

1.2a(2) Performance Evaluation: The achievement of predefined commitments on objectives, goals and metrics related to individual accomplishments and Enterprise performance provides the basis for evaluating the president and SLT. These commitments are directly linked to our Strategic Plan and Objectives, LRP, VMV, Ethos and Fundamental Business Principle. The executive vice president of Electronic Systems, one of four business areas that report to the Chief Operating Officer of Lockheed Martin evaluates the MFC president. The president, in turn, evaluates his direct reports at least once a year. At MFC, the SLT provides governance over the system of management and controls exercised in the stewardship of our organization.

Lockheed Martin allocates a significant percentage of the total compensation of senior leaders as achievement/incentive compensation. This percentage of base salary is held back

until the end of the year when it is finally determined by achievement of performance objectives, goals and metrics. As a person takes on more senior positions, the percentage of compensation “at risk” rises. Based upon both individual and organizational performance, MFC is the top-rated company in the corporation over the last 12 years.

Performance evaluations assess not only current performance but also opportunities for future leadership roles and promotions within MFC and the Lockheed Martin Corporation. Identified strengths or weaknesses help guide decisions about executive development that maximize leadership potential, and individual achievement metrics determine individual and organizational priorities. The ongoing monitoring and review of these metrics enable mid-course corrections of personal and organizational performance and training needs. In 2009, to improve the linkage between our strategic goals and individual performance goals, we increased emphasis on and added structure to employee feedback and performance by adding a mid-year review. This is validated during Employee feedback sessions, continued performance and employee satisfaction (Figs. 7.3-12, 13, 16).

1.2b Legal and Ethical Behavior

1.2b(1) Legal and Regulatory Behavior: Our military products must include explosives, volatile propellants, lasers and radioactive and corrosive materials. In dealing with these materials, we take extreme care to protect the lives and health of our employees, the citizens in communities near our facilities and the warfighters who use our products.

We select sites for our manufacturing and testing operations far from residential areas, typically in industrial or isolated rural tracts. We also limit our facilities that handle explosive devices to Camden, AR, Troy, AL, El Paso, TX, and our field-support sites. We strictly adhere to OSHA and other safety guidelines, embed safety procedures into product design and conduct cross-functional safety reviews of products before sending them to the field.

In a cycle of improvement in 2007, MFC initiated a program to reduce our environmental footprint. Our senior leaders have goals and metrics for reducing water usage, the amount of waste sent to landfills and the amount of carbon emissions released (Fig. 7.4-12).

We have a strong Supply Chain Management Process (SCM, 6.2b(2)) that helps ensure our supply chain has minimal impact on the public and the communities in which they operate. MFC works directly with our suppliers to increase efficiency, reduce waste and enhance the use of all safety guidelines.

Our innovative, high-technology products are made-to-specification for military use. We elicit inputs concerning ease of use, safety and combat effectiveness from our warfighters, and we are dedicated to providing safe, effective and highly reliable products that they can rely upon in combat. As a committed partner, MFC advises of known risks, utilizes best engineering practices and conducts impartial analysis of alternatives. We conduct comprehensive joint safety and standards reviews with our customers to ensure they are informed in the safe use of our products to proactively mitigate their risk of harm.

As a DoD supplier, MFC is subject to many regulatory and legal requirements, including contract terms and statutory/regulatory requirements. We have developed compliance processes tailored to these unique requirements, and we have integrated them into our business routines. Fig. P.1-6 illustrates our compliance processes and measures and goals for achieving and surpassing them (Fig. 7.4-5).

Senior leaders analyze data and make fact-based decisions about risk using the Enterprise Strategic Planning and Execution System and the LOB Strategic Planning Process, as well as throughout the entire Product Life Cycle (Fig. 3.1-2). At the program/product level, MFC formally defines risk as “a potential problem or threat that could affect the program’s ability to meet its operational capacity and performance, technical, cost, schedule, financial, quality or other objectives.” We have deployed the Risk and Opportunity Management Plan (ROMP) process throughout the Enterprise to identify and manage risks and opportunities. The process enables program managers to focus program resources where needed to meet technical, cost and schedule commitments. The process is comprehensive and integrated with the Program Management Process.

1.2b(2) Ethical Behavior: Fig. 1.2-2 illustrates the fundamental process elements we use in promoting and ensuring ethical behavior at MFC at every site and with every employee. Figs. 1.2-3 and 7.4-8 indicate the measures, goals and results for enabling and monitoring ethical behavior internally and in interactions with customers, partners, suppliers and other stakeholders. Ethical behavior is expected of all employees, and ethical behavior is a factor in all leaders’ and employees’ performance evaluations. Everyone is encouraged to inquire and/or express concerns about unethical behavior with our Ethics Office or hotline, Human Resources, Legal and management. The Ethics Office coordinates most ethical investigations with the assistance of Security, Legal, Human Resources and others as required.

Our Disciplinary Review Board evaluates substantiated findings of significant unethical behavior or poor management practice. Based on this evaluation, breaches can result in corrective actions ranging from employee counseling to discharge. If findings affect third parties, we disclose the violation to them and take remedial actions. Unethical and illegal behavior on government contracts can result in criminal prosecution of the offender.

The Ethics organization and Executive Ethics Council monitor trends and use them as a basis for targeted employee communication, training and management improvement.

1.2c Societal Responsibilities and Support of Key Communities

1.2c(1) Societal Well-Being: MFC senior leaders commit to making our Enterprise a good corporate citizen. MFC acts and contributes to enhance the well being of society and the communities that host our facilities. During the Strategic Planning and Execution Process, we establish environmental, societal and economic objectives, goals and metrics.

MFC is dedicated to protecting our environment. We are committed to reducing carbon emissions, conserving water



Figure 1.2-2 MFC Ethics Integrity Process

Issue/Process	Measure	Goal	Results
Employees Trained in Ethics Awareness Training	Percentage	100%	Fig. 7.4-8
Employees That Took LM Voice Survey		100%	Fig. 7.3-16, Fig. 7.4-9
Employee Conduct	Substantiated Allegations	0	Fig. 7.4-8
Attendance and Reporting (Charging Practices)		0	Fig. 7.4-8
Violence, Threats and Harassment		0	Fig. 7.4-8
Leadership Competencies		0	Fig. 7.4-8
Misuse of Company Assets		0	Fig. 7.4-8
Quality Assurance (Quality Manufacturing, or Service)		0	Fig. 7.4-8

Figure 1.2-3 MFC Closely Monitors Metrics Relating to Ethical Behavior

and reducing waste (Fig. 7.4-12). We work with our suppliers to support us in our efforts – from ordering recycled office supplies, to reducing packaging, to managing rare earth elements in a closed-loop process.

Through our “Go Green” initiative, we encourage employees to make suggestions about new environmental efforts, to volunteer for community programs that impact the environment and to recognize daily habits (both at work and at home) that collectively impact the environment. We also focus on purchasing available products and services locally to maximize the economic health of the community.

MFC is often the largest employer in our local communities, and we are typically the largest technically skilled workforce in those communities. In order to hire and retain highly skilled employees who are critical to our business success, we need stable communities with good schools, housing, recreational and cultural opportunities, and support services. We encourage our leadership and employees to take an active role in community leadership and service, especially local education and community welfare.

MFC sponsors many programs in support of community schools, with a priority on promoting the study of math and science and encouraging the participation of women and minority groups. The local programs we support include:

- Internships and co-op programs
- K-12 outreach initiatives for Science, Technology, Engineering and Mathematics (STEM)

- Encouragement of participation of women/minorities
- Other support, including Teach-in, Career Days, Junior Achievement and Read2 Succeed

1.2c(2) Community Support: We identify our key communities as members of the military, communities near each major MFC facility and communities affiliated with our customers. MFC community support balances MFC resource availability, community need, business relationships, our Core Competencies and the potential or real effectiveness of community investment.

All senior leaders play a role in community support, usually in a leadership position on local boards of directors, and the Enterprise provides direct financial contributions (Figs. 7.4-13, 14). Executives sponsor and encourage employees to be active in charitable activities at the workplace and to participate in the support of military personnel and community organizations. These include: Armed Forces Foundation, Army Relief Fund, Wounded Warrior Foundation, USO, Operation Homefront, United Way, family and women’s shelters, food banks, Habitat for Humanity, health and healing organizations, youth organizations and cultural activities.

Employees enter the volunteer hours they contribute in an online system, and they are recognized by MFC leadership for exceptional volunteerism with certificates, Community Service Awards and Evening of Excellence recognition.

Category 2: Strategic Planning

Lockheed Martin Missiles and Fire Control (MFC) created and continues to refine a structured – yet highly dynamic – Strategic Planning and Execution System (SPES) that is deployed throughout the Enterprise. Our SPES, combined with our Work Systems, processes, metrics, instrumentation set, analysis tools and results, drives our Enterprise Excellence System (EES, Fig. P.1-1), which integrates our major processes, data and data management capabilities to drive performance. During the SPES, we gather, analyze and manage an extensive amount of data including business data from Lines of Business (LOBs), domestic and international customer trends, market intelligence, competitor trends and projected performance, sales forecasts and market analysis and forecasts at the Enterprise level, LOB level and market segments. Based on the capabilities of the EES, in executing SPES we can analyze current data, study future trends and opportunities, analyze risk and conduct “what if” scenarios to make fact-based strategic decisions.

At MFC, we have three Strategic Tenets by which we consider and measure our business: **Growth, Sustainment and Profitability**. We filter all thought processes and decisions through these Tenets. We consider them as we analyze each program, product and internal investment in innovative technologies for its contribution to our bottom line, potential for future business and opportunities for innovation. The EES provides us the agility to establish weighting at the Internal Operating Plan (IOP) level for each Tenet. If senior leaders determine it is necessary to move the focus from one Tenet to another, the System adjusts all metrics to the correct levels to redirect the Enterprise.

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Figure 1.2-4 Key Meetings and Forums Provide a Systematic Approach to Sharing and Learning

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Throughout the year, senior leadership systematically reviews the Strategic Plan and IOP during the meetings shown in Fig. 1.2-4 and makes adjustments as necessary to respond to changes in complex and fluid internal and external environments. This model for continuous improvement enables us to shift course rapidly to market dynamics and meet our goals in a dynamic and challenging environment.

2.1 Strategy Development

2.1a Strategy Development Process

2.1a(1) Strategic Planning Process: The MFC SPES is shown in Fig. 2.1-1, along with the Work Systems and Work Processes (Figs. 6.1-2, 3) that we plan for and execute. We use SPES for both long-term and short-term planning and execution. It includes proven, well-defined strategic processes that have the rigor to ensure seamless operation and excellent performance across a large and complex Enterprise while also possessing the flexibility to rapidly adjust course in a dynamic marketplace.

We introduced the system in 1999, and we assess it annually to improve the process and metrics. In 2003, we added the concept of Market Cap Threshold, which spurred us to pursue business outside of our served core markets, resulting in an additional \$20 billion of opportunities. (Figs. 7.5-7.9). In 2006, we assessed the Market Forecast and determined our Core market would begin to shrink. Based on this information, we expanded our definition of our served market and added market aperture. This resulted in our capture of CRAD and Adjacent orders (Figs. 7.1-33, 7.5-7, 9).

We involve a cross section of our Enterprise in the SPES to tap diverse ideas and capabilities in our workforce. The group includes the president; other members of the Enterprise Leadership Council (ELC); the leaders of all functional areas (Business Strategy and Development, Finance, Operations, Engineering, Human Resources and Quality); the leaders of all LOBs; and the Strategic Planning Team. The Strategic Planning Team integrates senior leaders from the Strategy and Business Development area as permanent members and strategic analysts who serve on a staggered 18-month rotation. With the support of Human Resources, senior leadership interviews and selects these analysts, identifying high-potential, high-performing employees who demonstrate exceptional strategic thinking abilities. They bring new thinking to the Team, and after serving 18 months, they offer well-honed strategic capabilities to the rest of the business via assignments in Business Development, Program Management and other critical roles.

Step 1 of the SPES, *Prepare Company Strategic Plan*, includes three areas: "Perform Situational Assessment," "Develop Business Strategy," and "Create the Strategic Plan."

- During "Perform Situational Assessment," we analyze and evaluate Market Dynamics and our Business Posture using our Market Analysis Process (MAP). In the Market Dynamics phase, we conduct an extensive and in-depth

environmental scan and an analysis of external data. These data include domestic and international customer trends, potential new markets, the legislative landscape, the Department of Defense (DoD) budget, definition of market segments, market intelligence and competitor trends. We analyze market forecasts for the Enterprise, LOBs and their respective market segments. MAP lets us analyze markets we are pursuing or considering entering using instrumentation and metrics to define the market's quality.

- As we evaluate our Business Posture, we analyze data that affect Growth, Sustainment and Profitability. For **Growth**, we examine our orders and sales forecasts and assess the risks associated with achieving those forecasts, and we identify windows of opportunity for penetrating new markets.

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During this step, we reassess our Core Competencies, Strategic Challenges, Strategic Advantages and VMV to determine if they are still relevant to our mission, goals and strategic direction based on the latest understanding of our external environment and internal business posture. We then update these as required.

- As we develop and update the Strategic Plan, we incorporate plans from LOBs and functional departments. The LOB plans summarize the analyses conducted, the 10-Year Plan, our strategic positioning and any risk mitigation activities that must be considered to sustain or expand our business. Our Technical, Operational and Human Resources departments develop plans in concert with the other Strategic Planning participants who contribute to the consolidated Strategic Plan.

In **Step 2** of the SPES, *Develop Long-Range Plan (LRP)*, we map out a 3-year Operating Plan with a 10-year orders forecast. The Operating Plan aligns with the Strategic Plan and contains the financial commitments and plans required to achieve the objectives set forth in the Strategic Plan. The Operating Plan is a detailed bottoms-up plan guided by top-down Enterprise objectives. This Plan also contains a detailed risk analysis of our orders plan in terms of **Growth**, **Sustainment** and **Profitability**, as well as in terms of our core, international and adjacent markets.

In **Step 3** of the SPES, *Plan and Allocate New Business Acquisition Expense (NBAE) Capital*, we determine how much we will allocate, as a percent of sales, to acquiring new business. This includes the cost of preparing Bids and Proposals (B&P) and the cost of the Internal Research and Development (IRAD) required to meet the requirements outlined by prospective customers.

Step 4, *Capture the Business*, is tightly integrated with both our planning and execution phases. It is discussed in more detail in Category 3.

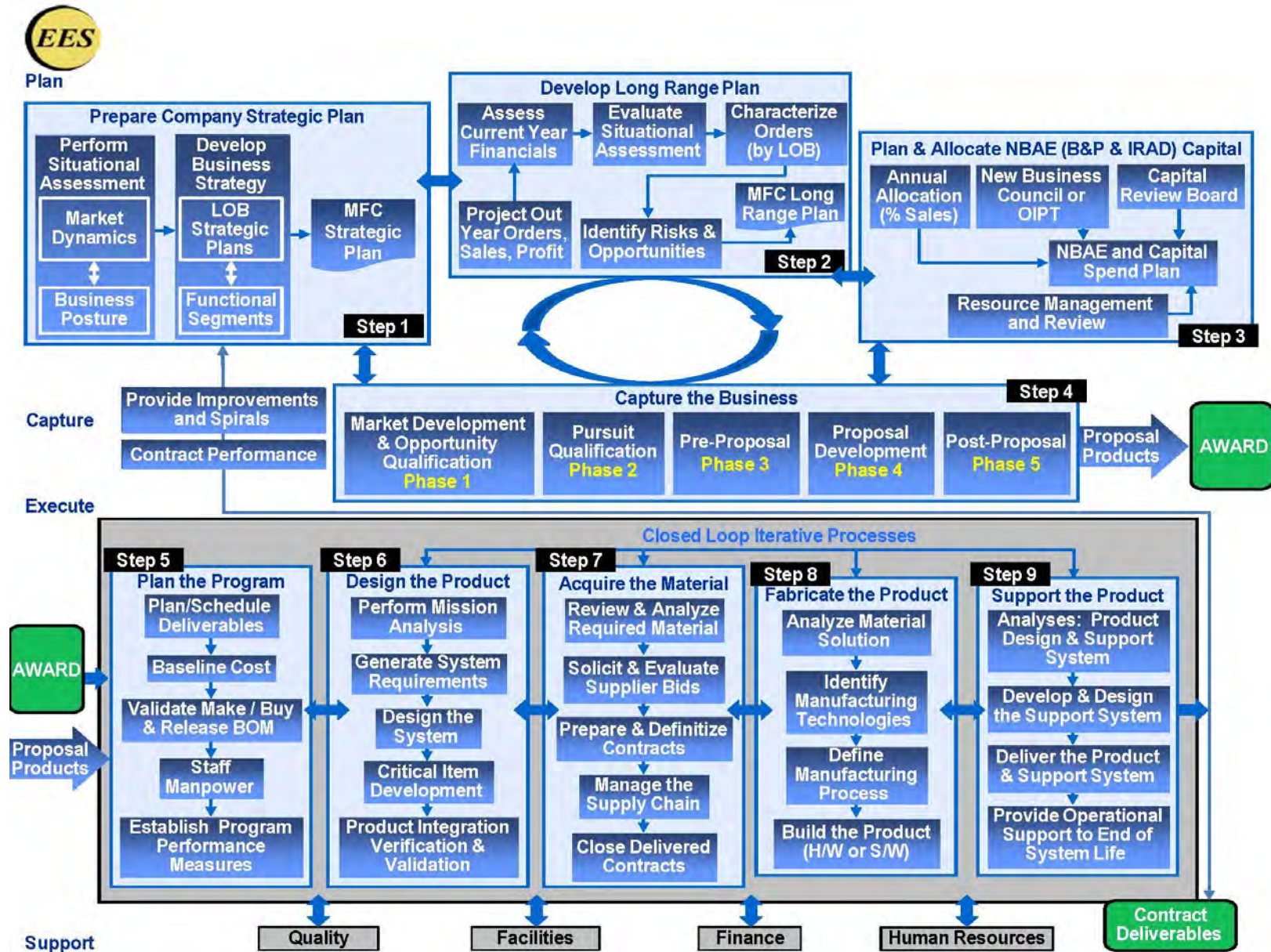


Figure 2.1-1 The Strategic Planning and Execution System is Highly Integrated with Our Work Systems (Plan, Capture, Execute and Support) and is a Key Element in Our Enterprise Excellence System (EES) Which Enables MFC to Make Fact-Based Decisions and Align Our Strategic Objectives, Goals and Measures Throughout the Enterprise

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We identify potential blind spots by considering a wide variety of in-depth information; examining our Strengths, Weaknesses, Opportunities and Threats (SWOT) and identifying issues, opportunities and risks. In addition, by appointing a diverse, cross-functional team to undertake the SPES, we take advantage of different perspectives and ideas that arise during analysis, brainstorming and evaluation. We also apply the modeling and simulation to examine “what if” scenarios to identify other potential blind spots.

Our short-, mid- and long-term planning horizons are:

- *1-Year Horizon* – During this period we develop objectives, goals and metrics for the time range and apply our Contract Status Review (CSR) and Orders Campaign Management (OCM) processes to determine our levels of orders, sales, profit and cash for the year.
- *3-Year Horizon* – Our Long-Range Plan (LRP) is developed to cover this planning horizon and includes a forecast of orders, sales, EBIT and cash. We also conduct a 10-Year forecast of orders. The Plan includes objectives, goals and metrics to be achieved during this period.
- *10-Year Horizon* – Our Strategic Plan is built on a 10-Year horizon and it includes near- and far-term strategies, objectives and goals.

These planning horizons align with the nature of our business. Government plans for new and add-on programs may take up to 10 years or more of decision-making and budgeting approval before proposals are requested. The 3-Year period enables us to consider shorter-term opportunities, as well as to examine the status of our current contract base. The 1-Year horizon enables us to focus on the current situation in terms of orders, sales, profit and cash based on existing contracts and new business. Each Step in the Planning phase of the SPES addresses these horizons: Step 1 incorporates the requirements for the 10-Year horizon, Step 2 covers the 3-Year horizon and Step 3 applies to the 1-Year timeframe. Step 4 is critical to accomplishing Steps 1-3, as well as to each Step in the Execution phase (2.2).

2.1a(2) Strategy Considerations: After evaluating our strengths, weaknesses, opportunities and threats in **Step 1** of the SPES, we compile and evaluate comprehensive external and internal data to ensure we take an objective view of each of these four elements. We continuously seek early indications of major shifts in technology, markets, customer preferences, competition, the economy and the regulatory environment. We scan news outlets and trade journals continuously; we maintain daily, weekly and monthly face-to-face interactions with our customers to gain insight into their thinking and trends; we coordinate with our Operations team in Washington, D.C., on new opportunities and trends in regulations; and we remain current with the Legislative landscape. Our engineers and technical staff remain abreast of technology trends through journals, meetings and trade shows and continuing education.

Because we review data and information throughout the year on a systematic basis, we can move rapidly and proactively to take advantage of or mitigate the potential impact of shifts. The Strategic Enterprise Leader Council (SELC) reviews the Strategic Plan on a quarterly basis and makes changes if needed at any time. The changes are

incorporated into the Plan and communicated to employees, customers, suppliers, partners and collaborators using the methods outlined in P1b(3), 1.1b(1) and 3.2a(2).

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During the SPES, we address long-term sustainability by performing detailed risk assessment of many factors, including the long-term orders forecast, market growth, market size, number of competitors, potential barriers and factors potentially inhibiting growth or profitability. We review and evaluate our Core Competencies for today and the future. We also develop projection of our future performance, as well as projections of the future performance of our competitors. MFC also carefully and precisely performs capability and capacity studies for our engineering base to ensure we can meet current contract requirements while also being positioned to create innovative new products and capabilities for our current and future customers (1.1a(3), 5.1a(1)).

We conduct risk assessments of our strategies and objectives to help us determine our ability to execute the Strategic Plan. For example, we create an “A” (primary) plan and a “B” (secondary) plan for new business. “A” orders are those that have been budgeted for the year. The “B” plan contains a set of opportunities and/or potential orders that we pursue in parallel to those outlined in the “A” plan. The “B” list can be used to replace any opportunities on the “A” list that may be postponed or fail to come to fruition. The Orders Campaign Management (OCM) team meets weekly to examine the status of booked orders and to discuss risks and mitigation plans to ensure changes to “A” opportunities do not impact our ability to meet our annual Plan (2.2a(1)).

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2.1b Strategic Objectives

2.1b(1) Key Strategic Objectives: Our key Strategic Objectives, Goals and timetables are shown in Fig. 2.2-1.

2.1b(2) Strategic Objective Considerations: Fig. 2.2-1 indicates how MFC’s Strategic Objectives address our Strategic Challenges and Strategic Advantages.

Our Strategic Objectives address opportunities for innovation in products, operations and our business model. Continued innovation supports our efforts in our Core business

by providing customers with the latest technology at an affordable price – a key to winning competitive bids.

Our innovations also enable us to reach new markets that require our Core Competencies for commercial and international applications. To be competitive in these markets, as well as in our core DoD market, we reinvent our business models as necessary to succeed in these new arenas.

Through our Strategic Objectives of “*Continue Portfolio Expansion and Diversification in Adjacent Segments*” and “*Invest in Technology and Contract Funded R&D Capture*,” we capitalize on our current Core Competencies and address the need to develop new Core Competencies. As we move into adjacent markets, we take our Core Competencies, skills and technologies and apply them to new segments that require innovation, precision and reliability.

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These Objectives enable us to identify areas where new competencies are required. One way we are addressing this challenge is with our Strategic Objective of “*Transform the Culture and Workforce...Agility, Innovation and Competitiveness*.” In our Strategic Plan, we establish staffing targets needed to develop capabilities and capacity in disciplines supporting potential new Core Competencies. Through our Culture Optimization Process (5.2a(2)), we adapt our culture to encompass both our traditional approach to work for long-term government contracts and a more entrepreneurial outlook that enables us to compete in commercial markets.

In Fig. 2.2-1, we indicate our short-term (ST) and long-term (LT) Action Plans. Our 1-year, 3-year and 10-year planning horizons enable us to balance short- and long-term challenges and opportunities. Based on our analysis and evaluation in Step 1 of the SPES, we determine our direction and the correct focus related to our three Strategic Tenets of Growth, Profitability and Sustainment over these multiple horizons. These decisions, along with those relating to our resources, enable us to establish the priority and timing of our Action Plans. Some actions must be undertaken within a short-term period in order for us to accomplish long-term Objectives, challenges and opportunities. Based on analysis and evaluation, other Action Plans are achieved over a long-term.

During Step 1 of the SPES, we also gather and analyze data relating to our customers, stakeholders, employees and communities. Our Strategic Objectives balance the needs of all key stakeholders based upon the broad scope of the environmental scan, the transparency of the Plan itself and the multiple points where stakeholders provide input to ensure that all have a voice.

We develop our Strategic Objectives based on in-depth evaluation of our markets, trends and risks using our EES. By conducting continual environmental scans throughout the year, maintaining close relationships with our customers and suppliers and reviewing performance systematically, we can anticipate shifts in market conditions and plan proactively at any time during the year rather than reacting to surprises.

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One of our key Strategic Advantages is our ability to develop products rapidly, which enables us to respond quickly to shifts in customer requirements and market changes. We are able to accomplish this because of our investments in modeling and simulation, rigorous processes and continuous improvement. Our flexible new technology investment strategy allows us to respond effectively to changing customer priorities. Moreover, our transition to a more agile, innovative and competitive culture and workforce permits MFC to adapt readily to fluctuating market conditions (5.2a(2)).

2.2 Strategy Implementation

2.2a Action Plan Development and Deployment

2.2a(1) Action Plan Development: During Step 2 of the SPES, “Develop Long-Range Plan (LRP),” we translate the Strategic Objectives identified in the Strategic Plan into operational objectives and Action Plans. A cross-functional team creates Action Plans by determining the specific resources, tasks, metrics, performance targets and schedule milestones required to achieve each Strategic Objective. The resulting LRP contains short-term operational, new business and financial commitments to achieve the near-term Objectives of the Strategic Plan. As we develop the LRP, we also undertake Step 3, “Plan and Allocate NBAE (B&P and IRAD) Capital.” Using the NBAE Allocation Process, we develop technology and proposal activity investment plans necessary to achieve our Strategic Objectives and meet the operational commitments of the LRP. To ensure we can accomplish the current year’s order plan, we use the OCM process to identify and define specific Action Plans around capture, risk assessment, potential contingencies or upside opportunities.

Each LOB and functional organization develops long- and short-term Action Plans and metrics that directly relate to achieving our Strategic Objectives and LRP commitments. We require a direct line-of-sight alignment from the Strategic Plan to each departmental plan and to each individual and team in the Enterprise. We employ a cascading approach, from the president to vice presidents to directors to managers to employees. We use *LM Commit*, our innovative annual employee performance review, to link every employee’s individual objectives to the Strategic Objectives and LRP commitments (5.2a(3)). The goals of our Performance Management Teams (PMTs) also have a direct line-of-sight to Strategic Objectives, Goals, Action Plans and Enterprise-level performance metrics.

Our LOBs manage the contracts customers award us for products and services. In **Steps 5-9** of the SPES, using our **key Work Systems and key Work Processes** (Figs. 2.1-1, 6.1-2, 3), senior leaders, program/product managers, suppliers and customers jointly develop the Action Plans and metrics to ensure we meet our contractual obligations, our Strategic Objectives and Action Plans.

In consideration of the Strategic Challenges outlined in Fig. P.2-1, we are proactively implementing several key changes to protect and augment MFC’s business base.

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2.2a(2) Action Plan Implementation: We deploy Action Plans to our workforce, PMTs, key suppliers and partners through the methods outlined in 1.1a(1), Fig. 1.1-2 and our key Work Systems and Work Processes (Figs. 6.1-2, 3). The annual President's Address presents the Strategic Plan and Strategic Objectives to the Enterprise at each site, focusing on both short- and long-term objectives. We distribute Action Plans through functional and program management to the workforce, both teams and individuals. We also discuss Action Plans in regular meetings such as those presented in Fig. 1.2-4. We include Action Plans and metrics in *LM Commit*, aligning individual employees' objectives, goals and metrics with those in the Strategic Plan and LRP (5.2a(3)). Employees are accountable for supporting achievement of the Strategic Plan.

Our EES provides the foundation to sustain the outcomes of our Action Plans. We update the performance metrics for all Action Plans at least weekly with both summary and detailed results available at all times. PMTs review their performance metrics weekly and make course corrections as required. The ELC meets monthly to review Enterprise-level performance metrics. Contract Status Reviews (CSRs) and Contract Progress Reviews (CPRs) occur quarterly and other reviews occur as shown in Fig. 1.2-4. We institute corrective action plans for areas where performance results fall outside acceptable thresholds. In 2011, when ELC trends showed corrective action plan closure times were increasing, we took measures including increasing data segmentation that resulted in a 42% reduction in the time it takes to close corrective action plans. When we make such improvements, we share the lessons learned within the organization and integrate them into other related process and Action Plans.

2.2a(3) Resource Allocation: During Steps 1, 2, 3 and 5, we analyze the resources required to accomplish our Action Plans and the plans developed by each functional department and program management team that align with the Strategic Plan and LRP. In concert, we analyze the resources required to meet current obligations, including financial, workforce, research, new business, Human Resources and equipment resources. If the resources required by the Plans are not congruent with available resources, the planning team, functional departments and program managers evaluate priorities. They may decide to rework the Plans to reduce the required resources, increase resources to meet plan requirements or develop a compromise between these options.

2.2a(4) Workforce Plans: Our key Human Resource plans for accomplishing our short- and long-term Strategic Objectives and Action Plans are shown in Fig. 2.2-1. Our system for addressing potential impacts on our workforce members and dealing with potential changes to workforce capabilities and capacity is described in 5.1a(1) and Fig. 5.1-2.

2.2a(5) Performance Measures: Our key performance measures to track the achievement and effectiveness of Action Plans are shown in Fig. 2.2-1. A cross-functional, cross-program team develops, implements and reviews metrics established at each Step of the SPES to ensure our overall Action Plan measurement system reinforces organizational alignment. The EES connects and integrates metrics to ensure exceptional performance (Fig. 4.1-1).

Objectives, goals and metrics cascade through the Enterprise from senior leaders to first line supervisors and are incorporated into annual individual and team objectives, goals and metrics (5.2a(3)). PMTs, functional departments and the ELC review metrics weekly, bi-weekly, monthly and quarterly. In pursuit of excellence, when we meet a goal, we generally raise the bar, adjusting targets to a higher level. Performance goals are rarely, if ever, lowered. They either remain the same or are increased.

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2.2a(6) Action Plan Modification: During the SPES, we develop contingency plans that enable MFC to be agile when accommodating changing circumstances. As we review plans, performance results and risks in regularly scheduled meetings, we can alter plans or establish a team to review and develop new plans if external or internal changes indicate the need. Because our Strategic Objectives, Action Plans and metrics are totally integrated in the EES, we can easily analyze "what if" scenarios to alter existing plans or develop new plans with efficiency.

2.2b Performance Projections

Fig. 2.2-1 presents our short- and long-term performance measures and projections as well as those of our competitors for comparison.

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Figure 2.2-1 Strategic Objectives

We have learned from our experience in facing a similar situation in the 1999 to 2000 timeframe and our ability through the EES to change our business focus around Growth, Profitability and Sustainment (Fig. 1.1-2). As we anticipate internal or external shifts, we proactively take measures, including reaching out to new markets, to ensure our success.

If we perceive current or projected gaps in performance against competitors or comparable organizations, we address them by enhancing our customer relationships, investing in technologies for more competitive offerings, investigating potential mergers or acquisitions, pursuing strategic partnerships and identifying strategic resources such as subject-matter experts or employees with critical skills.

Category 3: Customer Focus

At Lockheed Martin Missiles and Fire Control (MFC), we form long-term, intimate working relationships with our customers based on executing programs together that span many years, even decades. Customers are active members of our Integrated Product Teams (IPTs), and our Defense Contract Management Agency (DCMA) representative co-chairs the Enterprise Leadership Council (ELC) meetings with our president. Our concepts of “Customer First” and “We never forget who we’re working for[®]” are more than a trademark; we *live* them on a daily basis. Well-established customer relationships benefit us in meeting or exceeding our commitments on current business. They also allow us to hear and learn from the Voice of the Customer (VoC), so we are well prepared to compete for future contracts as they are put out for bid. This interdependency builds relationships and enhances customer engagement.

As we move strategically to new and adjacent markets with similar needs for performance and innovation, we are committed to building solid relationships with these new customers. Our VoC Process, best practices, agility and performance-driven culture result in MFC customer satisfaction and loyalty in both new and existing markets.

3.1 Voice of the Customer

3.1a Customer Listening

3.1a(1) Listening to Current Customers: MFC has a robust Voice of the Customer (VoC) Listening and Learning Process that includes face-to-face, electronic and written customer feedback. VoC is fully deployed at all sites and tailored to the best approaches for each customer segment. We continuously analyze our current Process and methods of listening to evaluate their usefulness and results. We add, remove or improve methods as a result of our evaluations.

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Our VoC Listening and Learning Process includes gathering and documenting information, whether it comes

through formal or informal methods. We verify data, deploy it to appropriate employees at each site and enter it into our Enterprise Excellence System (EES, Fig. P.1-1).

Our listening and learning results may show the need for product innovations or corrective actions. We develop Action Plans for these and assign teams to develop solutions (Fig. 4.1-3). Teams work closely with our senior leaders and customers to ensure results satisfy customers’ requirements. We share innovations and improvements within the Enterprise and integrate them into other processes as needed.

Fig. 3.1-1 shows our key methods of listening and learning by customer segment and frequency. Our interactions with customers normally occur at parallel levels within our organization and the customer organization – executive to executive, engineer to engineer and program manager to program manager.

Customers are integral members of our IPTs, working hand-in-glove with us to identify and resolve issues and discuss ideas for innovation. Acquisition offices have personnel on site from the DCMA and Defense Contract Audit Agency (DCAA) who work closely with our program teams to ensure effective communication and feedback. MFC also initiates and participates with customers in Kaizen events.

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We receive formal and informal feedback from our warfighters through our Field Service Representatives (FSRs). For Industry Days, held twice a year, the military Commanding Officer invites industry leaders to meetings in which both formal and informal listening and learning occur. Industry Days provide an opportunity for our executives to have frank, open, two-way communications with their customer counterparts.

MFC receives specific program- or contract-related feedback and learning through Business Development (BD) efforts, rigorous Lessons Learned debriefings following a win or loss, Customer Relationship Index (CRI) surveys, FSRs, Contract Project Reviews (CPRs), Contractor Performance Assessment Reports (CPARs), Government Corrective Action Reports (GCARs) and our Failure Reporting, Analysis and Corrective Action System (FRACAS). In addition, we listen in person-to-person informal conversations, conference calls and meetings. Lockheed Martin Corporation participates on four social media sites: YouTube, with *LM Video*; Flickr, with *LM Photostream*; Facebook; and Twitter (1.1b(1)), and we monitor any customer comments that may be posted on our sites. We use web-based technologies to listen and learn from our customers, including approved web-based exchanges, email, SharePoint and LiveMeeting.

Our VoC Process and methods of listening and learning are similar across different customer segments, although they vary by the level of the personnel involved. MFC’s customers comprise a complex network of people, and multiple people influence decisions. Our success in listening by any of these methods depends heavily on personal relationships and strong customer intimacy MFC has built over the years.

Our customer/program/product Life Cycle (Fig. 3.1-2)

Missiles and Fire Control

Listening Methods	Formal	Informal	Customer Segments		Frequency
			Warfighter	Program Management/ Procurement/Contracting Agencies	
Field Service Reps	X	X	X	X	Ongoing
Program Reviews	X		X	X	Weekly, Monthly, Quarterly, Annually
CPARs	X			X	Ongoing
Intra-Corporate Customer Surveys	X			X	Annually
Award Fees	X			X	Quarterly Annually
Industry Days	X	X	X	X	Semi-Annually
Customer Relationship Index Survey	X		X	X	Annually
Competition Debriefs	X			X	Ad hoc
Customer/Govt Corrective Action Reports	X		X		Ad hoc
Conferences & Trade Shows		X	X	X	Ad hoc
Professional Organizations		X	X	X	Ad hoc
Person-to-Person (In- Person or Phone)		X	X	X	Ad hoc

Figure 3.1-1 MFC Employs Formal and Informal Methods for Listening to Our Customers to Obtain Actionable Information

involves five stages that span a number of years – from capturing the business to fielding and support. At each stage, functional disciplines are involved in listening to the customer. During the Capture the Business stage, we have more interface with the warfighter, requirements developers and Acquisition Offices as our Business Development (BD) team leads the effort. During the stages of executing the business once we receive a contract, the program teams are involved in regular program reviews, detailed cost/schedule reviews and technical interface. We receive immediate feedback on the quality of products, customer support and transactions via day-to-day customer participation in our IPTs, regular program reviews and continuous interface. Once products are fielded, our FSRs provide feedback on product performance.

Data gathered via VoC are systematically analyzed and evaluated during the SPES, quarterly reviews of the Strategic Plan and monthly ELC meetings. Actions and changes are made based upon these data as appropriate.

3.1a(2) Listening to Potential Customers: The MFC Strategy and BD teams continually listen to former customers, potential customers and customers of competitors to learn how their requirements and programs/products align with our Strategic Plan. Through our contacts and those of our Washington, D. C. representative, we gain information about new opportunities. Potential customers include those within the DoD with whom we have never worked who now may have a need for our technologies and Core Competencies for new or improved products. Potential customers also include prospects in new, adjacent and international markets.

As a part of our continuing efforts to develop new business, we scan the press and other media for information on competitor performance and public statements on

competitor performance issues. We also compile Competitive Intelligence reports on major competitors and gain feedback on competitors during our Lessons Learned process that takes place with the customer after every competition – whether we win or lose. In addition, our FSRs collect information on product performance in the field.

Using this information, we develop Action Plans to address any product issues and to develop innovative solutions for the unmet customer needs. If our SLT determines we have available opportunities, resources, ability to perform to requirements and alignment with our Strategic Plan, we apply our solutions in the formal solicitation process.

We take the same approach to business development in our new market areas. We build relationships with new customers via current contacts, industry and trade show events and partners and consultants well known by the new customer to help facilitate an entry. Beginning in 2008, in a cycle of improvement, we assigned BD representatives on-site at new customer locations. We also hire representatives who have established relationships with the new customer. For example, we hired a former U.S. Army vehicles program manager to be on-site with the customer and assist with our entry into the tactical and combat vehicles market.

3.1b Determination of Customer Satisfaction and Engagement

3.1b(1) Satisfaction and Engagement: Our Process for determining Customer Satisfaction and Engagement begins with selecting the type of information and customer actions that best reflect satisfaction and engagement. MFC analyzes and evaluates information gained through our VoC Listening and Learning Process, as well as customer actions, to establish the elements that signify satisfaction and engagement. We have determined that the following elements enable us to measure customer satisfaction and engagement:

- Performance, reliability, cost, schedule
- Responses on the annual CPAR document
- Responses to questions such as “would you do business with MFC again?”
- Responses to the CRI survey
- The amount of follow-on business per year (Fig. 7.2-7)
- The duration of the Product Life Cycle
- The number of Product Improvement Programs (PIPs) or Spirals awarded (Fig. 7.2-9)
- Customer testimonials (Fig. 7.2-10)

We evaluate this Process to continually refine its execution. As an example, in 2007, we learned the customer

was placing growing emphasis on fiscal accountability and reporting. We strengthened our end-to-end financial management process, created an executive steering committee

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and intensified our Cost Account Manager training. The Process is deployed to employees at all sites, as appropriate, so any improvements and learning are also shared across the Enterprise.

If our evaluations and metrics uncover issues that might impact customer satisfaction, we immediately establish an Action Plan and appoint a team to close the gap or rectify the issue. If MFC has any concerns about customer satisfaction and engagement, we address these concerns directly with the customer to determine what we can do to turn the situation around. In these instances, the Action Plan considers all aspects of customer interaction with the intent of increasing or enhancing customer satisfaction and engagement while maintaining the integrity of the program within its established guidelines. The team notifies senior leaders and provides them with status updates. Senior leaders become personally involved as necessary. A senior executive in the program group is also assigned to ensure that Action Plans are properly implemented. As a part of our Knowledge Management Process (Fig. 4.2-2), we share any learning and innovations with other parts of the Enterprise.

3.1b(2) Satisfaction Relative to Competitors: MFC measures indicate we have a high level of customer satisfaction (Figs. 7.2-2, 3) compared to competitors. One source of information is the government's industry-wide Contractor Performance Assessment Reporting system (CPARs), which provides category-related statistics. This database captures ratings, commentaries and decisions about all contractors and provides benchmarked performance ratings to industry average ratings (Fig. 7.2-2).

We also conduct internal studies about our customers' satisfaction relative to that of competitors, which includes other organizations providing similar products. We compare ourselves to competitors on follow-on business (Fig. 7.2-7), win rate on competitive bids (Fig. 7.1-28) and the amount of positive and negative media coverage.

3.1b(3) Dissatisfaction: Strong working relationships with our customers allow us the opportunity to pinpoint and address customer concerns early. Customers air dissatisfactions during daily interactions in our IPTs. The on-site DCMA representative has direct access to our president and ELC to discuss areas of satisfaction and dissatisfaction. We also track, evaluate and provide solutions when CPAR scores indicate dissatisfaction. By continuously improving in product reliability, affordability and schedule, even with a significant increase in orders, we have consistently reduced customer dissatisfaction (Fig. 7.2-6).

Whenever we learn about customer dissatisfaction, we implement a prescribed process to determine the root cause, circulate the findings and respond as rapidly as possible. Our EES includes databases to guide employees toward solutions and provide the means to document findings.

We circulate our Action Plan solutions for resolving customer dissatisfactions Enterprise-wide so we can apply the findings to other programs and processes as applicable. At MFC, we consider losing a competitive bid to be one indicator of customer dissatisfaction. During the Lesson Learned Process following every competitive bid, we uncover the reasons for our selection (or non-selection) or for the selection of a competitor. As indicated by data we gather in these briefings, we establish Action Plans to close gaps or to develop innovative approaches to satisfy future requirements and expectations.

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3.2 Customer Engagement

3.2a Product Offerings and Customer Support

3.2a(1) Product Offerings: At MFC, we pride ourselves on our product offerings.

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We measure our performance against contract requirements and maintain a database that is useful in analyzing, determining and developing a forward-looking approach.

MFC begins to identify customer and market requirements during Step 1 of the Strategic Planning and Execution System (SPES, Fig. 2.1-1). Here, we conduct extensive environmental scans that include information such as DoD budget analyses, market forecasts and military/Pentagon/international requirements, including urgent operational needs statements. We also research and analyze data about adjacent and new markets to understand how our Core Competencies can be applied to customer needs. Our environmental scan and strategic planning encompass our continual interaction with Requirements Development and Acquisition Offices, as well as input from end users, logistics support personnel and current customers. We include programs and products under consideration for future contracts.

In addition to gaining information during the SPES, we also apply our New Business Capture Process (NBCP) to identify customer and market requirements for product offerings and services. During Phase 1 of the NBCP, "Market Development and Opportunity Qualification," we have extensive customer contact, formally assess customer needs, evaluate the expected competition, shape strategy and make a business case for pursuing the opportunity. The process of capturing new business has become more complex due to increased customer regulations, policies and reviews, budgetary pressures, etc. In response, as a cycle of improvement, we developed and standardized a more rigorous process for training new "capture managers" in 2004. In an additional cycle of improvement in 2010, we implemented training for international capture managers, addressing the unique requirements of the international market.

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Identifying innovative product offerings to meet and exceed customer requirements and expectations encompasses both teaming with the customer and internal MFC efforts.

Missiles and Fire Control

Often, customers and MFC identify issues that require innovation. For example, at the HELLFIRE Users Conference in October 2009, a warfighter who had just returned from Afghanistan explained a critical need for a height-of-burst (HOB) sensor. An MFC LOB vice president replied, "We hear you." We immediately established an Internal Research and Development (IRAD) task force, and, teaming with our customer, we generated innovative solutions for this issue, and an HOB sensor is being developed. As a part of our IPTs daily interaction, the customer and MFC discover new and better ways to meet the requirements.

We evaluate opportunities for innovation during our SPES and throughout the year. We perform a gap analysis to identify and address emerging customer needs for future products and services based on new or emerging technologies.

In Step 3 of the SPES, we request IRAD funds and funds we need for technical support to our bids and proposals. In allocating IRAD funds, we systematically quantify the value of IRADs to MFC in terms of Customer Value, Probability of Success and Business Value.

Role-model strengths that enable MFC to achieve innovations are cutting-edge simulation and rapid prototyping capabilities. These enable us to evaluate various solutions for innovation for cost and affordability, schedule, performance and quality before a design receives final approval. **Modeling and simulation capabilities also enable us to achieve success on the first flight test of our DoD products. Each flight test can cost anywhere from \$5 million to \$100 million, so a failure on a first flight is highly negative for the customer.**

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Our approach to expanding relationships with existing customers and to entering new markets is similar. We identify needs through research and other means. Before deciding whether to proceed, we determine how our current Core Competencies can be applied to different markets or programs, evaluate the degree of innovation required to do so and analyze the resulting Customer Value, Probability of Success and Business Value.

3.2a(2) Customer Support: We make it easy for customers to seek information from MFC, using many of the same methods shown in Figure 3.1-1. In addition, customers are on site as participants in our IPTs as are oversight managers from

DCMA and DCAA, so they can ask questions as a part of day-to-day interaction at all levels of the company. In conducting business with us, our customers provide real-time feedback through contractual channels, IPTs, DCMA, DCAA, FSRs, CPARs, GCARs, Industry Days and day-to-day interactions. We welcome input from customers, potential customers, end users and interested parties who are not involved with the program. MFC maintains a database that brings together customer observations about established policies and procedures, product performance and other customer issues that require management attention.

Our key communication methods include training, maintenance procedures, formal and informal meetings, formal correspondence, email, newsletters, field service bulletins, surveys and day-to-day conversations and interactions. These methods may vary for different customers, customer groups or market segments.

Requirement Developers have formal and informal meetings with MFC representatives. With this customer group, we also communicate via email, formal correspondence, surveys and day-to-day conversations and interactions. Communication with Acquisition Offices includes formal communication such as a Request for Information (RFI), a Request for Quotes (RFQ) and a Request for Proposal (RFP), as well as email, telephone, formal and informal meetings and person-to-person conversations.

Customer Support requirements in our industry are a key part of the contract because they drive Life Cycle cost. From the proposal stage forward, our FSRs and others responsible for Customer Support are a part of the Program/Project team. Support requirements are built into the program plans at the beginning and reviewed during every stage of the Life Cycle to ensure we can offer customers an affordable, best-value solution over the product life.

Our formal means of providing Customer Support are through our FSRs and in-the-field Depot repair support. **Our FSRs are embedded with warfighters in combat zones to provide product training, maintain the performance of products, answer questions and document issues.**

At customer request, in a cycle of improvement, we established an Integrated Technical Operations Center (ITOC) in support of the Apache sensor systems we provide the U.S. Army in combat zones. The center provides 24/7 technical help, a single point of contact with access to a breadth and depth of MFC technical expertise and *meet 95% of our customer's requests within one day.*

We work directly with end users and training personnel to identify product usage, reliability requirements and repair scenarios. We carefully define requirements during the analysis and program formulation phases, considering both customer

and MFC support requirements. We include user, customer and MFC personnel to determine and plan the most efficient

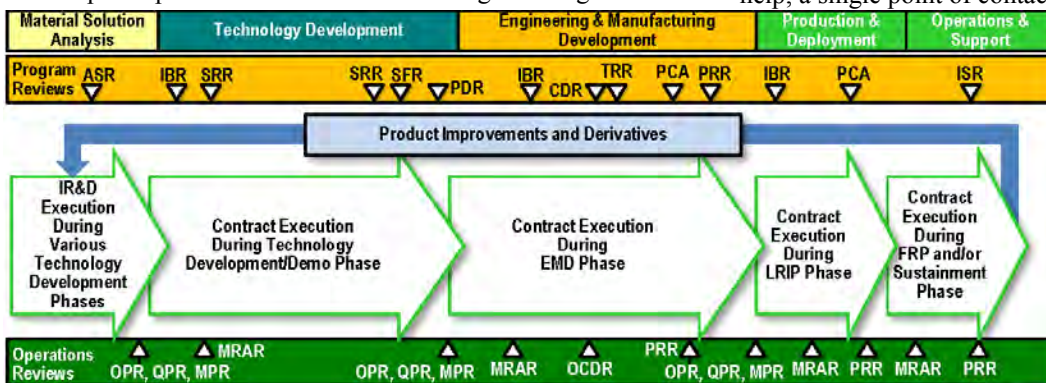


Figure 3.1-2 Our Product Life Cycle Spans Many Years and Relies on Our Work Systems, Work Processes and Frequent Reviews to Ensure Performance Excellence

and cost-effective way to provide Customer Support. We conduct in-depth planning for Customer Support, deciding deliverable methods and submission frequency and appointing action officers, approvers and data recipients.

We strive to understand and negotiate customer support requirements prior to program start-up by developing and fully documenting the finalized requirements data set, including actions, timelines and schedules. We maintain this data set as a part of the ongoing program and systems engineering efforts. The Program Manager and the program team create work structures, plans and cost and staff profiles to ensure the team can achieve the requirements. Program Managers deploy all aspects of the program to team members, including all personnel involved in customer support, via documentation, meetings and on-going discussions.

3.2a(3) Customer Segmentation: During SPES, we analyze and evaluate information about customers, markets and products, along with additional data gathered in the environment scanning process. To determine customer segments, we research and examine each of our current and potential market segments to determine the ultimate end user, the categories of decision makers, those who are in an oversight position and those who can say “no.” Based on this information, we analyze the requirements that each group considers when making selections. With this information, we segment each customer into groups that influence the decision-making process (Fig. P.1-8).

In our Core and International market segments, the customers of competitors are often our customers for other products or programs. Therefore, we know and understand their structure and decision groups, which are most often the same as those in our Core and International market segments.

In our Adjacent market segments, we carefully research our current and potential customers to determine if our existing and future Core Competencies and Values align. During the SPES and throughout the year, we research and visit the companies to determine how to segment the decision makers and influencers. In addition, we investigate our long-term goals and mission to determine if potential customers are ones we wish to pursue.

After making fact-based decisions about which opportunities are most promising to pursue, we develop strategies to meet any new requirements. Such strategies include applying our rapid prototyping capabilities to new endeavors, collaborating with partners and consultants and satisfying our needs for organic growth through learning and development, strategic hires and domain expertise.

3.2a(4) Customer Data Use: We have many avenues to obtain customer data, including on-site customer involvement in monthly and weekly program reviews. The EES includes a dynamic metrics database of information that the ELC, each program, Line of Business and functional department solicits, maintains, use for improvement, innovation and future product development. We examine, evaluate and correlate these data daily, weekly, monthly, quarterly and annually to track performance, identify areas for improvement and define MFC’s strengths and weaknesses. The EES is the foundation for leading and managing MFC to be the “best of the best.”

Based on these data, we create and implement Action Plans for improvement in all areas and processes of the Enterprise, including marketing, a customer-focused culture and opportunities for innovation.

3.2b Building Customer Relationships

3.2b(1) Relationship Management: MFC carefully manages and nurtures customer relationships to:

- **Acquire customers and build market share** – To achieve these goals, MFC is guided by our core Values: **Do What’s Right, Respect Others, Perform With Excellence.** Our dedication to ethical and legal behaviors, our respect for members of our workforce and the customer community and our strong focus on Performance Excellence set us apart from competitors. In our Core market segment, our performance and reliability are unparalleled and customers’ decision makers know of our consistent successes. Other strengths that help us acquire new customers and build market share are our Core Competencies; our innovations; the EES approach to business management, which integrates all processes and metrics into an advanced, engineered system; unparalleled simulation and rapid prototyping capabilities; state-of-the-art equipment and techniques; industry best practices; and certified processes and procedures that ensure quality.
- **Retain customers, meet their requirements and exceed their expectations** – We retain customers in many of the same ways we acquire them: expecting and exhibiting mutual ethical and legal behavior, respecting them and ourselves, focusing on Performance Excellence at every stage of the Life Cycle – often exceeding contractually required performance, including customers in our work and performance improvement efforts via IPTs, DCMA involvement with the ELC and program milestone reviews, and high levels of accountability and transparency.
- **Increase their engagement** – Over the term of our contracts we build intimate, trusting relationships with our customers. In addition to the items mentioned above, we also commit dollars and volunteer hours to causes important to our customers. For instance, we support many national and local organizations that support current warfighters and their families, as well as retired military personnel. We have a program in place to send our own “Care” packages to groups of warfighters, which include family members of our employees. We also sponsor and host air shows, exhibitions, conventions, conferences and focused meetings to assess special customer needs.

3.2b(2) Complaint Management: Addressing and satisfying customer complaints or concerns in a timely and consistent manner aligns with our Ethos, Vision, Mission and Values (VMV) and our Fundamental Business Principle (Fig. P.1-3). Our Complaint Management Process includes:

1. Complaint or concern received from customer
2. Complaint reviewed by leadership, functional areas, program management and corresponding customer points of contact within 24 hours of receipt
3. Action Plan developed to identify the root cause, determine its severity and estimate potential impact of the problem.

4. Corrective action plan developed and implemented using the appropriate analytical processes and tools, reporting status regularly to the customer and MFC senior leadership
5. Corrective action tested and piloted and further improvements made as required by the Corrective Action Board (CAB)
6. Final solution approved by customer and MFC senior leaders, then implemented, tracked and measured to ensure performance control is implemented internally to prevent recurrence of the problem
7. Solution shared with the Enterprise and Lessons Learned entered into the EES and used as input into the SPES.

The Complaint Management Process is deployed at every site within the Enterprise. We have systematic processes and procedures to ensure complaints are resolved promptly, effectively and to our customers' satisfaction. Throughout the discovery, analysis and corrective action phases, we update the EES, which, with any update, automatically notifies MFC leaders. Until the issue is resolved, senior leaders are updated on progress and solutions during monthly ELC meetings.

We recover our customers' confidence and enhance their satisfaction and engagement by the way we manage complaints. We involve our customers in solving the problem or concern. Any complaint has visibility at the highest management level, and a senior executive assumes accountability for ensuring an effective solution, along with assigned responsibility and accountability at other levels. We also operate with a high level of transparency, sharing our action plans and status with the customer on a regular basis.

Category 4: Measurement, Analysis and Knowledge Management

When Lockheed Martin Missiles and Fire Control began developing the Enterprise Excellence System (EES, P.1, 1.1) in 1999, one of the objectives was to provide a powerful, dynamic electronic system to integrate, gather, analyze, manage and improve data. This was vital to managing by fact and improving organizational performance. We engineered the EES to achieve an Enterprise-wide single-process focus. It would improve and fully integrate our Work Systems, processes and sub-processes; fully exploit internal and external best practices; and be tailored to our business needs.

We deployed the EES across all sites and programs at MFC, and we continuously evaluated it to determine if improvements are required. During the first five years, as we developed the EES, we conducted over 1,000 improvement events, resulting in over 5,000 process improvements. These events were focused on reducing the cost of the Capture the Business, Design the Product, Acquire the Product and Fabricate the Product business processes that contributed to 95% of the cost of sales.

Since 2005, we have conducted over 3,800 additional improvement events, focusing on less disruptive and incremental change. Any improvements we make to the EES we share with the entire Enterprise at all sites via email, training, meetings and through the EES itself. The EES is dynamic so that improvements entered into one area of the EES automatically update data and cascade and integrate into other areas.

4.1 Measurement, Analysis and Improvement of Organizational Performance

4.1a Performance Measurement

4.1a(1) Performance Measures: MFC selects data for tracking daily operations and overall organizational performance during Step 2 of the Strategic Planning and Execution System (SPES, Fig. 2.1-1). During this Step, based on best practices, past performance and new requirements, we establish the goals, measures (metrics) and targets required to achieve our Strategic Objectives.

We select metrics that are aligned with our Strategic Objectives, Action Plans and key Work Systems (Fig. 6.1-3). After selecting metrics, we index and weight them according to the Objectives and Action Plans in the Strategic Plan and the importance to the health of our business. The weights can change as work moves through the Product Life Cycle (Fig. 3.1-2). Strategic Objectives, Action Plans and metrics flow from the Strategic Plan to all sites, departments, teams and individuals so there is clear alignment throughout the Enterprise (2.2a(1)).

We present our key organizational performance measures in Figs. 2.2-1 and 6.1-3. MFC tracks and reviews these daily, weekly, monthly, quarterly and annually on a departmental basis and during the meetings in Figure 1.2-4. Personnel throughout the Enterprise have quick access to these metrics to support decision making and inspire innovation. For example, using this information, the Strategic Enterprise Leadership Council (SEL) reviews data quarterly and updates the Strategic Plan as required. The Enterprise Leadership Council (ELC) reviews data "by exception" on a monthly basis to evaluate performance and establish action plans to correct underperforming areas. Managers in our Lines of Business (LOBs) and Program Offices use these data to ensure projects progress according to plan and to guide product innovation. At the manufacturing level, the Performance Management Teams (PMTs) review data weekly and make improvements as indicated (Figs. 7.1-8, 9). MFC teams throughout the Enterprise use these data and information to identify opportunities for improvement.

Figure 4.1-1 indicates the extensive metric connectivity that enables MFC to assure a high level of performance, with each line representing an organic flow of information within the Enterprise.

MFC systematically reviews and evaluates our metrics to improve their utility in managing and leading a highly complex organization. We have recently completed three comprehensive improvement cycles in addition to our annual reviews. In 2005, we changed the metrics in the Design the Product Process to add Risk Management and Risk Aging measures. We also integrated development and transition metrics to the Program Scorecard and additional schedule metrics to review Critical Path and Task Starts/Finishes. In 2007, we added the Quality Section to our metrics to measure supplier rejects, defects per unit by program and Quality cost performance. In 2008, we changed Tier I metrics to reflect performance at the LOB level, we changed Tier II metrics to reflect performance by program, and we added 11 new metrics. In 2012, we included new measures in the Design the Product, Fabricate the Product and Quality metrics.

4.1a(2) Comparative Data: We discuss our methods of selecting comparative data and information in P.2a(3), 2.1a(1), 3.1a(2) and 3.1b(2). We gather and analyze comparative data during Step 1 of the SPES as a part of our study of Market Dynamics and Business Posture. We do this to ensure we effectively use key comparative data to support operational and strategic decisions and innovation. Our knowledge and use of comparative data, aligned with our business strategy, influence our Strategic Plan Objectives and Action Plans. We also use comparative data from Lessons Learned debriefings following competitive wins or losses to consider innovations in our products and services. We load Strategies derived from analysis of comparative data into our EES. In addition to the sources of comparative and competitive information listed in P.2a(3), we continually research other avenues of gathering this type of information to ensure we have comprehensive access to these data.

4.1a(3) Customer Data: Our process for selecting and using Voice of the Customer (VoC) data, including complaints, is discussed in 3.1a(1). Fig. 4.1-2 represents our Business Rhythm Process which enables us to gather customer and other data and apply it to the operational and strategic decision making process. It illustrates how we use customer input and data throughout our systems for planning, executing, analyzing, learning and integration of learning. Our Business Rhythm Process includes simulation activities for dynamic strategic planning, talent development and product performance. It enables MFC to use customer data effectively, and we also use this Process in nearly every aspect of our business.

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Figure 4.1-2 Internal and External Inputs Enhance MFC Decision Making through Our Business Rhythm Process.

4.1a(4) Measurement Agility: We ensure our response to rapid or unexpected organizational or external changes through the exceptional and dynamic capabilities of the MFC EES. It provides a high level of performance data availability and the frequency and Enterprise-wide nature of reviews enable us to determine changes almost instantly and take proactive steps. The EES provides the framework to conduct

“what if” scenarios to determine the optimal course of action required. We conduct 5- and 10-year analyses for capacity and resource planning, apply modeling and simulation capabilities available through the Enterprise Performance Index (EPI) and conduct risk management and assessment to quickly respond to changing conditions.

4.1b Performance Analysis and Review

Figure 4.1-3 illustrates our Performance Assurance Process. MFC operates in a data-rich environment. Data are organic, integrated across the Enterprise and highly predictive. They are maintained electronically through the Enterprise Metric Utility (EMU), a part of the EES, and the Enterprise Metric Suite (EMS) of data tools. We collect data, align and integrate them through the EMU and quickly make them

available. We classify data into four Tiers: Tier I metrics, comprised of 23 Enterprise-level metrics, are those reviewed at the monthly meeting of the ELC (1.2-4). Tier II LOB-level metrics, comprised of 50 lower-tier metrics are reviewed monthly by LOB leaders and staff. Tier III includes

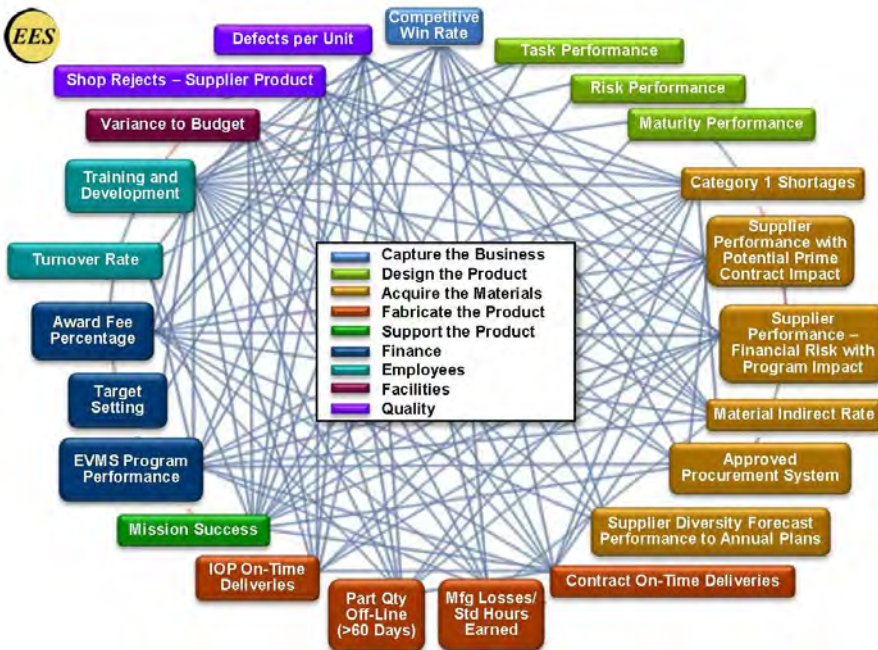


Figure 4.1-1 Extensive Metric Connectivity and Integration Through the Enterprise Excellence System Assures Holistic Thinking and Exceptional Performance

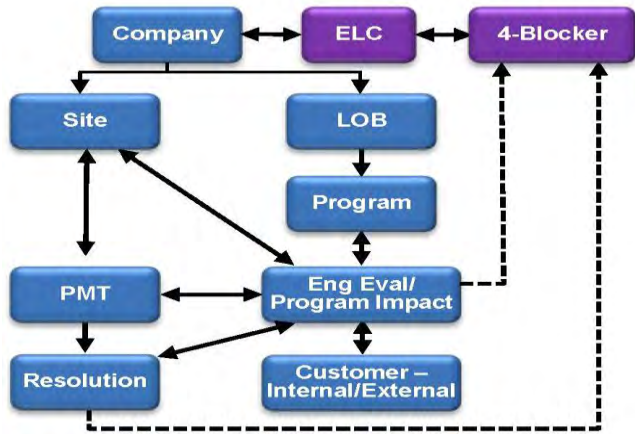


Figure 4.1-3 MFC Performance Assurance Process

Program-level metrics, and Tier IV includes Team-level metrics. Our cross-functional PMTs (5.1a(3)) review Tier IV metrics daily and weekly and use them on the PMT's work assignments. They review metrics on Quality, Cost, Schedule, Performance, Safety and Environmental issues. Their emphasis is on problem solving and working together as a cohesive and informed team.

Flagging significant variation in the metrics by comparing actual results to defined threshold levels identifies problem causes, risks and opportunities and identifies new areas for sharing best practices.

By applying measurement results and the organizational performance continuum, in 2010, MFC developed the Process Index (PI). The PI provides for integration, linking, scaling, sensitivity correction of Process metrics and trend analysis through statistical process control techniques to measure and forecast strategic metrics across the Enterprise. In 2011, we enhanced PI by integrating it with a Talent Readiness Index and Product Index to create a **highly innovative Enterprise Performance Index (EPI) that includes dynamic modeling and simulation capabilities** (P.2c, 6.1b(1)). We assess the current health of the Enterprise with indexed and weighted data driven by the long-range Strategic Plan. The performance indices that measure the business process health indicators cross program, site and functional boundaries.

MFC uses metrics at every Tier to support organizational decision making and innovation. At monthly meetings, the ELC reviews metrics "by exception" in a scorecard format, using red, yellow and green to indicate performance levels. We roll up lower-level metrics as appropriate, as shown in Figure 4.1-4. We show underperforming elements as "red" at each tier based on established parameters.

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We strive to resolve the problem at Tier III or Tier II. If not, it flows up to Tier I for ELC attention. The ELC and other managers establish high goals and expectations, and it is not uncommon for MFC to rate areas red when they are already above results that are considered exceptionally good in the industry. The MFC commitment to high performance is continual, and we believe we never stop improving.

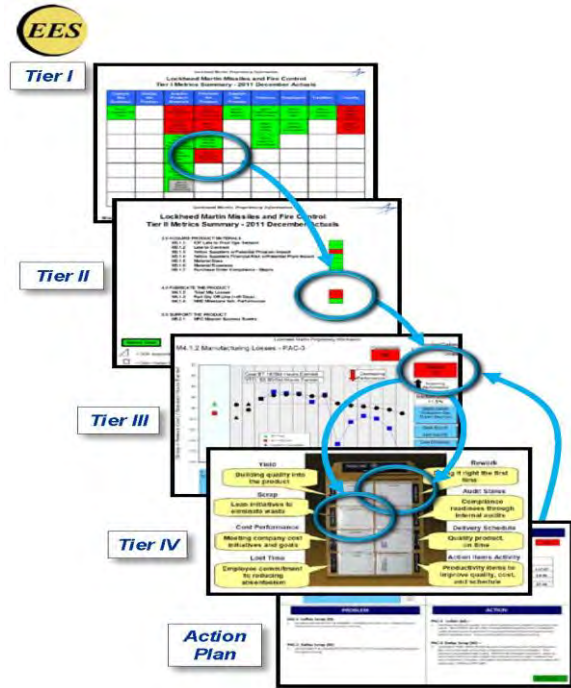


Figure 4.1-4 The MFC Metric System is Integrated Among the Tiers to Ensure High Performance

We perform the ELC analysis through a multi-functional review with a modified Deming Define, Measure, Analyze, Improve, Control (DMAIC) technique. We require that any item that appears in red undergo root cause analysis and an Action Plan for improvement. We use a 4-Blocker format to address the issue, Figure 4.1-5. The 4-Blocker includes a specific and enforced deadline for returning the item to green.

Depending upon the root cause from the Assessment phase displayed on the 4-Blocker, the team applies the best approach for improving performance. We often use the LM21 Path to Excellence Process (Fig. 6.2-3), a combination of Lean manufacturing and Six Sigma methodologies.

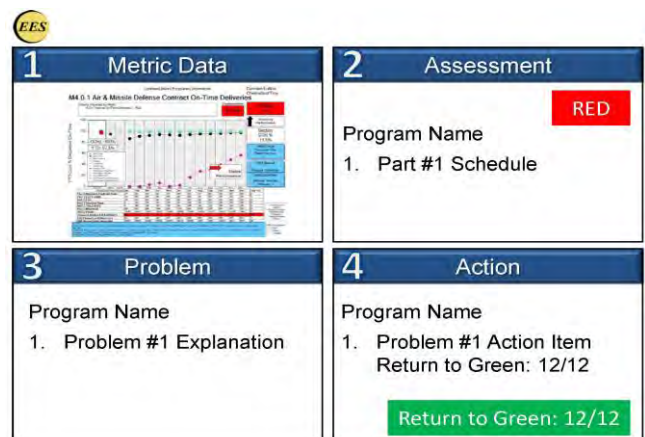


Figure 4.1-5 The 4-Blocker Format is Used Throughout MFC to Identify Issues and Develop Innovative Solutions

We align all MFC metrics carefully with our Strategic Objectives (Fig. 2.2-1) so we can assess organizational success, competitive performance, financial health and progress against our Strategic Plan. These reviews and the

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powerful EPI, with its modeling and simulation capabilities that interact dynamically in real time, enable MFC to respond rapidly to evolving needs and challenges, as discussed in 4.1a(4). In 2007, we improved the segmentation of the Procurement, Production Operations and Quality metrics by LOB, Program and Sites to provide more clarity and alignment on schedules. This resulted in 4% improvement in on-time delivery with a 147% increase in work output.

4.1c Performance Improvement

4.1c(1) Best-Practice Sharing: As MFC reviews performance on a scheduled basis, we develop Performance Excellence Plans (PEPs), and we create opportunities to learn lessons and best practices. Our review and improvement cycle results in PEPs. As appropriate, we work internally and with our customers, suppliers, partners and collaborators to develop the best solutions by incorporating best practices. We identify best practices through Structured Improvement Activities (SIAs) conducted by LSS teams, meetings with other Lockheed Martin business units, industry literature and technical and industry conferences.

As we incorporate Lessons Learned and best practices into our operations, we distribute and share them with all MFC sites and other Lockheed Martin Business Units through SIA events, LSS groups, organizational announcements, special initiatives, newsletters and the methods outlined in Figures 1.1-3 and 1.2-4. We update all Work Processes via the EES, Command Media (P.2c) and Review Findings Database (RFDB), an Enterprise-wide system that tracks audit activity, corrective actions and root cause analysis. We use best practices and Lessons Learned to improve performance, productivity, product design, process efficiency, supply chain management and initiatives like Go Green and Target Zero.

4.1c(2) Future Performance: We maintain all performance review data in the EES. We consider these data, along with competitive, comparative and other data, during the SPES (Fig. 2.1-1) to project future performance. The Senior Leadership Team (SLT), ELC, SELC and departments and teams also review performance, competitive and comparative data on a monthly and quarterly basis. If the SLT, ELC or SELC determines that data indicate a need to change future performance projections, we implement the changes when required and share with the Enterprise through the same process used to distribute and execute the Strategic Plan, Action Plans and metrics as discussed in 2.2a(2).

4.1c(3) Continuous Improvement and Innovation: MFC commits to performance and putting our customers first. We ensure that our process and product innovations reliably perform as designed in the most demanding circumstances and environments. Our EES establishes a cascading schedule of reviews throughout the Enterprise and requires universal accountability with the objectives of prioritizing continuous improvement and innovation.

By setting high targets and requiring Action Plans in the tiered 4-Blocker format, the ELC sees a complete picture of Enterprise performance during every monthly meeting. Any red item serves as an early indicator and serves to prevent future problems down the line. This information enables the

ELC to set priorities and determine opportunities for innovation. Building upon the EES, the EPI utilizes a series of algorithms to promote innovative solutions and establish priorities, as well as to model capabilities and outcomes. With these techniques, leaders determine if changes or improvements in Process, Product or Talent add value to the Enterprise or have diminishing returns (Figure 7.1-10).

We establish priorities and share innovations throughout the Enterprise with the same methods outlined in 2.2a(2) and 4.1c(1). We share with suppliers through our Supply Chain Management System (Fig. 6.2-2) and with partners via face-to-face meetings, phone, written directives and email.

4.2 Management of Information, Knowledge and Information Technology

4.2a Data, Information and Knowledge Management

4.2a(1) Properties: Figure 4.2-1 outlines how MFC manages our data, information and knowledge systems to ensure accuracy, integrity, reliability, timeliness, security and confidentiality.

Our business requires we process and manage U.S and foreign classified data. To accomplish this, Lockheed Martin Security developed a centralized database, used by all Lockheed Martin Business Areas, to track U.S. Government classified data. The database is encrypted to U.S. Government standards, and we use the same database to track and process employees' security clearances. We compare our database with a U.S. government database daily to ensure accuracy and integrity. Employees must receive specialized training and be assigned a user name and password before they can gain access to this database. We also have systems in place to protect proprietary information, export-controlled information and partner and employee confidentiality.

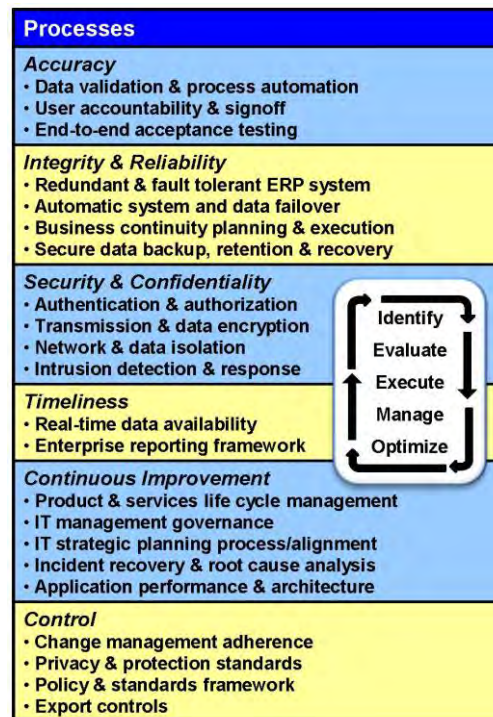


Figure 4.2-1 MFC Continuously Improves Systems That Process and Manage Data, Information and Knowledge

4.2a(2) Data and Information Availability: Information in our EES is always available to appropriate employees who have password access. The EES provides the right data at the right level at the right time for action-oriented reviews. Teams review data with optimal frequency. For example, even though data are always available, our Performance Management Teams (PMTs) perform most efficiently and effectively with weekly data reviews. We allow our customers, suppliers, partners and collaborators access to data and information as appropriate. Our U. S. Government Defense Contract Management Agency (DCMA) representative has access to certain data in the EES and receives electronic access and a printed book that contains metrics for all functions at all sites. Other customer groups have access to the EES as prescribed in their contracts, and our suppliers can enter their data directly into the EES. They can also see data related to their activities. Partners and collaborators can access data and information on an authorized, need-to-know basis.

4.2a(3) Knowledge Management: Knowledge is one of our key assets, and we present our Knowledge Management Process in Figure 4.2-2. We manage and transfer knowledge using these methods:

- **Collecting and transferring workforce knowledge** – We use a variety of methods to collect and transfer workforce knowledge, including Microsoft SharePoint collaboration, Microsoft Live-Meetings, face-to-face team meetings, mentoring and recorded interviews with experts. Employees also can enter information and knowledge directly into the EES. Employees have online access to our Command Media system of policies and business practices, which serves as a vital conduit to knowledge about many MFC practices and processes.
- **Transferring knowledge to and from customers, suppliers, partners and collaborators** – We transfer knowledge to and from customers, suppliers, partners and collaborators during routine and frequent conversations and meetings, transfers required by contract, shared access to the EES, collaboration via Microsoft SharePoint and at supplier conferences and training.
- **Rapid identification, sharing and implementation of best practices** – MFC employees, customers, suppliers, partners and collaborators work together with an unwavering dedication to teamwork and innovation. They identify best practices in work groups, through LSS groups and projects and at conferences, tradeshows, technical symposia and other venues. After testing to ensure a best practice improves a process or product, we implement and share it rapidly with employees, customers, suppliers and partners who can benefit as discussed in 4.1c(1).
- **Assembly and transfer of relevant knowledge for use in innovation and strategic planning processes** – We store and share knowledge via the EES, process documentation and Command Media. By making knowledge readily available, employees can find the innovations of others and avoid investments in duplicative innovation or improvement. We store and maintain knowledge for analysis during the SPES as described in 2.1a and Figure

2.1-1. Figure 1.2-4 indicates when and how we gather and share information, data and knowledge.

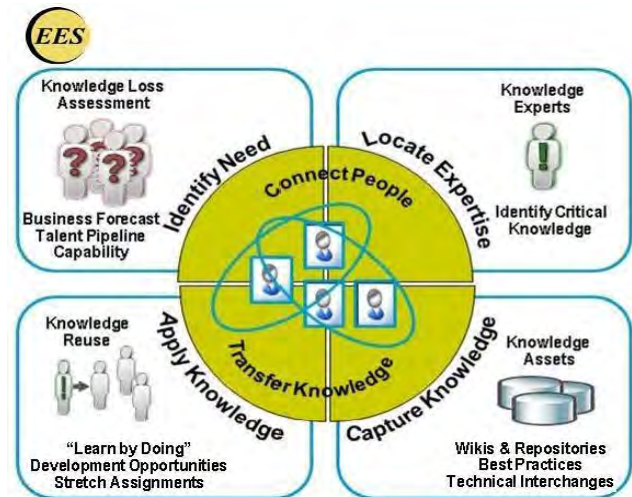


Figure 4.2-2 MFC Knowledge Management Process

4.2b Management of Information Resources and Technology

4.2b(1) Hardware and Software Properties: MFC's Information Technology department has standards that ensure hardware and software are reliable, secure and user friendly. Figure 4.2-1 illustrates some of these processes. MFC works with reliable information technology vendors, and we pilot and beta test any new hardware and software prior to deployment. We continuously monitor both hardware and software for errors, improvements and accuracy. We adhere to strict standards which include processes that ensure hardware and software are reliable, SEI-CMMI, IT Infrastructure Library, SAP API Protocols, VPN Encryption, DATA Encryption, WAN Protocol and LAN Protocol, as well as Network, Wireless, Data Communications and VoIP standards.

4.2b(2) Emergency Availability: MFC has an effective, well-documented and thoroughly tested methodology to prepare for, deal with, recover from and mitigate emergencies that could potentially impact our data and information systems. Our methodologies can accommodate a power outage lasting a few hours or disruptions that might interrupt normal business operations for months. Our Business Continuity Planning (BCP), a part of our Business Resiliency System, is designed to minimize disruption of service to internal and external customers, minimize financial loss, ensure a timely resumption of operations and keep the company in business.

Our BCP has three interrelated steps: **1) Pre-Crisis Planning;** **2) During the Crisis Plans,** including Disaster Recovery Plan, Crisis Management Manual and Communications Crisis Management Plan; and **3) After the Crisis is Stabilized,** including a Business Process Contingency Plan that focuses on re-establishing Business Processes.

All sites have BCP, and we conduct periodic exercises to test the plans. In addition, we store our centralized databases on two different servers, in two different cities, with a Business Continuity plan in place. Using systematic reviews

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and evaluations of our BCP and periodic exercises, we have improved our IT systems and contingency plans. During an exercise in 2010, we identified a potential vulnerability in our consolidated data centers, which led to the installation of a back-up server in Troy, AL, and we now have a “Class A” user list in case of cyber attacks based upon potential vulnerabilities uncovered in 2008.

Category 5: Workforce Focus

One of our Core Competencies at Lockheed Martin Missiles and Fire Control (MFC) is “Developing Talent” (Fig.P.1-4). We are dedicated to developing talent as a critical differentiator for competitive advantage and long-term business success. This is evident in our robust processes for acquiring talent, developing and engaging employees and retaining employees and knowledge.

Our integrated approach to managing the Human Capital of the Enterprise to align with the Strategic Plan and Action Plans includes a strong focus on ethics, engagement, development and flexibility. This has made MFC a talent and process leader within Lockheed Martin Corporation, as well as in our industry.

5.1 Workforce Environment

5.1a Workforce Capability and Capacity

5.1a(1) Capability and Capacity: A key to success at MFC is ensuring that the right people with the right knowledge and skills are in the right job at the right time. Our Integrated Talent Management Process (ITMP) enables a cross-functional team to assess the talent requirements for the Enterprise to evaluate capability and capacity during the Strategic Planning and Execution System (SPES) and throughout the year. Executives in each Line of Business (LOB) and functional department conduct talent assessments to analyze and project the strategic capabilities, critical skills, staffing, skill atrophy and learning and knowledge transfer needs for existing and future business pursuits. The areas analyzed include: Long Range Plan (LRP) Talent Implications, Technical Operations and Advanced Research (TOAR) Workforce Plan, Production Operations Workforce Plan, Finance Headcount Plan, Attrition Projections, Talent Learning Needs Assessment, Workforce Demographics/Diversity, Internal Research and Development (IRAD) Plans/Needs and Succession Plan/Talent Review Assessment.

The assessment includes a gap analysis for capabilities and capacity. Based on evaluation of this data, we map out a strategy for developing our talent internally and/or recruiting talent externally to meet both short- and long-term needs.

We also examine and prioritize our functional needs, engineering skill trends, critical capabilities requirements and

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critical technology requirements by LOB and function. Our assessment of technologies includes analysis of how critical the capability is to MFC and our relative competence in the skill compared to competitors and the best in our industry.

We analyze other talent requirements both on a systematic and an ad hoc basis using our fully deployed Needs Assessment Process. In 2011, after review and evaluation, we improved this Process by adding a Performance Consulting

methodology to more clearly diagnose the need and better obtain desired business results.

5.1a(2) New Workforce Members: The MFC Human Capital Framework includes three distinct categories: Acquire Talent, Develop and Engage Employees and Retain Employees and Knowledge.

The Acquire Talent Process primarily leverages the corporate resources of Lockheed Martin’s centralized recruiting centers, entry-level sourcing programs and talent pipelines. Our entry-level hiring strategy includes:

- K-12 outreach initiatives for Science, Technology, Engineering and Mathematics (STEM) (1.2c(1)) that encourage students to study these disciplines
- A strategic approach to staffing our College Intern/Co-op program supported by on-campus career events at selected nationally recognized and targeted universities
- Partnership with the INROADS organization to gain access to high-potential minority candidates.

For recruiting and hiring experienced professionals, we use a number of resources, including our highly integrated applicant tracking system – LM Careers, Military Recruiting and Executive and Critical Skills Recruiting.

Figure 5.1-1 shows our Human Capital Framework System that integrates the processes we use to recruit, hire, place, develop and retain new members of our workforce.

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MFC takes diversity beyond a narrow concept and focuses on diversity as a means to gain competitive advantage. Our Diversity Council drives our efforts to understand, include and embrace the multiple perspectives and contributions of our workforce, our community, our customers and our suppliers. Our Diversity Council focuses on Leadership Commitment, Talent Acquisition and Retention, Inclusion and Engagement and Strategy and Metrics.



Figure 5.1-1 The Human Capital Framework System Integrates Our Human Resources Processes, Achieving a Holistic Approach to Talent Management

5.1a(3) Work Accomplishment: MFC organizes and manages our workforce as shown in Fig 5.1-2. We are organized in a matrix structure to permit efficient and fluid movement of talent to accomplish work and meet the changing needs of our business. Most people in our workforce are a part of a team to ensure we capture the diverse ideas and capabilities necessary to excel on huge, complex and integrated programs and projects.

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Throughout the Product Life Cycle (Fig. 3.1-2), cross-functional teams ensure the success of our Action Plans, Work Systems and Work Processes (Fig. 6.1-3). For each customer contract, MFC selects a Program Management team to plan, design, develop, produce, and support the product. We further structure these through Integrated Product Teams (IPTs). Customers and suppliers are an integral part of IPTs, constantly reinforcing a customer-centric focus.

In Production Operations, MFC established Performance Management Teams (PMTs), which are recognized as an industry best practice that engages production employees with dramatic results. PMTs are cross-functional teams that engage people in innovative thinking and empower them to improve quality and reliability while reducing cost and cycle time of our products and services. In a cycle of improvement in 2001, MFC standardized and expanded PMTs throughout all the heritage locations. In a further improvement cycle in 2006, MFC deployed PMTs at all production sites. The 131 teams in our PMT organization are major contributors to continuous improvement (Figs. 7.1-8, 9).

5.1a(4) Workforce Change Management: MFC uses the ITMP to analyze and evaluate both short- and long-term talent needs of the Enterprise. To prepare our workforce for changing capability and capacity needs, we identify and develop key high-potential employees and leaders, provide targeted development for critical leadership and technical skills and provide selected development opportunities for leaders and employees to gain critical skills. By assessing Enterprise and individual development needs and anticipating the potential loss of critical knowledge, we either staff the identified gaps or expand and transfer knowledge and skill sets to other members of the workforce.

We also use this process to manage our workforce and Enterprise needs to ensure continuity, limit workforce reductions and minimize their impact if they become necessary. In addition, we use contract labor to meet short-term workforce requirements. If an unexpected downturn occurs, we can gradually reduce our use of temporary employees without impact to our regular employee base. MFC also works closely with the Lockheed Martin centralized recruiting centers to connect at-risk employees with opportunities in other business units of the corporation.

The ITMP is deployed to all MFC locations. It is reviewed formally semi-annually and actively throughout the year. If improvements are required, the appointed team utilizes the LM21 Path to Excellence Process (Fig. 6.2-3) to improve and innovate processes. We have gone through three key cycles of improvement in relation to our ITMP. In 2009, we organized and improved our processes to integrate Human Resource services relating to all aspects of the talent at MFC. With this cycle of refinement, MFC established an integrated workforce planning team chartered with ensuring we have the foresight in manpower planning to prepare for both growth and downturns to minimize the impact on the Enterprise and the workforce.

We take four approaches to preparing for and managing periods of workforce growth: **1)** Our rigorous diligence in manpower forecasting and planning during SPES and LRP allows us sufficient time to insert the resources required to

Achievement	Methods of Organization and Management
Accomplish the Work of the Organization (Fig. 7.1-26)	<ul style="list-style-type: none"> Matrix structure Teams <ul style="list-style-type: none"> Program Management Teams Integrated Product Teams (IPTs) Performance Management Teams (PMTs)
Capitalize on Core Competencies (Fig. 7.1-25)	<ul style="list-style-type: none"> Teams are cross-functional and dedicated to continuous improvement and innovation (Figs. 7.1-8, 9) Program Management teams and IPTs have customers on the team to achieve a customer focus and to cultivate customer relationships All teams and/or individuals have objectives, goals and metrics aligned with Strategic Plan, Action Plans, organizational goals and metrics to meet customer requirements for product excellence, affordability, schedule and reliability (Fig. 7.1-26) Talent is managed and developed to ensure resources are available in terms of capabilities and capacity to develop superior, innovative systems (Figs. 7.3-22, 23, 24)
Reinforce Customer and Business Focus and Exceed Performance Expectations (Figs. 7.1-6, 8)	<ul style="list-style-type: none"> Vision 2020 aligns workforce focus on the Enterprise (business) and customer Teams and individuals have objectives, goals and metrics that align with Enterprise Strategic Plan, Action Plans, goals and measures are tracked and reviewed on a systematic basis (Fig. 7.1-1, 2) Teams meet daily, weekly and monthly to review metrics and make improvements to ensure they meet or exceed customer and business requirements
Address Strategic Challenges and Action Plans (Fig. 7.1-26)	<ul style="list-style-type: none"> Workforce is trained in performance improvement skills (CMMI, ISO, LSS, etc.) to increase affordability, reduce costs and improve cycle time (Figs. 7.1-9, 13, 24 7.3-26) Continual assessment of talent around critical skills/competencies, capacity needs and new market requirements to ensure recruiting, hiring and developing talent is accomplished in a timely manner (Fig. 7.3-4) Reduce our environment footprint through processes, training and innovation (Figs. 7.4-11, 12)

Figure 5.1-2 MFC Organizes and Manages our Workforce to Accomplish Our Work, Capture Diverse Ideas and Excel on Large, Complex Programs

accommodate a surge in business. **2)** We leverage a larger share of Corporate recruiting resources and expand our recruitment marketing activities. We also increase our use of search agencies for critical and/or niche capabilities and skills. **3)** We hire entry-level personnel at incremental levels in advance of need so they are acclimated in time to meet increased demand. **4)** We increase our use of contract labor to satisfy immediate needs.

5.1b Workforce Climate

5.1b(1) Workplace Environment: The Environmental, Safety and Health (ESH) Department manages these services at MFC. ESH has developed and deployed many processes to protect the workforce, suppliers, the community, our customers and end users from harm. Our ESH performance measures and improvement goals for health, safety and security are shown in Fig. 5.1-3.

Some MFC locations also have site-specific efforts that support and enhance MFC safety goals. For example, our Ocala, FL, facility has developed the Operations Safety Teamwork and Responsibility (STAR) program to encourage alertness and attention to detail; reporting of safety hazards, issues and ideas; reporting near misses and close calls; reporting ergonomic concerns; and instilling responsibility for personal safety and the safety of others.

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Factors	Measures	Goals	Differences	Results	Accessibility
Health	Wellness Center use	100%	Availability	Available	ADA Access
	Facility Investments	Achieve needs	Sites	7.3-6	Ergonomic Controls
	Survey questions	N/A	Sites	7.3-7	
Safety	DACR	Yearly reduction	None	7.3-8	Equip safety guards Explosive Controls
	RIR	Yearly reduction	None	7.3-9	
	Close Calls	Yearly reduction	None	7.3-10	
	Emp ID of Hazards	100% reported	None	7.3-11	
	PMT Safety Points	100% reported 100% achieved	None	7.3-11	
Security	Security Breaches	100% investigated	None	7.1-22	Facility barriers Badge Controls On-site guards
	On-site Security	100%	Needs based	7.4-6	
	Reg Compliance	100%	None	7.4-5	

Figure 5.1-3 We Establish and Closely Track Performance Measures and Goals to Ensure Health, Safety and Security.

ESH has a Contractor Safety Program supplemented by a Contractor Safety Manual. We review contractual and site-level requirements for safety and environmentally responsible practices at all MFC facilities annually.

MFC has a policy to provide reasonable accommodations in the workplace and for applicants. We provide assistive technology devices including screen readers, phone amplifiers, TTY telephone devices, recording devices and voice recognition software as needed, based on an interactive dialogue between employees, leadership, Medical and Equal Opportunity Programs. In February 2012, we began offering video relay capabilities to employees. Employees can request an Ergonomic Review of their work station. If the review indicates that alternative equipment is required, MFC supplies the appropriate ergonomic material.

5.1b(2) Workforce Policies and Benefits: MFC advocates and practices a Total Value philosophy and provides our employees policies, services and benefits that range from competitive compensation and health benefits to career development, work/life balance and an environment that welcomes everyone with talent and determination to be the best. We offer a full complement of programs. Some of these benefits include health and welfare benefits, such as medical, dental and prescription coverage; company-provided and optional life insurance; income protection through full pay continuation for up to six months in case of personal illness; retirement income through defined benefit and defined contribution plans; support for work/life balance with alternate and flexible schedules; paid vacation; and many recognition and rewards programs.

MFC is dedicated to the career growth of employees and invests heavily in employee development and education assistance. To improve overall health and wellness, we offer on-site Wellness Centers to provide acute medical care that is convenient and free. Our compressed work schedules (9/80 and 4/10) are available at most facilities and well used by our workforce. We offer telecommuting options to provide workplace flexibility to employees.

Benefits are common for all segments of the workforce dependent on union contracts, as applicable. To tailor benefits to the needs of a diverse workforce, we provide a comprehensive range of programs so employees can find those that suit individual needs, such as adoption assistance. Not all services such as on-site mobile mammography are offered at all locations based on service availability. Benefits are tailored to our U.K. workforce based upon the benefit rules and regulations in the U.K.

5.2 Workforce Engagement

5.2a Workforce Performance

5.2a(1) Elements of Engagement: MFC determines key elements that affect workforce engagement (P.1a(3)) and satisfaction by correlating data from surveys, focus groups, manager-employee discussions, Diversity Council teams and the Voice of the Employee Process. We baseline results of our *LM Voice* employee engagement and satisfaction survey with an industry survey benchmarking group, the Mayflower Group, to assess our results relative to industry norms.

We segment our survey results at the Enterprise, site, LOB, functional and individual leader levels. MFC does a detailed trend analysis of survey results on the basis of age, ethnicity, gender, tenure, level in the organization and individual employee write-in comments. We regularly analyze workforce demographics, attrition, workforce planning and talent management efforts. In this way, we can determine if the elements that foster engagement and satisfaction differ for various workforce groups and segments. Because employee engagement and satisfaction vary across different demographic groups, we advocate and support leader and Corporate actions that address the varied needs of our diverse constituency.

5.2a(2) Organizational Culture: As described in P.1a(2), the MFC culture is a hands-on endeavor that encourages the active participation of every member of the Enterprise. The foundation of our culture is our focus on performance and results. We foster an organizational culture that is characterized by open communications, high-performance work and an engaged workforce with strong communications about our Ethos, Vision, Mission, Values and Fundamental Business Principle (P.1-3). We also require leaders and managers to build effective relationships with employees that energize the team and deliver results. We align Strategic Objectives, Action Plans and metrics throughout the Enterprise and include these in performance evaluations so that individual employees and teams know what is expected of them. Because we review metrics systematically and are transparent with our results, employees can see their progress throughout the year. Individuals and teams are recognized and rewarded on an immediate basis, as well as weekly, monthly, quarterly and annually to further drive engagement. We also listen and learn from responses from our employee survey and make improvements as required.

As a cycle of improvement, MFC is currently creating an integrated culture optimization strategy aimed at identifying cultural enhancements that support continued business success and respond directly to input from *LM Voice*

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regarding shifting demographics, employee engagement, leadership capabilities and the work environment.

In **Step 1** of the Culture Optimization Process (Fig. 5.2-1), the team uses existing data and research to assess our current culture. In **Step 2**, facilitated group sessions involving senior leadership and top talent employees describe our optimized future culture by answering questions such as “What should be sustained and maximized and what should be changed?” Next, in **Step 3**, we identify gaps between current and optimized future culture and generate plans to close gaps and support MFC strategy. In **Step 4**, we implement targeted changes and leverage and integrate the changes with existing initiatives such as Vision 2020 and branding campaigns. Finally, in **Step 5**, we monitor changes while modeling, rewarding and reinforcing desired behaviors and making course corrections as required.

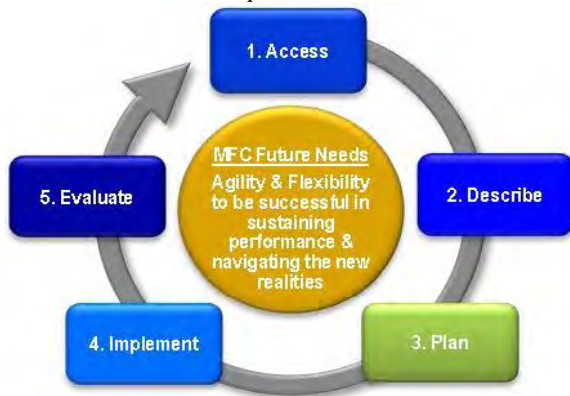


Figure 5.2-1 The MFC Culture Optimization Process Leads to Sustained Excellence in Business Performance, as well as Employee Engagement and Satisfaction

In addition to encouraging strong manager-employee relationships, providing challenging job opportunities and offering a safe and healthy work environment with other highly motivated people, MFC supports an engaged workforce with initiatives that include Go Green, PMT weekly/monthly/annual recognition and awards and other activities that make employees a part of the fabric of MFC.

MFC derives business benefit from the diverse ideas, cultures and thinking of our workforce through collaborative efforts, opportunities to provide suggestions and Leadership Forums and Employee Resource Groups. Collaborative efforts and input opportunities include: **1)** PMTs and SPMTs, **2)** Structured Improvement Activities (SIAs) through Lean Six Sigma (LSS), **3)** TIPS (TOAR Innovative Proposals and Suggestions), **4)** Coffee Sessions (New Business Initiatives) and **5)** Inventit (Intellectual Property Suggestions).

The Diversity Council sponsors Leadership Forums for various employee groups. It also sponsors ten Employee Resource and Network Groups by providing an annual budget to support their events and activities. Over 2,100 MFC employees are members of one or more groups.

5.2a(3) Performance Management: The MFC Performance Management System enables leaders and employees to discuss and understand performance expectations, create steps for development, monitor performance against business goals, offer feedback and review actual performance. For ten years,

we used a robust Performance Management System to deploy an Enterprise-wide approach for planning, tracking, developing, providing feedback and evaluating employees' performance. The System and its supporting Processes were improved and enhanced annually based on the feedback from employees and leaders, including the addition of Mid-Year Reviews in 2009.

Feedback from our *LM Voice* survey indicated the Performance Management System still needed further improvement. In a cycle of refinement in 2012, MFC and Lockheed Martin developed and launched the next generation of Performance Management Systems, named *LM Commit*, using internal, industry and technology best practices. We will complete our first full annual cycle in February 2013.

In *LM Commit*, employees and their managers develop goals and objectives directly aligned with the Strategic Plan, Strategic Objectives, Action Plans and goals. Employees commit to their objectives and “weight” their commitments, with the more important commitments receiving more weight in their performance evaluation. In the evaluation, 70% is based on meeting commitments, and 30% is based on behaviors. Performance evaluation directly influences compensation, rewards and recognition. Based on “pay for performance,” MFC provides compensation commensurate with each employee's contribution.

We encourage and reward high-performance work. We select high-performing workers for special development programs to train them for organizational leadership roles. Some high-performing technical employees choose to remain individual contributors instead of taking a management role. For these exceptional contributors, MFC has a Fellows program to recognize the highest levels of technical expertise and accomplishment.

The majority of our hourly production workforce does not participate in the *LM Commit* system. Instead, the PMT process identifies and establishes goals that align with the Strategic Plan, Strategic Objectives and Action Plans and charts progress to these goals through an established set of metrics. PMT members participate in developing the goals, intended to enhance productivity, ensure compliance and maximize customer satisfaction. Team members are evaluated and compensated based on how well the team achieves its goals.

MFC's formal employee recognition and reward programs range from the annual Evening of Excellence gala to Instant Recognition Awards that quickly acknowledge performance and specific accomplishments. We recognize the power of ongoing informal recognition and advocate recognition of individual efforts and contributions through supervisory interactions with staff, peer-to-peer recognition and “thank you” conversations.

5.2b Assessment of Workforce Engagement

5.2b(1) Assessment of Engagement: MFC's primary method of assessing workforce engagement is our Talent Readiness Index which includes Workforce Planning, Talent Management, Retention and Workforce Engagement. The Workforce Engagement measure is composed of **1) LM Voice Engagement** and **2) MFC Engagement Initiatives**.

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MFC Engagement Initiatives are 30% of the Workforce Engagement measure. These are measured across a combination of efforts by monitoring reward and recognition spending, ethics cases, training and development metrics and internal development opportunities.

In a cycle of improvement for assessing employee engagement, in 2008, we developed a “Jobs versus Careers” index that helps identify employees who may view their relationship with MFC as more of a “job” than a “career.” Results from the initial assessment were shared with leadership to raise awareness, with data refreshed annually.

Informally, MFC assesses employee engagement and satisfaction through Town Hall meetings, All Hands meetings, staff meetings, focus groups and skip-level meetings. Leaders use the formal and informal data to create action plans for improving their work environment.

5.2b(2) Correlation with Business Results: The key measures that MFC uses to correlate workforce engagement with business results are: **1)** Return on Human Capital (Fig. 7.3-1) and **2)** Compound Annual Growth Rate of Sales per Employee (Fig. 7.3-2).

Each functional department is currently reviewing how significantly engagement metrics influence performance within their function. From this assessment, they can gain a better understanding of how engagement impacts business results and develop action plans for improvement.

5.2c Workforce and Leader Development

5.2c(1) Learning and Development System: MFC’s Learning and Development System addresses the following:

- **Core Competencies, Strategic Challenges, Action Plans** – Based on ongoing SPES activities, we align and integrate our Learning and Development System with our Strategic Plan, LRP, Core Competencies, Strategic Challenges and short- and long-term Action Plans. We analyze the capability needs of the Enterprise and identify the best internal and external learning and development resources available. We analyze and evaluate our ability to address current and future Core Competencies and determine how to develop talent to support them. We evaluate the ability of our talent to meet our Strategic Challenges and achieve our Action Plans, and we recommend learning and development opportunities to bridge any gaps.
- **Organizational Performance Improvement and Innovation** – We train leaders, employees and identified suppliers in performance improvement and innovation methods and techniques. These include training for Master Black Belts, Black Belts and Green Belts (Fig. 7.3-26) in Lean/Six Sigma (LSS) and individual and team training in LSS, CMMI and ISO management systems. We also support technical learning and development.
- **Ethics and Ethical Business Practices** – MFC requires annual training for all employees in ethics and ethical business practices (Fig. 7.4-8). We provide specific

courses on ethical business practices in areas such as procurement and conducting business internationally.

- **Customer Focus** – MFC provides learning and development in program, customer relationship, cost management and other areas that impact customers.
- **Learning and Development Needs** – MFC offers an array of development courses and activities for every level of employee, including leadership and technical skills development. Fig. 7.3-22 shows that MFC employees participate in over 80 hours per year of training and development, over 100% better than national benchmarks. Each employee and his/her manager discuss development needs during the establishment of commitments, the mid-year review and the annual performance review. They determine how best to meet those needs, both self-identified and identified by leadership. Growing our junior engineers is essential to building our critical technical skills pipeline. We created a development program that provides them with rapid-paced enrichment opportunities they would not normally get via formal technical training. Technical subject matter experts facilitate learning. Over the past 5 years, 1,332 engineers have participated in this development opportunity.
- **Transferring Knowledge** – In addition to coursework and activities, MFC has a robust Knowledge Management Process (Fig. 4.2-2) available across the enterprise that enables employees and the business to benefit through shared experiences and knowledge in the areas of professional, technical and leadership development. In the last five years, 7,009 mentoring relationships have been established.
- **Reinforcing Knowledge and Skills on the Job** – This is accomplished through mentoring, management oversight and continuing on-the-job training experiences.

5.2c(2) Learning and Development Effectiveness: The primary measure of the effectiveness of our Learning and Development System is the ability of our workforce to assume responsibilities and perform in an extraordinary manner. We also apply the Kirkpatrick/Phillips model to conduct surveys on formal learning processes. The summary rating information rolls up as one of the key Human Resources measures within the metrics the ELC reviews quarterly. Any identified issues are tracked to resolution in the EES. To further drive improvement of our Learning and Development System and services, we use internal and external audits to evaluate the effectiveness of our services.

5.2c(3) Career Progression: Facilitating career progress is central to MFC’s business strategy. Our Career Center is a key aspect of career progression at MFC. Over the past five years, it has provided workshops to 3,990 participants and individual career coaching to 940 employees. Focused on growing our leadership pipeline, Leadership Development Programs (LDPs) develop future technical and business leadership talent. Technical Operations affords dual career paths as either a manager or an individual contributor for engineers and technical professionals.

MFC offers targeted career development opportunities focused on growing our leadership pipeline. Our Leadership

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Development Programs (LDP) engage high potential participants in job rotations designed to develop a pipeline of future technical and business leadership talent. Program members participate in one of six program disciplines (Fig. 7.3-23). Participants are provided an accelerated opportunity to obtain broad experiences that are essential for leadership success. Upon graduation from the program, participants pursue positions of increasing responsibility within their field.

MFC also has a formal Succession and Talent Management Process that engages our leaders in ownership of the talent in their organizations. We conduct formal talent reviews semi-annually. The Strategic Talent Review occurs in the second quarter, during which departments and organizations within the Enterprise present key position and program succession plans. Attendees also review current and anticipated key capability challenges and top mid-career, minority and female talent. In addition, we identify the “MFC Top 60,” and the executive staff takes ownership of those individuals’ careers to provide the development and exposure they need to eventually lead the business.

In a cycle of refinement in 2011, MFC added a fourth quarter Strategic Talent Review so that the team could reconvene to discuss top talent and key action plans from the second quarter Strategic Talent Review. This improvement emphasized accountability of leadership and the importance of Strategic Talent Management, and 100% of the executive leadership team is engaged in this process.

Category 6: Operations Focus

Lockheed Martin Missiles and Fire Control (MFC) has developed and highly refined five key Work Systems integrated with each other and our key Work Processes. These five Work Systems provide the backbone for focusing and aligning the Strategic Planning and Execution System (SPES) and our metrics to develop and accomplish our Strategic Plan, Strategic Objectives and Action Plans.

Our key Work Systems and Processes are fully deployed to all locations and Lines of Business (LOBs). They receive Business Performance Reviews (BPRs) monthly during the Enterprise Leadership Council (ELC), as well as annually during a meeting of the Strategic Enterprise Leadership Council (SEL). These reviews ensure our key Work Systems and Processes are continually improved and result in efficient, effective and productive operations.

6.1 Work Systems

6.1a Work System Design

6.1a(1) Design Concepts: Figure 6.1-1 illustrates how MFC designs and innovates our overall Work Systems.

When designing and innovating our Work Systems (Fig. 6.1-1), MFC focuses on results and creating value for the Enterprise. As shown in **Step 1** of the Enterprise Work System Development Process, we first analyze requirements and then develop a Value Stream Map (VSM, Fig. 6.2-1) of the Enterprise work flow. In **Step 2**, we use the VSM to identify key Work Systems, based on the Strategic Plan and encompass both current and future performance objectives.

In **Step 3**, we identify the key Work Processes required to successfully implement and control our Work Systems and in **Step 4**, we define key requirements and metrics for each

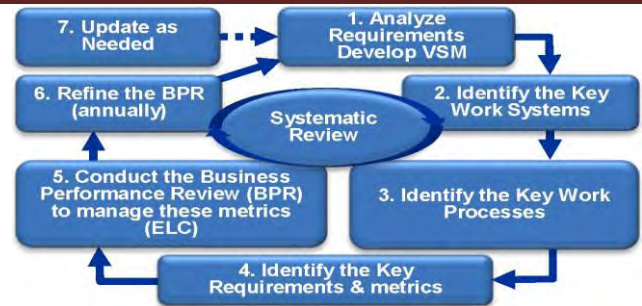


Figure 6.1-1 Our Enterprise Work System Development Process Enables MFC to Design and Innovate Our Work Systems

Work Process. To drive continuous improvement, in **Steps 5 and 6**, Work Systems, Work Processes and metrics are deployed throughout the Enterprise and are reviewed and evaluated for performance during systematic reviews by senior leadership, including the monthly meetings of the ELC and on an annual basis through the Strategic Enterprise Leadership Council (SEL) to drive continuous improvement (Fig. 1.2-4). Frequent reviews ensure MFC has the agility required to make needed changes. For example, reviews at the departmental level avoid issues early in product development. During engineering design, multiple Peer Reviews and Design Assurance Reviews are conducted by subject matter experts and members of our Group Technical Staff to ensure design quality and identify early trends for work process improvements. Improvements we made in 2005, 2007, 2008 and 2012 are discussed in 4.1a(1). Improvements and innovations are shared with the Enterprise and with customers, suppliers, partners and collaborators as indicated in P.1b(3) and Fig. 3.1-1.

In 2009, as part of our systematic review process, we uncovered opportunities for continuous improvement within our “Execute” Work System where we added a new metric in the “Acquire the Material” Work Process. We learned that a segment of our supply chain was experiencing financial distress due to the global market economic conditions. We implemented a supplier financial risk metric that provides advanced indicators of supply chain impacts related to our supply chain. Potential venerable suppliers were identified and risks were mitigated.

Figure 6.1-2 shows how we incorporate and capitalize on our Core Competencies when designing our Work Systems. It also indicates the Internal and External Inputs that influence the design and innovation.

MFC uses our Make-or-Buy Process to determine which processes within our overall Work Systems are internal to MFC and which use external resources. In making a decision on Make or Buy, the program/project team considers many factors: customer perspective, our strategic capability, our Operating Plan, product liability, resources, competitive sensitivity, Supply Chain Diversity requirements, proprietary or licensing considerations, strategic partnerships and international Offset/Industrial Participation requirements.

As a part of the Make-or-Buy Process, MFC develops and maintains a “Must Make” list. We review this list and the Process itself at least annually to ensure continuous improvement. We continue capital investment that increases our “make” capabilities (Fig. 7.1-19). The Make-or-Buy

process has been through three cycles of refinement since 2008 and has been designated a best practice.

6.1a(2) Work System Requirements: When defining Work System requirements in **Step 4** of the Enterprise Work System Development Process, we maintain a customer-centric perspective. Requirements, shown in Fig. 6.1-3, are driven by our commitment to Perform with Excellence. Among the inputs we use to define requirements are customer inputs gained through our Voice of the Customer Process (3.1a(1)) and the external inputs displayed in Fig. 6.1-2.

We value input from our workforce and partners when we are designing, innovating and developing requirements for our Work Systems. In addition, we consider our societal responsibility to build in ethical and legal requirements, as well as Environmental Safety and Health requirements. We collaborate with customers and suppliers through our Integrated Product Teams (IPTs), design reviews, laboratory teamwork, Strategic Performance Management Teams (SPMTs), Supply Chain Management System (6.2b(2)) and Corrective Action Boards (CABs). We also conduct monthly and quarterly reviews at higher levels in the organization to ensure we receive valuable customer and supplier input.

6.1b Work System Management

6.1b(1) Work System Implementation: MFC Work Systems are shown in Figure 6.1-3, along with Key Processes, Requirements, Measures and Results. We deploy our Work Systems Enterprise-wide as discussed in 2.2a(2).

We manage and improve our Work Systems through the Enterprise Excellence System (EES) and the Enterprise Work System Development Process. In **Step 4** of the Enterprise Work System Development Process, we define metrics for each Work System. Applying the EES, we use these metrics to provide line-of-sight alignment up and down the work chain. The SELC reviews the metrics annually (Fig. 1.2-4) to determine if they continue to perform as required or if MFC needs to change or improve the metrics as discussed in 4.1a(1), 4.1b and Figure 7.1-20. Performance results reviewed at lower levels of the Enterprise are rolled up and integrated into the Tier I metrics reviewed monthly by the ELC. Wherever improvement or innovation is required, the ELC requires an Action Plan (Figs. 4.1-4, 5) that includes the LM21 Path to Excellence Process (Fig. 6.2-3).

In 2010, in a cycle of improvement, MFC reviewed and analyzed our EES and determined that our metrics were weighted equally. This prevented us from identifying which issues were most important to developing and executing the Strategic Plan. To correct this situation, we expanded the EES with the Enterprise Performance Index (EPI, 4.1b), which enables us to evaluate our Work Systems from a strategic perspective based on our Long Range Plan (LRP) while identifying systemic trends that could impact Enterprise performance.

MFC manages our Work Systems and entire Enterprise by adhering to our Fundamental Business Principle: **“Business is not the objective...it is the result. Performance is our objective.”** (Fig. P.1-3). By focusing on delivering high performance results, innovation and value to our customers

based on their requirements (Fig. 7.1-3), we also achieve organizational success and sustainability (1.1a(3)).

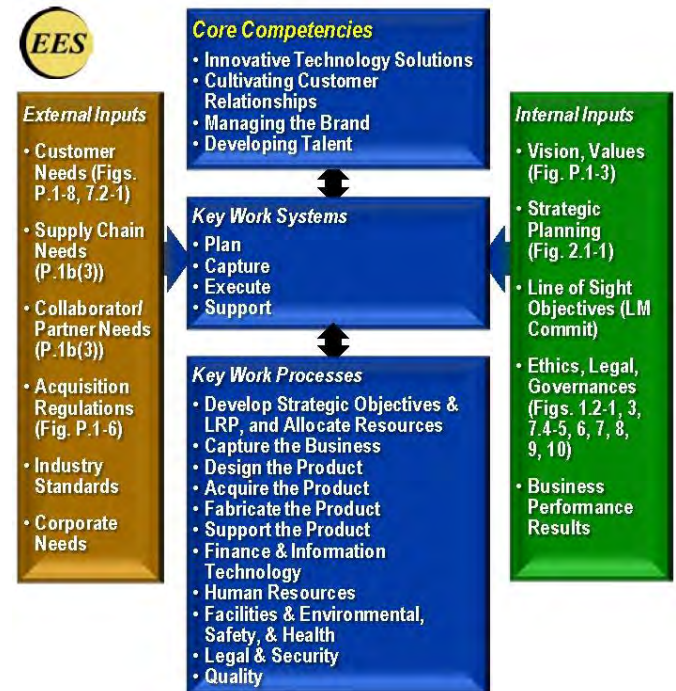


Figure 6.1-2 Our Core Competencies, as well as Internal and External Inputs, Influence the Design and Innovation of Our Work Systems

6.1b(2) Cost Control: One of the challenges MFC faces across the Enterprise is the current Department of Defense (DoD) focus on “affordability.” This requires we examine opportunities for cost control within our Enterprise at every site, in our Work Systems and Processes and during our Product Life Cycle (Fig. 3.1-2). Over the past five years, we have grown from 7 to 20 Lean Six Sigma (LSS) program teams to develop innovative solutions for customer value and cost control/reduction. In addition, we have analyzed and evaluated our Work Systems and Work Processes to discover ways to reduce waste, increase productivity and enhance our work methods to reduce costs. We continue this focus in our Structured Improvement Activities (SIAs) and via teamwork with our customers and suppliers (Fig. 7.1-13).

We monitor and control program and product cost through the Program Performance Measurement Process (PPMP). Managed by Finance, the PPMP covers five key areas of program management: **1)** organization; **2)** planning, scheduling and budgeting; **3)** accounting; **4)** analysis and management reports; and **5)** revisions and data management. To provide robust reporting of program and project cost status, we integrate other standard processes and procedures, including the Earned Value Management System (EVMS) and Program Management procedures. Cost, as well as other key performance measures, is reviewed by various levels of management, customers and suppliers at least monthly to identify any potential issues that could impact our ability to meet our cost projections. Each month, program management conducts Cost Performance Reviews (CPRs) with customers.

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Key Work Systems	CC ₁	Key Work Process	Key Requirements for Work Systems and Work Processes	Performance Measures	Results
Plan	1-4	Develop Strategic Objectives, LRP and Allocate Resources	<ul style="list-style-type: none"> Growth in Order Growth in Financials 	<ul style="list-style-type: none"> CAGR Sales, EBIT, Margin, ROI 	7.5-7,7.5-8 7.5-1, 7.5-2
Capture	1-4	Capture the Business	<ul style="list-style-type: none"> Meet/Exceed the following: <ul style="list-style-type: none"> Annual Orders Requirements Expenditures per Proposal Proposal Costs 	<ul style="list-style-type: none"> Annual Orders Target: <ul style="list-style-type: none"> Overall Win Rate $\geq 60\%$ Core Win Rate of $\geq 75\%$ International Win Rate of $\geq 50\%$ Adjacent Win Rate of $\geq 25\%$ Proposal Costs \leq Budget 	7.1-28 7.1-29 7.1-29 7.1-29 7.1-18
Execute	1-4	Design the Product	<ul style="list-style-type: none"> Innovation Prepare High Fidelity Modeling/Simulation Identify/Mitigate Key Technical Risk 	<ul style="list-style-type: none"> Patents, Customer-Focused Innovation Conduct Simulation Design Assurance Review Accomplish Technical Performance Requirements 	7.3-20, 7.2-9 7.1-5, 7.1-6 7.1-7
	1, 3-4	Acquire the Product	<ul style="list-style-type: none"> Expand SPMTs Ensure Suppliers Deliver On-time to Prime Contract 	<ul style="list-style-type: none"> Grow Number of SPMT Suppliers Suppliers Deliver On-time to Prime Contract = 100 % 	7.1-14 7.1-11
	1, 3-4	Fabricate the Product	<ul style="list-style-type: none"> Contract On Time Deliveries 	<ul style="list-style-type: none"> Contract On Time Deliveries = 100% 	7.1-1
	2-4	Support the Product	<ul style="list-style-type: none"> MFC Mission Success Events Meet or Exceed System Reliability Requirements 	<ul style="list-style-type: none"> MFC Mission Success Event = $\geq 96\%$ Reliability Requirement met $\geq 100\%$ 	7.1-4 7.1-3
Support	1-4	Provide Finance and Information Technology (IT) Support	<ul style="list-style-type: none"> EVMS Program Performance Independent Cost Evaluation (ICE) Requirements Sarbanes-Oxley Requirements Infrastructure Management 	<ul style="list-style-type: none"> EVMS = CPI & SPI ≥ 0.95 Performance to Mid-Nominal = 50 % 100% Compliance with Controls 100% Detection/Remediation of Malicious Campaigns 	7.2-1 7.5-4 7.1-23 7.1-22
	3-4	Provide Human Resources (HR) Support	<ul style="list-style-type: none"> Critical Talent Forecast Workforce Engagement Maximize Employee Retention 	<ul style="list-style-type: none"> Talent Readiness Index Retention Rate 	7.3-15 7.3-17
	1, 3-4	Provide Facilities and Environmental Safety & Health Support	<ul style="list-style-type: none"> Annual Facility Cost Go Green Target Zero 	<ul style="list-style-type: none"> Total Annual Facility Cost/Sq Foot Waste to Landfill, Water Usage, Carbon Emissions Days Away Case Rate 	7.5-5 7.4-11 7.3-8, 7.3-9
	1-4	Provide Legal and Security Support	<ul style="list-style-type: none"> ITAR Management Facility Security 	<ul style="list-style-type: none"> ITAR = 100 % Compliance DSS Superior Ratings 	7.4-5 7.4-6
	2-4	Ensure Quality Excellence	<ul style="list-style-type: none"> Quality System Reliability 	<ul style="list-style-type: none"> Quality System Reliability $> 5.75\sigma$ 	7.1-2

Figure 6.1-3 MFC Key Work Systems, Key Work Processes, Requirements, Measures and Results (Legend: CC¹ = Core Competencies, 1 = Creating Innovative Technological Solutions, 2 = Cultivating Customer Relationships, 3 = Managing the MFC Brand, 4 = Developing Talent)

IPTs address issues that could impact cost in their daily interactions. If, during any PPMP review, a variance is found, a Variance Analysis Report (VAR) is required, which includes root cause, impact, corrective action plan and an estimate to complete the project. Results are entered into the Review Findings Database (RFDB) to provide higher visibility of root causes, lessons learned and best practices.

To minimize customer productivity losses or warranty costs, MFC strives to prevent defects, service errors and rework in every Work System. Our EES provides performance data for frequent reviews, with built-in indicators to flag potential issues early. If any part of the Enterprise is not performing as planned, we develop an improvement Action Plan (Fig. 4.1-5).

LSS initially provided support to programs by resolving technical and manufacturing cost issues as they arose. To be more proactive, in a 2004 cycle of improvement, MFC introduced Program Excellence Plans (PEPs) to identify annual program challenges, focus LSS resources on programs and plan improvement activities. Since then, we have extended PEPs to all key MFC programs and developed them into program improvement/cost control plans owned by the Program Manager and supported by green and black belts.

MFC minimizes the costs of inspections, tests and process or performance audits through **1)** Design Reviews for hardware and software, **2)** Design Assurance reviews, **3)** LSS methods, including Mistake Proofing, **4)** PMTs and SPMTs, **5)** CAB and FRACAS processes, including performing Failure Trend Analysis, **6)** statistical process controls to reduce variability, **7)** frequency and focus of audits, **8)** Supply Chain Management Process and tools and **9)** quality system reliability. In addition, we have established teaming arrangements with customers to provide Performance-Based Logistics (PBL) to minimize customer cost.

6.1c Emergency Readiness: MFC has a comprehensive Business Resiliency System, including our Business Continuity Management System (BCMS, 4.2b(2)). The three phases of the BCMS are planning/preparedness, crisis stabilization and process contingency implementation, including crisis recovery. To respond to emergencies, we have a Business Continuity Plan (BCP), managed by the BCP Team led by the MFC president. The roles and responsibilities of BCP Team members correspond to the three phases of the BCMS. The BCP Team assesses impacts and risks on the key programs, functions and sites (including

supplier sites) that could be affected by an emergency.

We deploy the BCP to employees at all sites through a variety of means, including distribution of a tri-fold pamphlet, *MFC News* articles, staff meetings and BCP management briefings. The pamphlet briefly describes the Business Continuity Plan (BCP). Write-ups include “How You Can Help to Prepare?” “Why Should MFC Have a BCP?” and “Support Organizations’ Supporting Role.”

During a crisis or disaster, three distinct documents govern how we stabilize the situation: **1)** Crisis Management Plan, focused on protecting people and facilities; **2)** Disaster Recovery Plan, focused on recovery of IT resources; and **3)** Crisis Management Communication Plan, focused on keeping all stakeholders informed.

In 2006, in a cycle of improvement, MFC created a Pandemic BCP to maintain business operations, ensure the safety and health of employees and their families and provide general education and awareness.

MFC has developed key preparedness checklists to ensure the right precautions are identified and taken in emergencies. The Crisis Communication Management Plan uses the LM *Notify* system to rapidly disseminate key prevention, continuity and recovery information via work/home phone-automated notifications, work/home emails and news and media communications. We conduct annual drills and assessments to test our crisis management plans and strategies. Results become appendices to the BCP. Lessons learned guide us on improvements.

Using our innovative Global Disasters Assessment Tool (GDAT), MFC accurately determines the impact of natural and man-made disaster on our supply chain. For example, during the Japanese earthquake and tsunami we used GDAT to rapidly establish the impact on our suppliers. With this knowledge, MFC established mitigation plans that minimized disruption to production.

6.2 Work Processes

6.2a Work Process Design

6.2a(1) Design Concepts: After we analyze the requirements, we use the Value Stream Mapping process (VSM, Fig. 6.2-1) to design and innovate our Work Processes and incorporate best practices so as to meet all the requirements. We recognize the value of using LSS tools and techniques during VSM. We also use modeling and simulation tools, prototyping and other tools. MFC used VSM to improve our Make-or-Buy Process (6.1a(1)). The VSM Process is evaluated at least annually to ensure it continues to perform as expected.

6.2a(2) Work Process Requirements: Our key Work Processes reflect the Strategic Objectives developed in the Strategic Plan. Through the VoC, we listen and learn about customer requirements (3.1a(1)). During the SPES, we gather customer information about new and existing requirements, market changes and other data that impacts customer needs. Customers are a part of our IPTs and provide input on a continuing basis. Our Work Process requirements are also defined by internal and external inputs displayed in Fig. 6.1-2.

MFC Key Work Processes and their requirements are

The Ten Step VSM Process

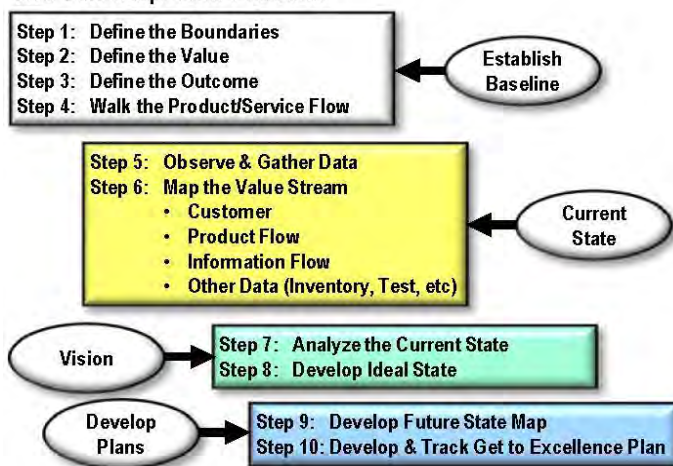


Figure 6.2-1 Value Stream Mapping Process Enables MFC to Design and Innovate Work Processes

displayed in Figure 6.1-3. Key Work Processes are reviewed and evaluated at least annually to determine needs for improvement. If a Work Process requires improvement, we use the LM21 Path to Excellence Process (Fig. 6.2-3) as one of the key LSS tools for improvement.

6.2b Work Process Management

6.2b(1) Key Work Process Implementation: Figure 6.1-3 shows the relationships between our key Work Systems and Processes. They are closely aligned to ensure we attain our Strategic Objectives and execute our Action Plans.

We generate metrics for each key Work Process, establishing thresholds that indicate the level of performance. Top-level metrics cascade down to team metrics at the PMT and Program levels, which are measured daily, weekly and monthly and rolled up and integrated into the Tier I metrics reviewed by the ELC. In Figure 4.1-2, ELC reviews are shown under “Systematic Reviews.”

Also, at the department level, engineering directors and chief engineers participate in monthly Continuous Improvement Board (CIB) meetings to evaluate the status of programs and recommend actions when necessary. They identify systemic problems and develop improvements as well as implement lessons learned throughout the organization.

All key processes and metrics are fully integrated through the EES, and the ELC can easily determine the impact of the performance of one process on other processes. Metrics are consolidated at the Tier I level, yet ELC members and others reviewing the data can easily drill down to the lowest measures to define a problem. Performance data are available via the EES, and frequent reviews help MFC ensure processes are performing to key requirements during day-to-day operations. The key measures that allow MFC to control and improve our Work Processes are listed in Figure 6.1-3. Improvements in our Work Processes are discussed in 4.1a(1).

6.2b(2) Supply-Chain Management: MFC’s Supply Chain Management System (SCM, Figure 6.2-2) is recognized as a best practice within our industry, and it continues to be benchmarked by government and industry partners.

In 2004, supplier performance issues had reached a critical point, necessitating a cultural shift in management, metrics and relationships. MFC transitioned from the role of tactical observer to a strategic, engaged organization. In striving for world-class performance, we set our goals at 100% quality (product reliability) and 100% on-time delivery. We dropped poor performing suppliers, increased supplier focus on affordability, and measured, analyzed and improved supplier performance via an approach focused on performance data, lessons learned and continuous improvement.

Our robust SCM Process enables us to ensure that suppliers are qualified in order to enhance performance. It facilitates a highly mistake-proof methodology that permits cross-functional collaboration with checks and balances using our Procure-to-Pay (P2P) System. Examples of P2P mistake-proofing include automated flow-down of customer and business requirements that ensure selection of approved suppliers and electronic acceptance of purchase orders.

During the initial supplier selection phase, a cross-functional team selects subcontractors in accordance with Lockheed Martin Acquisition Procedures (LMAPs), which ensure compliance with applicable laws and regulations. The team also develops “best value” selection criteria. It works with other programs within MFC to ensure we take advantage of proper leverage and synergy.

Past performance, including quality, cost and schedule performance; diversity; and participation in MFC’s Preferred Supplier Program (PSP) are some of the criteria we use in selecting suppliers. We also have a wide range of tools and processes to review past performance, predict future trends and provide assurance that a supplier has the ability to successfully execute to MFC’s specifications.

In 2011, through the performance analysis process, MFC detected an increase in the number of poor performing suppliers, primarily at the sub-tier level. This prompted us to add granularity to our management health indicator tools to provide better insight into performance at the sub-tier supplier level. We developed and are deploying the Supplier Health Assessment for Performance Excellence (SHAPE) tool for targeted sub-tier suppliers.

The Supplier Performance Review (SPR) Process, involving senior leaders from the Procurement and Quality organizations, provides an opportunity for MFC to further address poor-performing and at-risk suppliers during monthly reviews. The reviews include presentations of root cause and corrective actions. They also help identify common issues across programs for synergistic solutions.

We evaluate supplier performance with tools such as the Trend Tool, Supplier Report Cards and Financial Risk Analysis. Since 2004, we have developed, implemented, evaluated and continued to refine our tool set, while ensuring a direct alignment with our process results and supply chain performance, as reflected in Figure 7.1-11.

In a benchmarking event with Michigan State University in 2009 and 2010, MFC established and refined a Reverse

Report Card (RRC) Process to anticipate future trends and provide a means for our suppliers to provide feedback focused on continuously improving supplier relationships and supply chain management processes.

MFC has extended our PMT approach to selected suppliers through the SPMT program. This program has improved the efforts of critical suppliers who were not performing to expectations. The program enhances MFC and supplier communication and promotes the sharing of best practices to drive excellence in quality, cost, productivity and schedule. SPMTs are now being extended to well-performing suppliers who want to continue to improve.



Figure 6.2-2 The Seven-Step Supply Chain Management System Drives High Supplier Performance

6.2b(3) Process Improvement: For process improvement, MFC uses the eight-step LM21 Path to Excellence Process (Fig. 6.2-3), which may be integrated with the VSM process and LSS tools to eliminate waste and reduce variation.

Although the LM21 Path to Excellence Process serves as a stable framework for MFC’s process improvements, the focus, deployment and tools have evolved to support the unique challenges that face our customers, suppliers and programs. Our LSS program has matured over the years from training resources to engaging leaders, from “drive by” (reactive) Kaizen events to strategically focused (proactive) events, from being internally focused to being customer- and supplier-focused.



Figure 6.2-3. The LM21 Path to Excellence Process is the Foundation of Process Improvement at MFC

The LM21 Path to Excellence Process is fully deployed throughout the Enterprise and used with all suppliers. It is evaluated periodically to determine if it is performing to purpose. In 2011, MFC developed and issued a survey on the value of the LM21 Path to Excellence Process to key LSS users and stakeholders. Over 1,700 users/stakeholders participated and provided key insights that led to the 2012 LM21 Operating Excellence Plan. We identified needed continuous improvements for Steps 6-8 in the LM21 Path to Excellence Process and have planned LSS Events in 2012 to increase effectiveness. We share lessons learned across the Enterprise via the forums discussed in Fig. 1.2-4.

Category 7: Results

The Fundamental Business Principle at Lockheed Martin Missiles and Fire Control (MFC) is **“Business is not the objective...it is the result. Performance is our objective.”** From the beginning of the MFC Journey Toward Excellence in 1999, our focus has been on performance and continuous improvement in all aspects of our Enterprise. Through workforce engagement, strong customer relationships, rigorous processes, challenging metrics and systematic review, analysis and improvement, we have obtained results that place us as the highest performing company within Lockheed Martin Corporation and one of the highest within our industry.

7.1 Product and Process Outcomes

7.1a Customer-Focused Product and Process Results: As shown in Figures P.1-7, P.1-8, the key requirement of our markets and customer groups include cost, schedule, technical characteristics, performance/reliability, innovation, affordability and field support. **Figures 7.1-1 through 7.1-20** exhibit our current levels and trends of product and process performance.

Figure 7.1-1 illustrates our adherence to performance to customers’ schedules. Even with a major increase in the number of deliveries, MFC exceeded the industry in percentage of on-time deliveries.

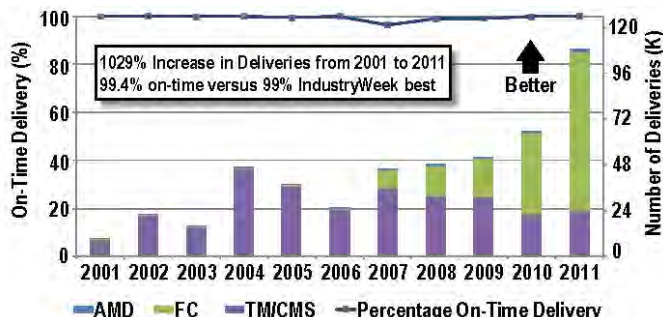


Figure 7.1-1 On-Time Delivery is Critical to Meeting Customer Requirements for Schedule, Segmented by Line of Business (LOB)

Figure 7.1-2 demonstrates the reliability of our system across all LOBs and product lines. This rigorous system reliability yields product quality and performance to the customer. MFC consistently operates at or near the **Six Sigma level**, defined as the level **“at which 99.99966% of the products manufactured are statistically expected to be free of defects.”**

Figure 7.1-3 describes the reliability of our products in the field. The orange line indicates the reliability level required in our contracts. This chart shows how MFC consistently provides a higher level of reliability than required to our Warfighters and other customers.

MFC receives customer requirements that contain performance objectives for events and milestones that we must successfully achieve. These are referred to as Mission Success/Customer Scorecard. **Figure 7.1-4** outlines the MFC rate of success in completing these events and milestones. We exceed the benchmark provided by Best Manufacturing Practices (BMP), an organization that identifies, researches and promotes exceptional manufacturing practices and procedures.

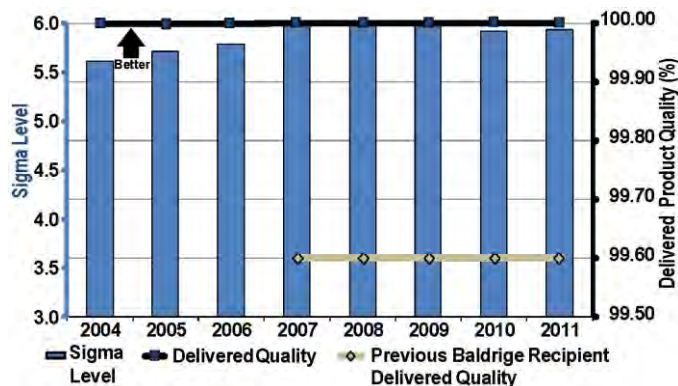


Figure 7.1-2 Best-in-Class Quality System Reliability Saves the Lives of Warfighters

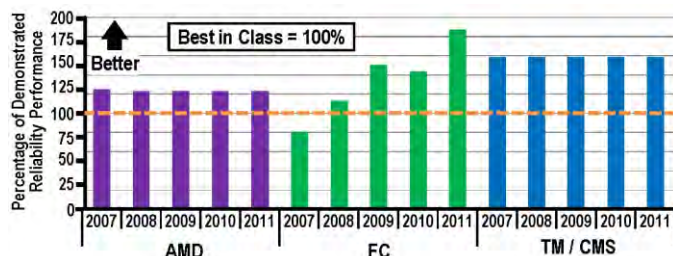


Figure 7.1-3 MFC Provides a Higher Level of Reliability Than Required by Our Customers, Segmented by LOB

LOB	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	CUM
Air & Missile Defense	100%	100%	100%	50%	100%	83%	100%	80%	100%	100%	96%
Fire Control	No Events			100%	94%	100%	100%	100%	100%	99%	99%
Tactical Missiles/Combat Maneuver Systems	99%	95%	99%	98%	96%	99%	97%	96%	95%	95%	98%
Threshold/Goal	96%	96%	96%	96%	96%	96%	96%	96%	96%	96%	96%
MFC	99%	95%	99%	97%	96%	98%	97%	96%	95%	96%	98%

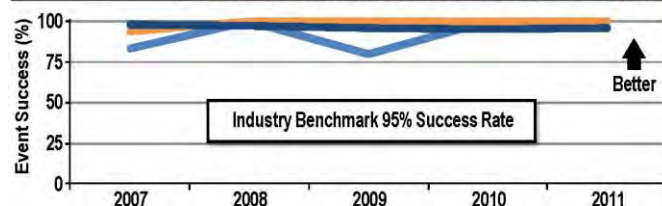


Figure 7.1-4 MFC Achieves a High Customer Score /Mission Success Rate Against Customer Requirements, Segmented by LOB

At MFC, one of our strengths is our expertise in using simulation and modeling. Through simulation and modeling, we are able to conduct extensive live testing to evaluate total system performance before committing to production.

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Figures 7.1-5 and 7.1-6 outline the results of simulations in performance and costs saving to our customers and taxpayers (3.2a(1)).

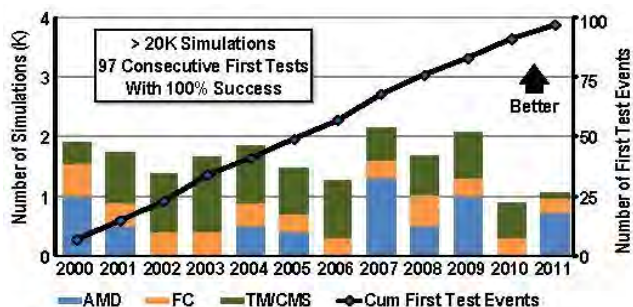


Figure 7.1-5 Simulations and First Test Success, Segmented by LOB

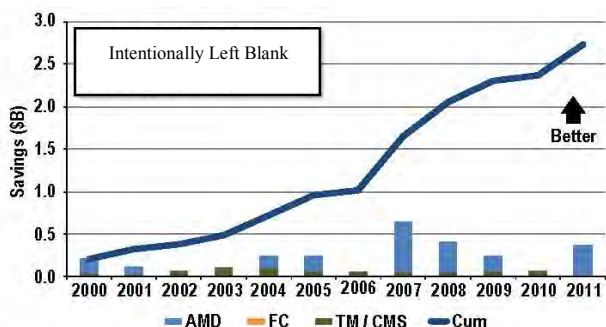


Figure 7.1-6 Robust Simulation Leads to First Test Success and High Customer Satisfaction

Product and Mission Success are dependent upon how well a company manages and/or eliminates the risk associated with a complex defense industry program. Figure 7.1-7 shows that MFC decreases the probability of failure by mitigating risk as a product progresses through the Program Life Cycle, reducing costs and increasing the probability of success. At two points in the development cycle – Innovation and Reconciliation – risks are normally higher. During Innovation, the design phase is just beginning, and during Reconciliation, all design elements are being pulled together for the first time, and some redesign may be required. Once this occurs, risk quickly lowers.

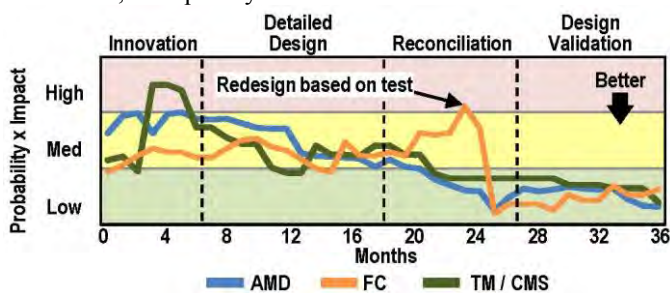


Figure 7.1-7 MFC Carefully Manages Risk for Program and Product Success

Controlling costs is one of the key requirements of our customers, and MFC excels in this area. Performance Management Teams (PMTs) at MFC focus on continuous improvement which drives cost savings. Since 2003, PMTs have increased their amount of annual savings by 84%. Intentionally Left Blank.

Figure 7.1-8 illustrates cost savings achieved by PMTs by location. Figure 7.1-9 shows PMT savings attributable to cost avoidance and cost reduction since 2004. Results for

segmentation by program, site, LOB and functional area are available on-site.

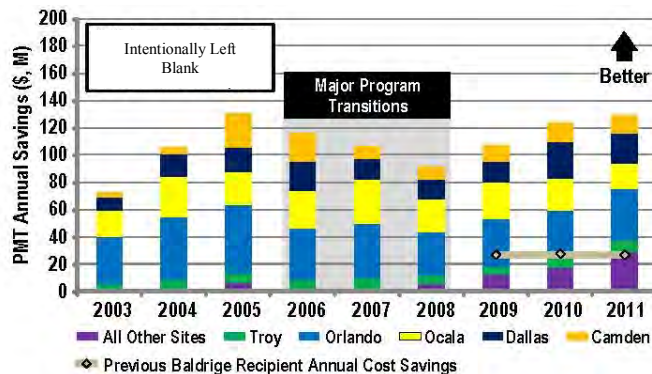


Figure 7.1-8 PMT Savings Directly Reduce the Cost of the Final Product Delivered to the Customer, Compared to the Savings of a Previous Baldrige Winner

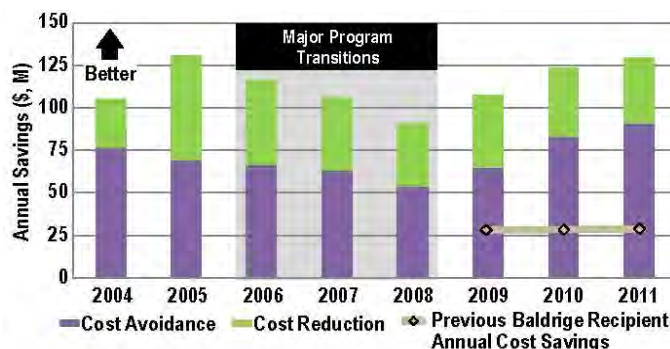


Figure 7.1-9 PMT Savings, Segmented by Cost Avoidance and Cost Reductions

7.1b Operational Process Effectiveness Results

7.1b(1) Operational Effectiveness: When considering operational effectiveness at MFC, leaders examine our processes, products, suppliers, Lean Six Sigma (LSS) improvement opportunities and results, innovation, infrastructure utilization, efficiency and growth in capabilities. One of our latest management innovations is our Enterprise Performance Index (EPI) that enables us to evaluate the overall health of the Enterprise and model and simulate potential changes to determine their impact.

Figure 7.1-10 shows the three elements of our EPI – Products, Processes and Talent Readiness – that provide an overall performance score for the organization. The Product and Process scores are derived from key lower-level metrics that encompass the business from a product and process perspective. These two scores are combined and added to a Talent score which measures the health of our talent base. The three elements combine to form our overall Enterprise health score. All three elements are utilized at an individual and all-up level so the level of granularity of our real-world system is directly mapped to one of the three elements of the model. Figure 7.1-10 is segmented by program, site, LOB and functional area. The scale used is 0 to 1,000, and the colors represent set parameters where blue = excellent, green = good, yellow = average and red = poor (P.2c, 4.1b, 6.1b(1)).

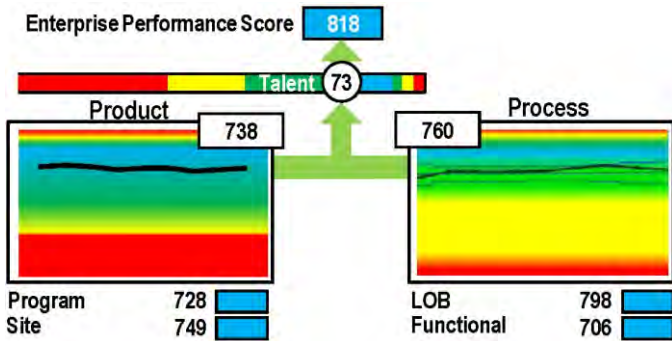


Figure 7.1-10 The Enterprise Performance Index is a Tool That Indicates the Overall Health of Performance at MFC, Segmented by Program, Site, LOB, Functional Areas and Talent

Figure 7.1-11 details the strategic improvements we have made to our Supply Chain Management Process and the corresponding results in **enhanced on-time delivery by suppliers, even as we significantly increased the number of parts we procured from them.** **Figure 7.1-12** indicates that our ratings of our suppliers have remained high as we have required significantly more deliveries.

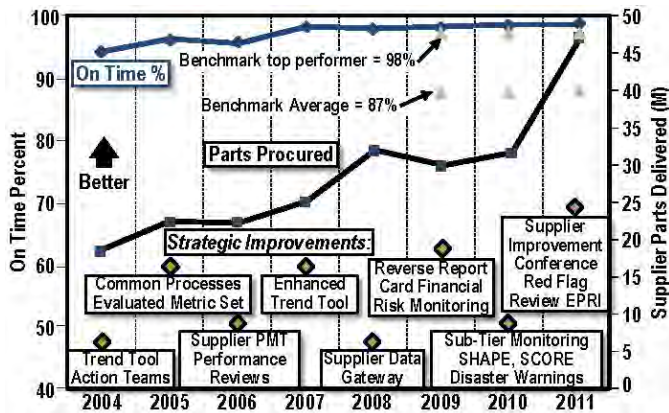


Figure 7.1-11 Improvements in Managing/Developing Our Supply Chain Processes are Driving Operational Effectiveness

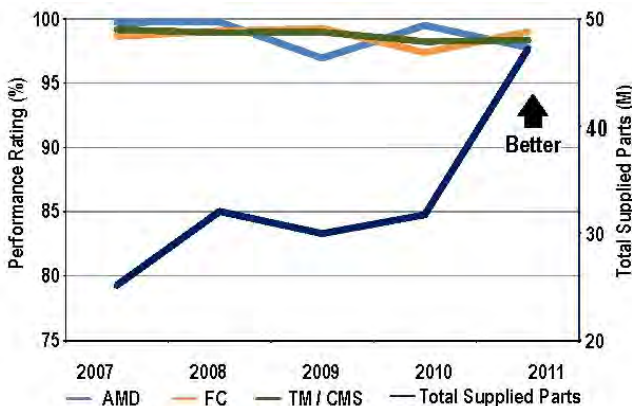


Figure 7.1-12 MFC Ratings of Suppliers, Segmented by LOB

MFC is totally committed to continuous improvement, and we conduct a significant number of LSS events each year. **Figure 7.1-13** reveals the number of events that have occurred, the annual savings and the cumulative reductions in cost that MFC and our customers have realized.

Early in our Journey, we focused on a few large events to improve the processes that drove cost in our organization. As we completed these and matured our processes, we began to deploy many smaller events across the Enterprise to improve sub-processes. Our operational performance improvement helps us meet customer requirements for affordability, while increasing our own efficiency and effectiveness. This figure includes a benchmark from a 2009 Baldrige Award winner.

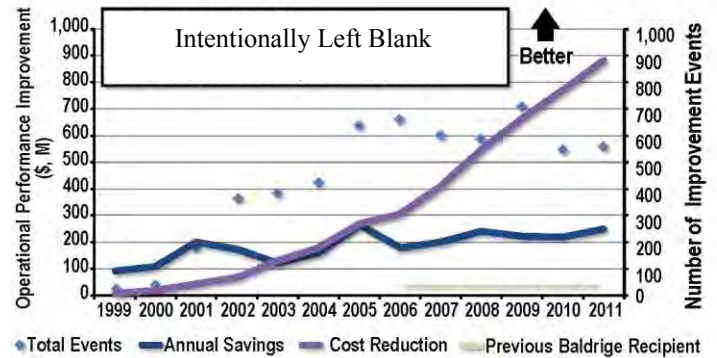


Figure 7.1-13 Operational Performance Improvement Yields Clear Results in Cost and Efficiency at MFC

As discussed in 6.2b(2), MFC implemented Strategic Performance Management Teams (SPMTs) at suppliers that were critical to our business and typically the only source, yet were seriously underperforming. **Figure 7.1-14** shows the quality of SPMT suppliers has risen to the level of our non-SPMT suppliers.

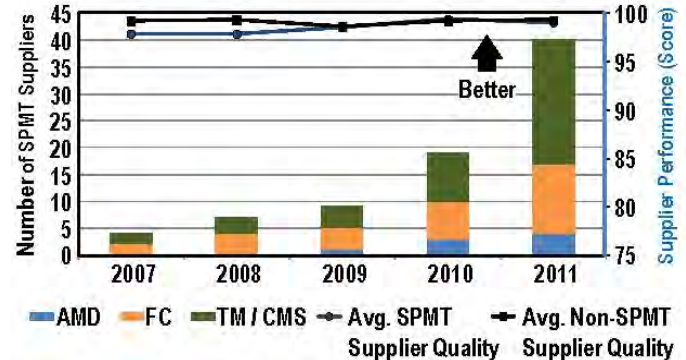


Figure 7.1-14 By Assisting in the Development of Our Suppliers, We Achieve Greater Quality From Them, Segmented by LOB and SPMT/Non-SPMT Suppliers

Figure 7.1-15 illustrates MFC's Earnings Before Income Taxes (EBIT) per square foot of space as compared to our key competitors. This measure of productivity and efficiency indicates that we have dramatically improved our profit without significantly increasing our footprint. We have achieved this increase in infrastructure utilization over the past five years based on improvements we have made to our "Execute" Work System. **Figure 7.1-16** shows how our improved utilization has contributed to a compound annual growth rate of 14%, exceeding the results of the best in the industry.

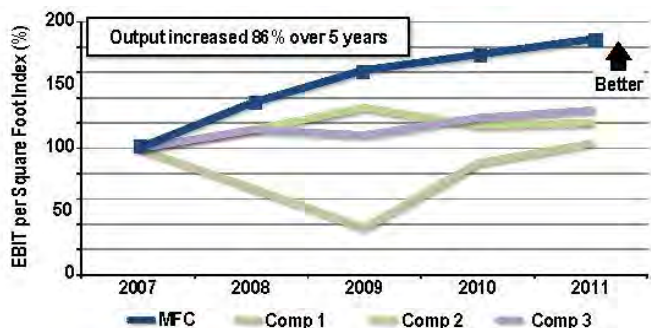


Figure 7.1-15 EBIT Per Square Foot Against Competitors Demonstrates MFC's High Level of Productivity/Efficiency

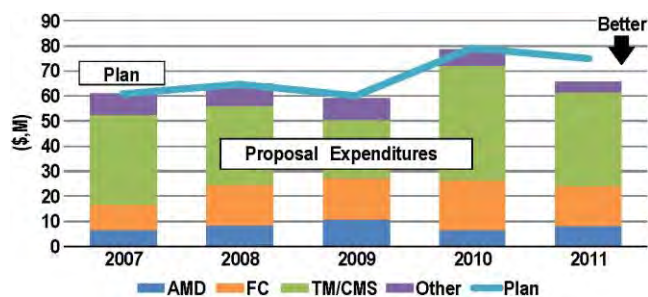


Figure 7.1-18 MFC's Efficient Management of the Proposal Process Keeps Expenditures Below Plan

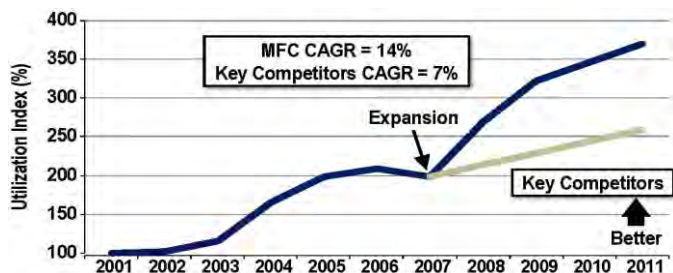


Figure 7.1-16 Our Efficient Utilization of Space Contributes to Higher Growth

Another way MFC measures operational effectiveness is through our Operating Margin Index (which we call Return on Sales [ROS]). In our organization, we consider that Operating Margin is driven by efficiency and innovation, as well as by a sustained improvement in performance.

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Figure 7.1-17 shows MFC has achieved a Compound Annual Growth Rate (CAGR) of 6.2% in Operating Margin. The major inflection point in 2003 parallels the implementation of re-engineered processes and our Enterprise Excellence System.

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Figure 7.1-17 Our Operating Margin

In our industry, carefully managing taxpayer money is critical. A key expense relates to the process for creating proposals and bidding on contract opportunities that vary from year to year. MFC maintains highly effective management of our Proposal Process, as seen in Figure 7.1-18.

MFC's Make or Buy Process (6.1a(1)) guides leaders in determining whether we should "Make" a product or if we should "Buy" it externally. By continuing to invest in workforce expertise and manufacturing capabilities, our "Make" option improves, as shown in Figure 7.1-19. These capabilities support all LOBs and products.

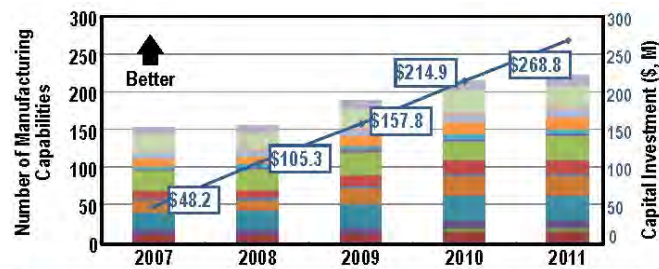


Figure 7.1-19 MFC's Capital Investments to Add or Improve Capabilities, Segmented by Capability, Support All LOBs and Products

At MFC, continuous improvement applies to the metrics we establish for reviewing, analyzing and evaluating performance. Our metrics are not static. We change to meet the needs and requirements of our customers, workforce, suppliers and our business. We are continually working to simplify our metric systems by reducing, consolidating and improving them. Figure 7.1-20 exhibits the cycles of improvement and refinement of our metrics for Tier I and Tier II, which are reviewed by the leadership team. These cover 100% of our Work Systems and 96% of the cost structure. Tier III and Tier IV metrics have increased to more than 2,500. Detailed information on our metrics system, including those for Tier III and Tier IV, are available on site.

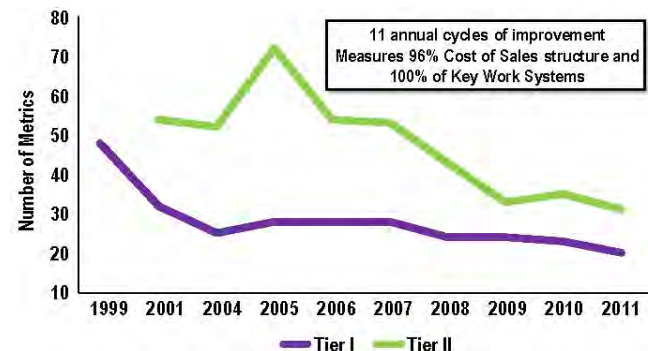


Figure 7.1-20 MFC Continues to Refine Performance Metrics Through Cycles of Learning and Improvement to Reduce, Consolidate and Improve Them

Missiles and Fire Control

7.1b(2) Emergency Preparedness: At MFC, we call our approach to emergency preparedness the Business Resiliency System (6.1c), and it is working. We consider a FEMA disaster that affects multiple MFC sites as multiple opportunities for down time. A MFC Crisis is an event that only impacts MFC and not the local area. **Figure 7.1-21** shows the number of events that could have resulted in an interruption of MFC's business and how our emergency preparedness mitigated our risk of disruption. **According to the KPMG Global Business Continuity Management Program Benchmark Study, MFC has a best-in-class Business Resiliency System.** MFC is also considered to have a top tier integrated Business Resiliency System.

Our Information Technology (IT) system is critical to the performance of our business and is Best in Class in several categories. The accuracy, security and availability of the system impacts the productivity and efficiency of the organization, whether in daily operations or in an emergency.

Figure 7.1-22 details that 19 attempts have been made to compromise our IT system. We remediated all of them, and none affected our business. Additionally, 100% of critical vulnerabilities were patched within 24 hours.

One aspect that influences the high stability of our IT system is our compliance with IT controls. **Figure 7.1-23** shows that we stayed at 100% compliance while decreasing the number of controls required to accomplish the goal. We have also decreased the number of IT processes and applications by 41% while maintaining the 100% compliance.

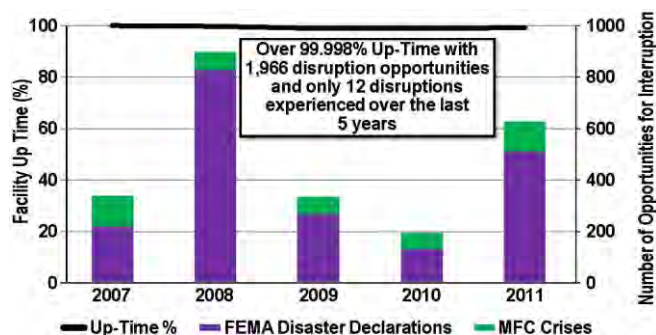


Figure 7.1-21 MFC's Strong Business Resiliency System Plans Resulted in Over 99.998% Up-Time Over Five Years

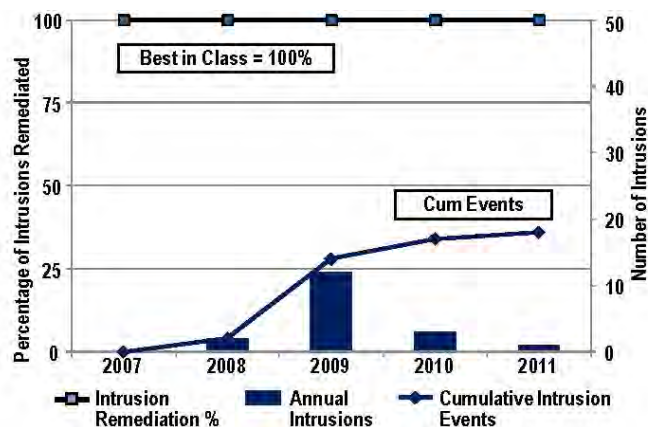


Figure 7.1-22 Careful Planning Prevents Intrusions



Figure 7.1-23 MFC Maintains a Best in Class 100% Compliance With a Significant Reduction in IT Controls

7.1c Strategy Implementation Results: Utilizing our Strategic Planning and Execution System (Fig. 2.1-1), we carefully gather, analyze and evaluate data to develop our Core Competencies, Strategic Plan and Action Plans. **Figure 7.1-24** details the reductions in cycle time that help us achieve our goals. On average, cycle time improvement takes two to three years because of the complexity of our products.

Product (LOB)	Initial C/T	Improved C/T	% Reduction
Product 1	30	11.4	62
Product 2	31	16	48
Product 3	26	14	46
Product 4	21	13.3	37
Product 5	23	16	30
Product 6	30	22.5	25

Figure 7.1-24 Reductions in Cycle Time, Segmented by Product and LOB

Figure 7.1-25 indicates the strength of our Core Competencies and the Category 7 Figures that show results we achieved based on our Core Competencies.

Figure 7.1-26 shows the results of the accomplishment of the MFC Strategic Objectives and key Action Plans based on the information detailed in Figure 2.2-1. As shown, we achieved or exceeded the goals we established for our Strategic Objectives and key Action Plans.

Core Competency	2009	2010	2011	Figures
Tech Innovation	Good	Good	Good	7.1-4, 7.1-5, 7.1-9, 7.2-8, 7.2-9
Customer	Good	Good	Good	7.1-3, 7.1-13, 7.2-2, 7.2-6, 7.2-7
Brand	Good	Good	Good	7.1-1, 7.1-2, 7.1-3, 7.2-8
Talent	Good	Good	Good	7.3-1, 7.3-5, 7.3-13, 7.3-21, 7.5-3

Legend: Excellent (Blue), Good (Green), Average (Yellow), Poor (Red)

Figure 7.1-25 MFC Builds and Maintains Strong Core Competencies

Careful management of planned orders is an important effort at MFC. Every year, original orders are postponed or cancelled, and we must still meet our Plan for the year.

Figure 7.1-27 shows our success in Orders Management

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Figure 7.1-26 MFC Has Achieved or Exceeded Our Strategic Stretch Goals for over 10 years, since 2001

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Figure 7.1-29 displays our competitive capture rate by market segments. The right axis details the Total Program Value – the amount of dollars the business is expected to yield throughout the lifetime of the program, including follow-on orders. **Figure 7.1-30** provides our win rate against our major competitors in all market segments.

Figure 7.1-27 MFC Performs Above Plan Despite Marketplace Volatility

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The next three figures detail MFC’s competitive win rate by looking at data in different ways, which is important for us to gain a clear picture of our role in the marketplace.

Figure 7.1-28 shows the percentage of business MFC captures when competing against another company for the same contract, segmented by LOB. MFC is continuing to increase our win rate in a highly competitive market environment.

Figure 7.1-29 MFC’s Competitive Win Rate By Market and Year and the Financial Value of Wins by Year

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Figure 7.1-30 MFC Won 71% of the Dollar Value of Wins Against Other Competitors

Figure 7.1-28 MFC Captures a High Percentage of Competitive Bids as a Result of Strategic Planning and Implementation

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Missiles and Fire Control

Figure 7.1-31 shows that we consistently exceed our Plan for Core orders, even when these orders have a high rate of volatility (2.1a(2)).

Figures 7.1-32 indicate that we are also accomplishing another key Strategic Objective by continuing to increase the number and value of orders from International markets.

Another of our key Strategic Objectives is to capture Customer Research and Development (CRAD) dollars from our customers to fund technology innovations. **Figure 7.1-33** shows that MFC continues to exceed our plans in terms of CRAD funds awarded.

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Figure 7.1-31 MFC Continues to Exceed Our Plan in Core Markets

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Figure 7.1-32 Our Growth in International Markets Supports Our Strategic Objectives

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Figure 7.1-33 Based on High Performance, Customers Continue to Fund MFC's Technology Innovations Through CRAD Awards

7.2 Customer-Focused Outcomes

7.2a Customer-Focused Results

7.2a(1) Customer Satisfaction: MFC evaluates customer satisfaction in several ways. First, we track the Cost and Schedule of each product against a baseline agreed to with our

customer. **Figure 7.2-1** shows the percentage of programs that were rated green based on the customers' rating scale.

We also capture Customer Performance Assessment Report (CPAR) scores, which we relate to the amount of follow-on business we receive. **Figure 7.2-2** displays this correlation and indicates that although the industry average is declining, MFC's score continues to rise, along with follow-on orders. It includes two data point benchmarks from a previous Baldrige winner. **Figure 7.2-7** segments the number of follow-on orders we have received from these customers by LOB,

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Figure 7.2-1 Customers Continue to Show High Satisfaction with MFC's Program Performance

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Figure 7.2-2 High Customer Satisfaction with MFC – Exceeding Industry and Baldrige Benchmarks -- Results in an Increasing Number of Follow-on Orders

One question on the CPAR asks if the customer would select MFC for future business. In 2011, 100% of our customer ratings consisted of the top two choices: "Definitely" would or "Probably" would select MFC for future business. These results are shown in **Figure 7.2-3**.

Customer satisfaction is contingent on our systems meeting or exceeding performance and up-time requirements when they are sent to the field. **Figure 7.2-4** details the high performance levels of our systems when they are used by warfighters. As wartime efforts are being reduced, we have fewer deployed systems in the field. Thus, we are measuring performance against a lower number of opportunities.

Another customer contract requirement is the percentage of time spare parts are available when needed in the field. MFC's performance in the availability of spare parts is shown in **Figure 7.2-5**.

Missiles and Fire Control

7.2a(2) Customer Engagement: The amount of follow-on business that customers award to MFC is an element of engagement as well as satisfaction. **Figure 7.2-7** indicates the amount of orders that were follow-on contracts by LOB.

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Figure 7.2-3 In 2011, 100% of Customers “Definitely/ Probably Would Select MFC for Future Business”

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Figure 7.2-4 MFC Systems Exceed Performance Requirements in the Field

Figure 7.2-7 Each LOB Receives Follow-on Orders Which Demonstrate Customer Engagement with MFC

An element that drives customer engagement is MFC innovations in technology and products. One of our Core Competencies is “Creating Innovative Technological Solutions,” and customers respond to our competencies in this area with additional product orders. **Figure 7.2-8** indicates the correlation between innovation and orders.

Often, MFC and the customer are jointly engaged in the innovation and improvement process, and MFC may fund innovation and improvement efforts to solve a customer problem. This type of strong customer engagement leads to new orders for the next generation of product solutions. **Figure 7.2-9** indicates the dollar value of orders based on customer engagement in the innovation process. The results shown include innovations for our Core, Adjacent and International market segments, segmented by LOB.

Perhaps our greatest indication of customer engagement is the testimonials we receive from the warfighters we support. A few of these are quoted in **Figure 7.2-10**.

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Figure 7.2-5 MFC Exceeds Availability Requirements for Spare Parts in the Field

MFC utilizes the CPAR to gauge dissatisfaction as well as satisfaction. **Figure 7.2-6** displays the positive trends in customer dissatisfaction.

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Figure 7.2-8 Innovations Contribute to Customer Engagement and Lead Directly to Growth in Business

Figure 7.2-6 MFC Is Consistently Reducing Customer Dissatisfaction

Missiles and Fire Control

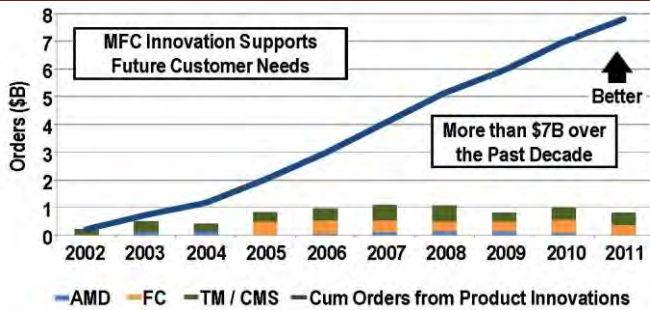
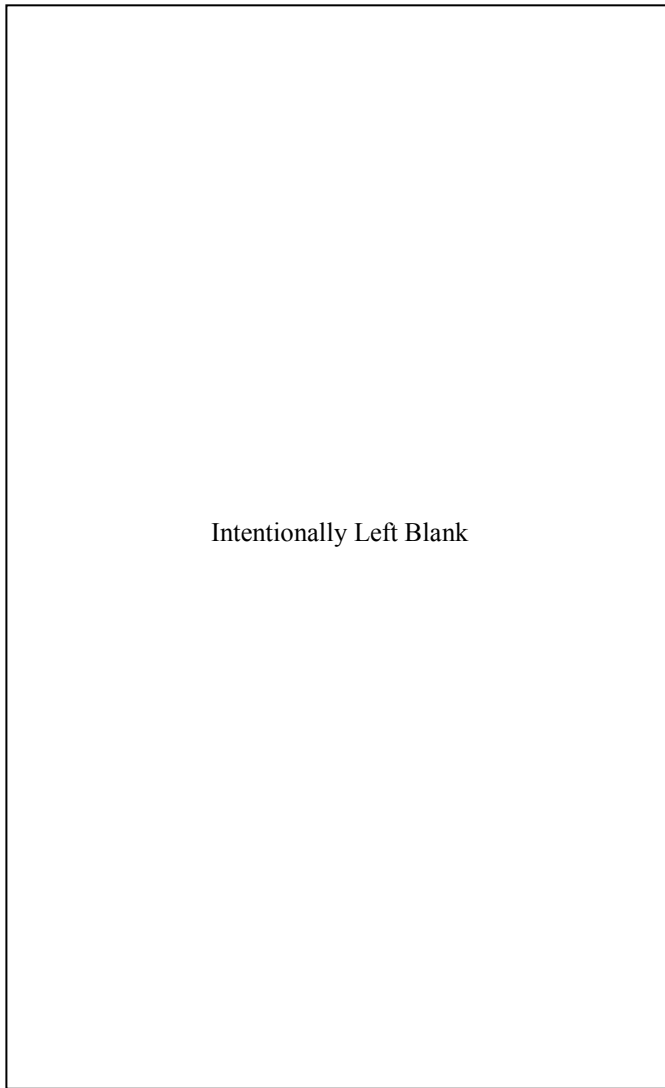


Figure 7.2-9 MFC Innovation Results in Orders for Product Improvements



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Figure 7.2-10 Warfighters Are Highly Engaged with MFC Products and Organization

7.3 Workforce-Focused Outcomes

7.3a Workforce Results

7.3a(1) Workforce Capability and Capacity: A key to success at MFC is assuring that the right people with the right knowledge and skills are in the right job at the right time. Reviewing, analyzing and evaluating workforce capability and capacity is an on-going effort at MFC. Enhancing our capacity requirements is associated with increasing the

productivity of the current workforce through management and process improvements. **Figure 7.3-1** reports our Return on Human Capital. We arrive at this metric by dividing Net Operating Profit After Tax (NOPAT) by employee cost. This indicates that our work output is increasing faster than we are adding employees.

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Figure 7.3-1 Our Return on Human Capital has a Compound Annual of Growth Rate of 8%, Meaning MFC is Increasing Output Faster than We are Adding Employees

Sales per Employee is another measure of workforce capability and capacity. **Figure 7.3-2** shows our results for this measure against key competitors.

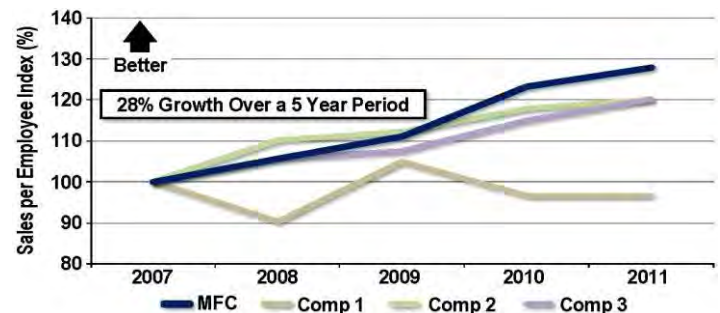


Figure 7.3-2 MFC Sales per Employee Exceeds that of Key Competitors

MFC effectively manages our manpower capacity in order to meet business needs and minimize reductions in the workforce. **Figure 7.3-3** shows these results.

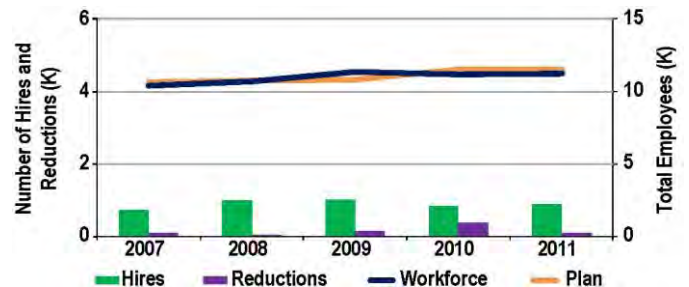


Figure 7.3-3 MFC Accurately Hires to Plan, Minimizing Volatility in the Workforce

We carefully plan the type and level of employees we add to our workforce to optimize both capabilities and capacity. As shown in **Figure 7.3-4**, we place a higher emphasis on technical personnel as opposed to non-technical applicants.

Missiles and Fire Control

This reflects the technical nature of our work and our policy of promoting from within when possible.

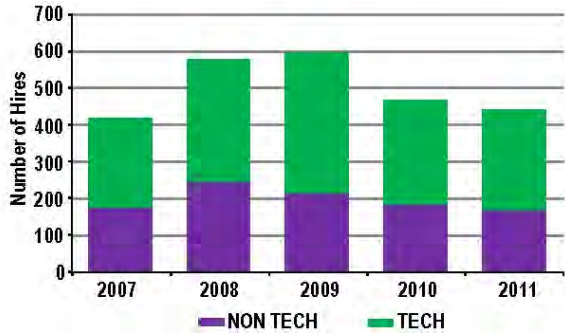


Figure 7.3-4 MFC Hiring Patterns are Segmented by Technical versus Non-Technical

As discussed in 5.1a(2), MFC hires highly capable interns and co-op students as a part of our entry-level pipeline strategy. Upon graduation, we offer positions to the best of the best. Figure 7.3-5 presents our conversion rate of these individuals to regular employees. Our conversion rates are better than the benchmark from National Association of Colleges and Employers (NACE).

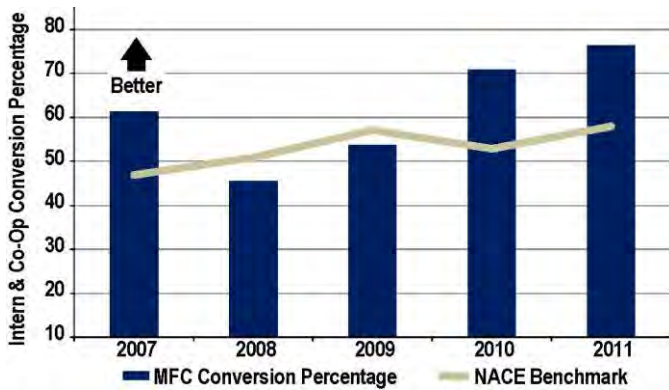


Figure 7.3-5 MFC Converts a Greater Percentage of Interns /Co-Op Students to Employees Than a NACE Benchmark

7.3a(2) Workforce Climate: MFC provides a work environment that is safe, healthy and productive. Figure 7.3-6 outlines the capital investment and maintenance expenditures we make to ensure these outcomes.

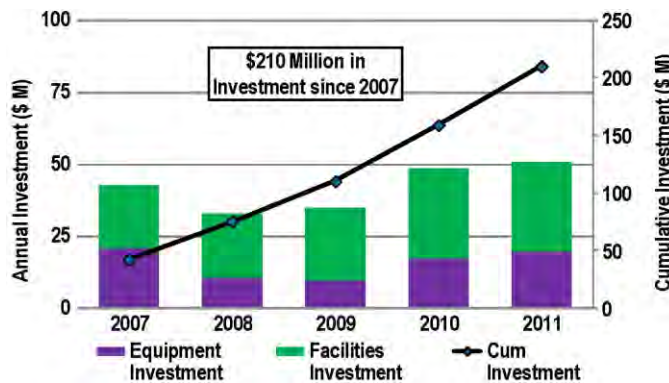


Figure 7.3-6 MFC Continues to Invest in Facilities and Equipment for a Safe, Healthy and Productive Workplace

One question on the MFC employee survey, *LM Voice*, asks about how the site manager performs in providing a safe, healthy and productive workplace. Below are examples of the response, segmented by site, as shown in Figure 7.3-7. Although we segment and review survey results in many ways, we have found that when evaluating the types of responses shown in this application, reviewing by site provides the best insight into workforce satisfaction and engagement. These sites represent those that conduct 95% of our contracted work.

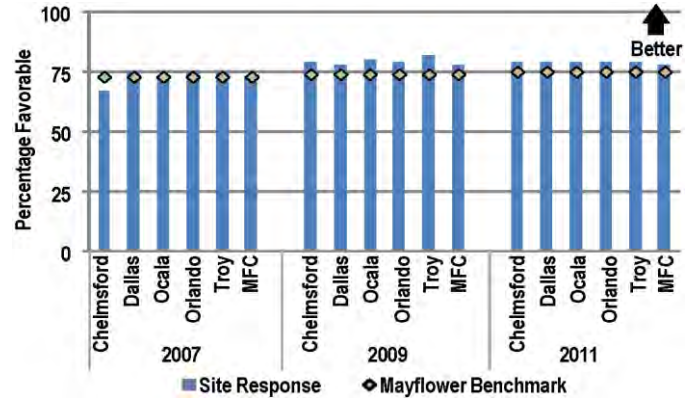


Figure 7.3-7 Segmented by Site, Employees Respond Favorably to Questions About Managers' Performance in Providing a Safe, Healthy and Productive Environment

MFC maintains an active focus on workplace health and safety. Figure 7.3-8 reports the "Days Away Case Rate," an OSHA metric and provides comparisons against our industry and competitors. Figure 7.3-9 segments these data by site.

Figure 7.3-10 presents the Recordable Incident Rate for MFC compared to our industry and competitors.

MFC engages employees in identifying potential hazards in the workplace. Results, as shown in Figure 7.3-11, indicate a strong employee involvement in safety performance. Our culture is focused on employee communication of potential hazardous issues via close call reports, formal inquiries and risk/safety suggestions from PMTs. In 2011, we implemented a program through the PMT process for encouraging the identification of hazard, risk and safety risk suggestions. The yellow bar indicates the positive result of this action.

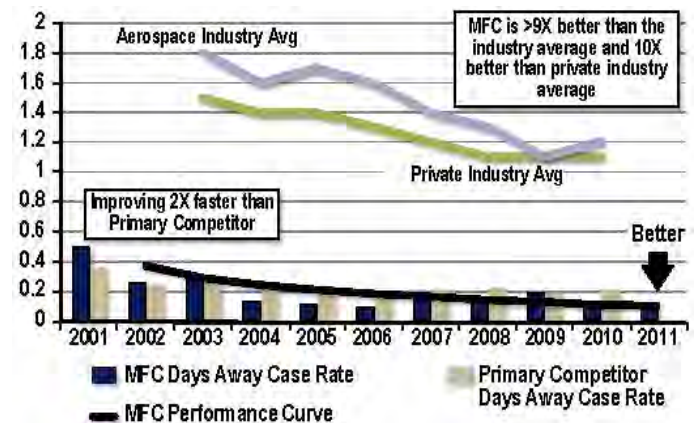


Figure 7.3-8 MFC Excels on the OSHA "Days Away Case Rate"

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Days Away Case Rate by Site						
Site	2007	2008	2009	2010	2011	2012
Archbald	0.00	0.18	0.37	0.48	0.00	0.00
Camden	0.21	0.20	0.18	0.00	0.00	0.00
Chelmsford	0.00	0.00	0.77	0.00	0.73	0.00
El Paso	0.00	5.89	0.00	0.00	5.06	0.00
Grand Prairie	0.19	0.20	0.26	0.07	0.14	0.00
Japan	0.00	0.00	0.00	0.00	0.00	0.00
Lufkin	1.03	0.00	0.00	0.00	0.00	0.00
Ocala	0.00	0.00	0.00	0.11	0.10	0.00
Orlando	0.11	0.04	0.04	0.08	0.00	0.00
Santa Barbara	0.69	0.00	0.00	1.48	0.48	0.00
Troy	0.42	0.00	0.00	0.00	0.00	0.00
WSMR	0.00	0.00	0.00	0.00	0.00	0.00
MFC	0.19	0.08	0.14	0.11	0.08	0.00
Gyrocam (new)	N/A	N/A	N/A	0.00	0.00	0.00
Amphill (new)	N/A	0.54	0.90	0.45	0.00	0.75
Littleton (new)	N/A	0.00	0.00	0.00	0.00	0.00
MFC (with new sites)	0.19	0.13	0.18	0.12	0.08	0.04
Primary Competitor	0.22	0.23	0.19	0.22	N/A	N/A
Private Industry Avg	1.2	1.1	1.1	1.1	N/A	N/A
Aerospace Industry Avg	1.4	1.3	1.1	1.2	N/A	N/A

Figure 7.3-9 Days Away Case Rate, Segmented by Site

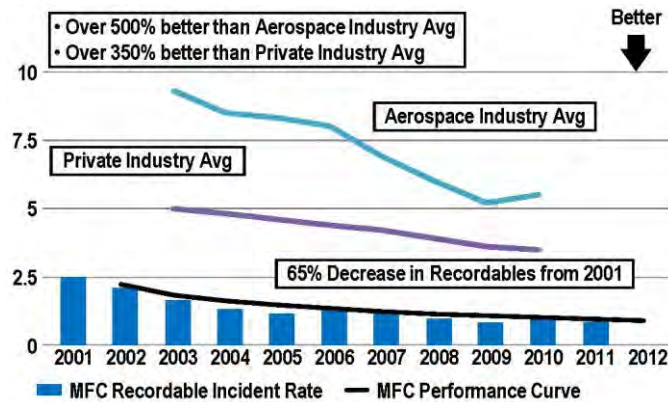


Figure 7.3-10 MFC Focuses on Achieving a Low OSHA Recordable Incident Rate

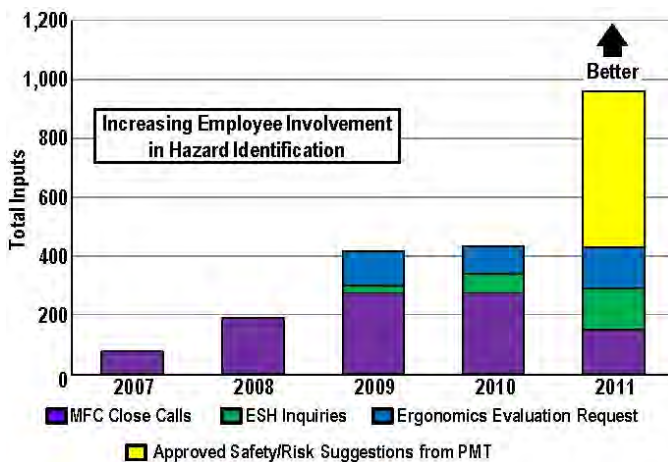


Figure 7.3-11 Employee Engagement in Hazard Identification is a Leading Indicator of Safety Performance

One of the LM Voice survey questions asks employees, "Considering everything, how would you rate your overall

satisfaction with MFC?" Figure 7.3-12 shows the rating for this question, as well as the Mayflower benchmark.

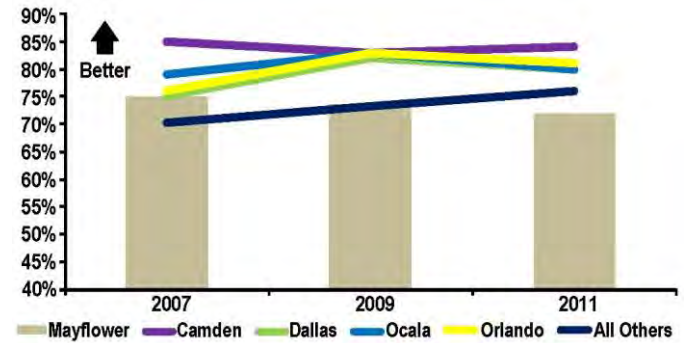


Figure 7.3-12 Employees Express a Favorable Rating for Overall Satisfaction with MFC, Segmented by Site

7.3a(3) Workforce Engagement: At MFC, we believe that employees who are engaged with their work perform more productively and effectively. Therefore, one measure we review to determine workforce engagement is the Earning Before Income Taxes (EBIT) per employee. Figure 7.3-13 shows MFC's EBIT per employee and how it surpasses that of others in our industry.

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Figure 7.3-13 MFC's EBIT Per Employee is One of the Highest in Our Industry, Indicating a Strong Level of Engagement

Another question on the LM Voice survey rates how proud employees are to work at MFC, segmented by exempt and non-exempt employees. The results are shown in Figure 7.3-14, along with a benchmark from Mayflower.

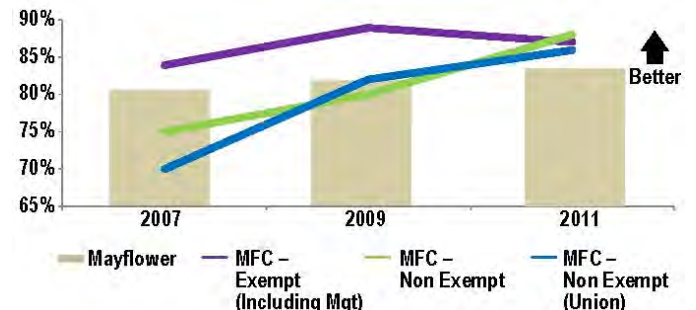


Figure 7.3-14 Employees Respond to LM Voice Survey Question That They Are Proud to Work for MFC, Segmented by Exempt and Non-Exempt Employees

The Human Resources department at MFC collects, reviews, analyzes and evaluates metrics used to identify employee engagement. The department maintains an Index

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on Talent Readiness, which is detailed in **Figure 7.3-15**. This Index is one of the primary tools we use to gauge the workforce on a regular basis. It is comprised of four indices shown below. These indices are scored from 100 to 1000. The system is weighted so that there is a “sweet spot” between the 700 and 800 levels. When we consider changes or improvements, the modeling and simulation capabilities of the system lets us understand at what point these add value and at what point we reach a level of diminishing returns.

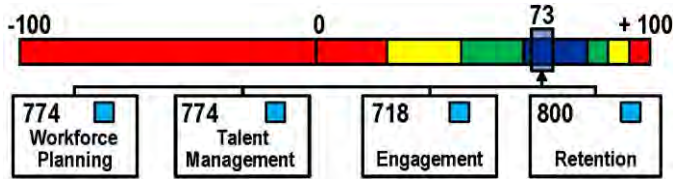


Figure 7.3-15 The Talent Readiness Index Identifies an Excellent Level of Engagement at MFC

Another way MFC evaluates employee engagement is by the percentage of participation in the *LM Voice* survey. In 2011, we intensified our efforts to encourage participation, resulting in 82% of employees completing the survey, as shown in **Figure 7.3-16**. This was the highest percentage of participation within Lockheed Martin.

MFC considers employee retention as an element of employee engagement. Through the years, MFC has consistently surpassed national averages and the top quartile in 2010 and 2011, as shown in **Figure 7.3-17**.

Over 3,600 production employees (100%) participate in 131 PMTs at MFC, a rate that exceeds an *IndustryWeek* “best” of 98.4% (**Figure 7.3-18**).

At MFC, we sponsor many reward and recognition programs, as seen in **Figure 7.3-19**. Over the past five years, MFC awarded over \$19 million for rewards and recognition.

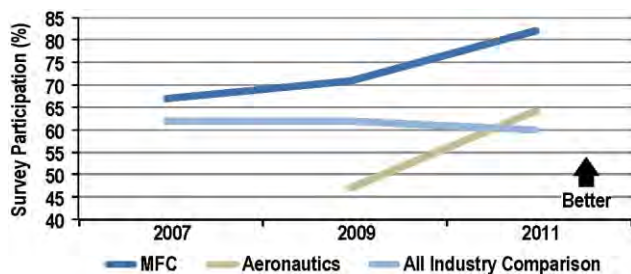


Figure 7.3-16 A High Percentage of the Workforce Participates in the *LM Voice* Survey, Indicating Engagement

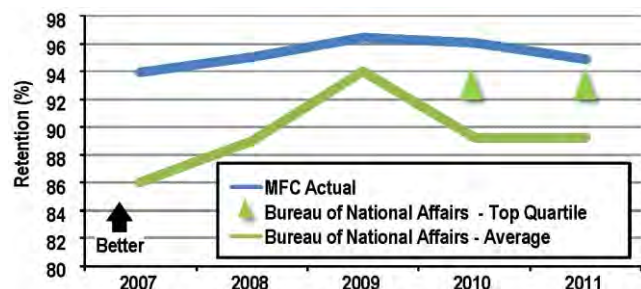


Figure 7.3-17 MFC Retains Employees at a Much Greater Rate than the Top Quartile Benchmark

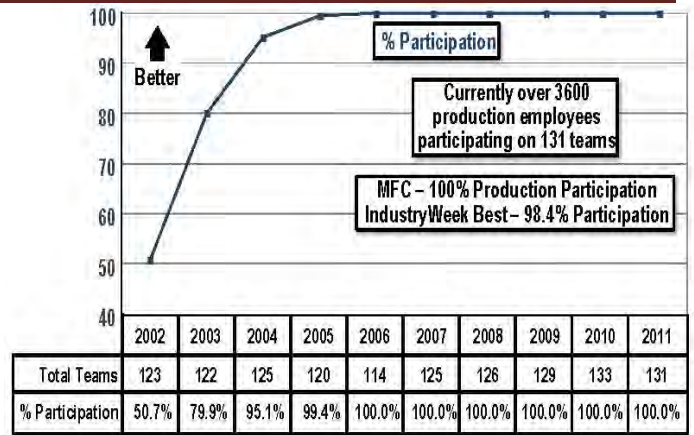


Figure 7.3-18 MFC Can Claim a World-Class Production Participation Rate on PMTs

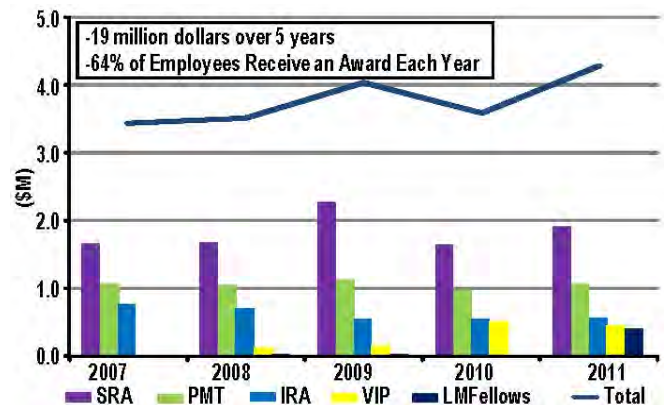


Figure 7.3-19 MFC Supports Several Major Reward and Recognition Programs Through Encouragement and Dollars

MFC employees are strongly engaged in innovation. This is measured in **Figure 7.3-20** as the number of patents per 1,000 people, segmented by LOB. The Figure also indicates comparisons to our competitors.

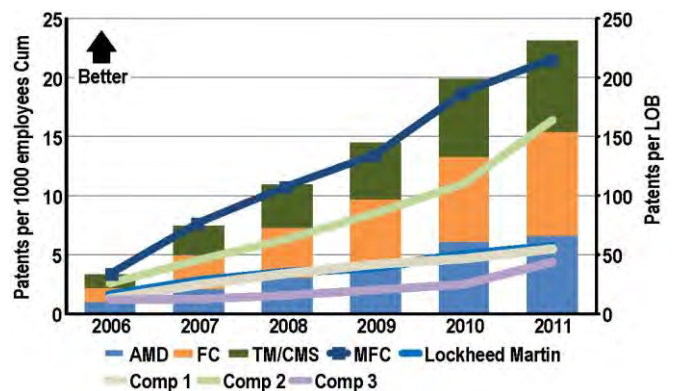


Figure 7.3-20 The Workforce at MFC is Continuously Creating Innovation Solutions, Surpassing the Competition

When using Lost Time as a measure of engagement, MFC exceeds the Bureau of National Affairs benchmark by 12%. This is displayed in **Figure 7.3-21**.

Missiles and Fire Control

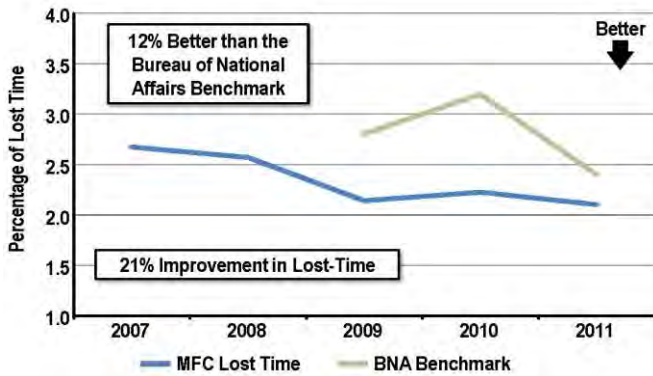


Figure 7.3-21 MFC Exceeds a National Benchmark When Measuring Lost Time and Achieves a 21% Improvement

7.3a(4) Workforce Development: MFC makes a considerable investment in continuous workforce and leader development and training. Figure 7.3-22 shows MFC average hours of quantifiable learning exceed national benchmarks. The ASTD benchmark is an average number, and the APQC benchmark indicates top quartile.

MFC invests in the future through early career Leadership Development Programs, shown in Figure 7.3-23 and segmented by type of program. Figure 7.3-24 demonstrates the impact of our Leadership Development Program. This shows that 75% of our leadership positions have been filled by internal candidates who we prepared for these roles. Our strategy is to develop our talent and promote from within.

Working with Lockheed Martin Corporate Human Resources, we recruit entry-level hires with Lockheed Martin co-op/intern experience and/or from key colleges and universities that we have strategically determined to provide the best candidates for our industry. Figure 7.3-25 demonstrates that these new hires have significantly higher performance ratings than the average new hire.

In 1999, MFC launched Lean Manufacturing and Six Sigma (LSS) techniques and tools as a strategic part of our transformative journey toward excellence. We have continued to expand and improve our LSS capabilities and participation with all programs. Our dedication to continuous improvement has resulted in a large number of Green Belts and Black Belts who lead our improvement efforts. As shown in Figure 7.3-26, MFC significantly surpasses the benchmarks indicated.

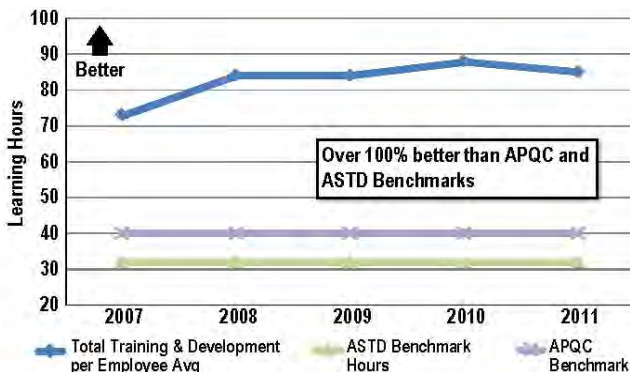


Figure 7.3-22 MFC's Commitment to Workforce and Leader Development is Higher than Respected National Benchmarks

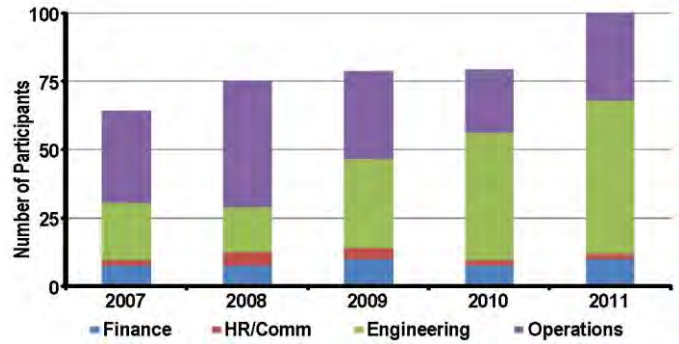


Figure 7.3-23 The Number of Participants in MFC's Early Career Leadership Development Programs is Increasing

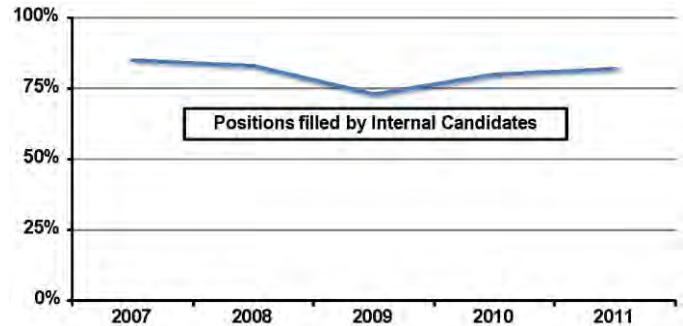


Figure 7.3-24 Our Strategic Focus on Development and Knowledge Continuity Enable Us to Fill Positions Internally

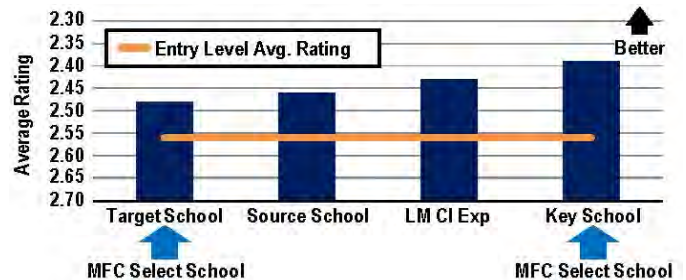


Figure 7.3-25 Entry-Level Professionals Hired From Strategically Selected Schools Show Higher Performance than the Average Entry-Level Professional at MFC

Year	MFC Green Belts	Green Belt Benchmark	MFC Black Belts	Black Belt Benchmark
2006	16%	3%	3%	1.2%
2007	16%	3%	3%	1.2%
2008	16%	3%	3%	1.2%
2009	18%	3%	3%	1.2%
2010	21%	3%	3%	1.2%
2011	23%	3%	3%	1.2%
2012	23%	3%	3%	1.2%

MFC has 8x more Green Belts and 1.5x more Black Belts trained than an "organization focused on effective process improvements," according to expert Forrest Breyfogle III (2012)

Figure 7.3-26 MFC Has Trained Green Belts and Black Belts to Lead Our Journey Toward World-Class Performance Excellence

MFC's Knowledge Management Process (Fig. 4.2-2) drives the continuity and transfer of knowledge within our organization. Figure 7.3-27 shows how knowledge transfer occurs in our mentoring and knowledge continuity programs.

Missiles and Fire Control

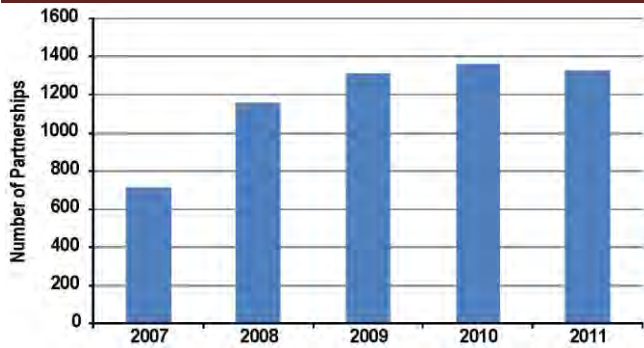


Figure 7.3-27 Mentoring Partnerships Drive Knowledge Transfer

7.4 Leadership and Governance Outcomes

7.4a Leadership, Governance and Societal Responsibility Results

7.4a(1) Leadership: MFC senior leaders apply a robust Communication System (Fig. 1.1-3) to communicate with employees about Vision and Values, Strategic Objectives and Action Plans, company direction, workforce and individual questions and/or concerns and other topics. We continually improve our approach to ensure workforce engagement.

Figure 7.4-1 shows a positive trend in employee response to the *LM Voice* survey question, “Leadership gives employees a clear picture of the direction in which MFC is headed.”

Figure 7.4-2 reports employee response to the *LM Voice* survey question, “Leadership Creates an Environment That Allows Employees to Perform at Their Best.”

Employees responses to the *LM Voice* survey question, “Overall, how good a job is being done by your leadership?” is shown in Figure 7.4-3.

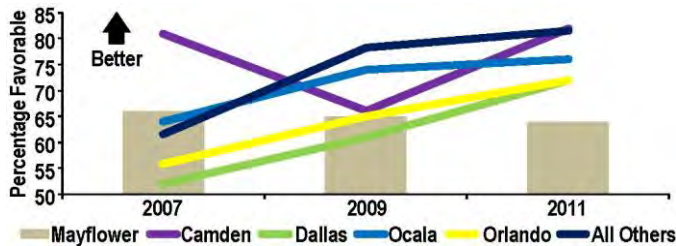


Figure 7.4-1 Employees Provide Positive Response to the Survey Question, “Leadership Gives Employees a Clear Picture of the Direction in Which MFC is Headed.”

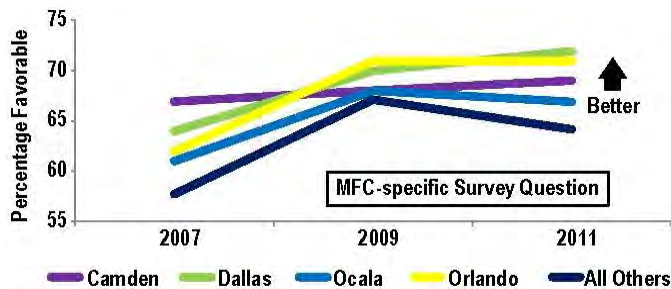


Figure 7.4-2 Employees Agree That Leadership Creates an Environment That Allows Them to Perform at Their Best

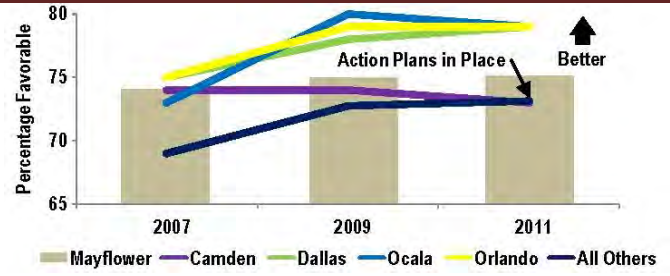


Figure 7.4-3 A High Percentage of Employees Believe That MFC Leadership is Doing a Good Job.

7.4a(2) Governance: MFC finances are carefully audited every year, both by internal auditors and by the government.

Figure 7.4-4 reports the number of System Surveillance Reviews and Findings conducted each year by government agencies. MFC has approximately the same number of these audits each year with few or no findings.

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Figure 7.4-4 MFC Displays Outstanding Financial Audit Results With Very Few or No Findings

7.4a(3) Law and Regulations: MFC’s Governance System (Fig. 1.2-1) requires absolute compliance with the multitude of regulations under which we operate. Any critical regulatory actions against us could literally shut down our business. Figure 7.4-5 details MFC’s strict level of compliance to our key laws and regulations. MFC is subject to many regulations related to security. Our dedication to continuous improvement has resulted in MFC consistently exceeding regulatory requirements for security, as shown in Figure 7.4-6.

Figure 7.4-7 details the results of the Earned Value Management System (EVMS) audit that the customer conducts on our program financial system on an annual basis. This audit was introduced in 2007, and most companies in our industry performed poorly during the audit. No audits were performed in 2008 to allow companies time to improve their systems. As a result of our improvement efforts, from 2007 to 2011, MFC has achieved a 100% improvement in audit findings, going from 109 discrepancy reports in 2007 to zero discrepancy reports in 2011, with a “Low Risk” rating.

Law & Regulation	Measure	Results				
		2007	2008	2009	2010	2011
OSHA	Critical Regulatory Actions	0	0	0	0	0
EPA		0	0	0	0	0
ITAR/EAR		0	1	0	0	0
ATF		0	0	0	0	0
FAR/JDFAR		1	0	0	0	0
Regulatory Audits Performed		230	101	181	175	130
Note: All Incidents have been closed to Agency Satisfaction Data for all sites, LOBs, customers, and employees						

Figure 7.4-5 MFC Strictly Complies With Laws and Regulations

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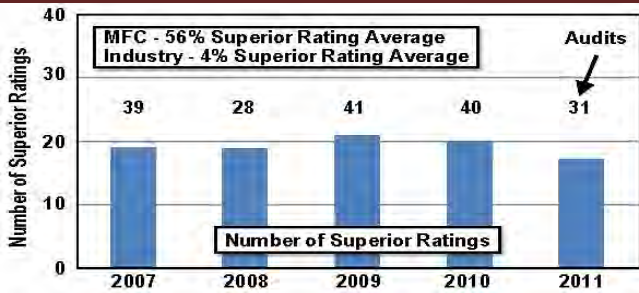


Figure 7.4-6 MFC Consistently Receives Superior Ratings During Regulatory Audits for Security

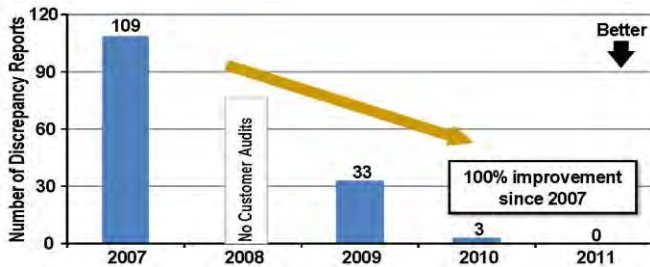


Figure 7.4-7 MFC Has Continuously Improved Results From the Customer's EVMS Audits

7.4a(4) Ethics: As discussed in P.1a(1) and 1.1a(2), ethical behavior is a cornerstone of our company and our culture.

MFC has developed required training in ethical behavior, established an Ethics Hot Line and created an Ethics Department that reports directly to the President. Figure 7.4-8 displays the issues, metrics, goals and results that we use to evaluate the degree of ethical behavior in the organization. Figure 7.4-9 reports employee responses about the highly ethical environment at MFC on the LM Voice Survey. As shown in Figure 7.4-10, MFC employees firmly believe they are well prepared to handle situations that could lead to violations of MFC's standards on ethical business conduct.

Issue / Process	Goal	Measure	2007	2008	2009	2010	2011
Case Rate	0.000		0.000	0.004	0.003	0.002	0.006
Employees Trained in Ethics Awareness Training	100	%	100	100	100	100	100
Employees that took LM Voice Survey	100		67	N/A	71	N/A	82
Employee Conduct	0	Substantiated Allegations	16	10	9	28	20
Attendance and Reporting (Charging Practices)	0		3	3	2	3	12
Violence, Threats and Harassment	0		10	6	3	6	3
Leadership Competencies	0		7	2	4	11	8
Substance Abuse	0		1	0	0	0	0
Misuse of Company Assets	0		3	5	3	10	14
Environmental, Safety, Health and Wellness	0		0	0	0	0	0
Quality Assurance (Mfg, Quality or Services)	0		1	1	1	0	2

Figure 7.4-8 The Case Rate for Breaches in Ethical Behavior are Extremely Small Compared to the Overall Number of Employees

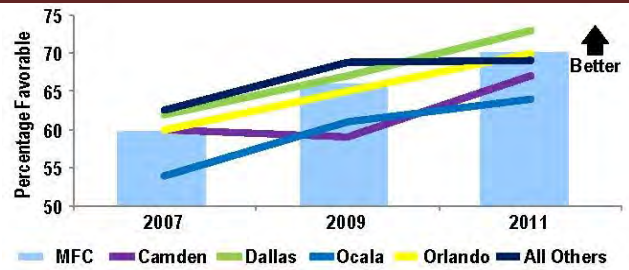


Figure 7.4-9 A Very Large Percentage of Employees Believe that MFC Promotes a Highly Ethical Environment

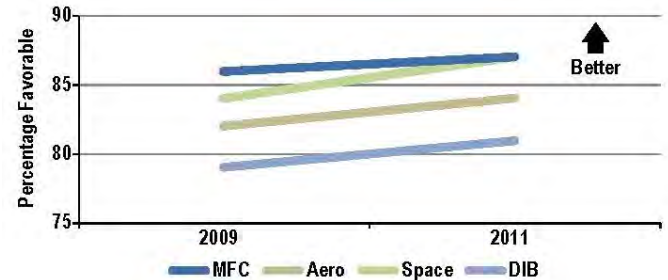


Figure 7.4-10 Survey Responses Indicate That MFC Employee Believe They are Prepared to Handle Situations that Might Violate Our Ethical Business Conduct Standards

7.4a(5) Society: As a part of our societal responsibility, MFC is committed to reducing environmental waste through our "Go Green" initiative. Figure 7.4-11 displays the improvements we have made since the start of the program in 2007. Our efforts continue to improve year by year. We are also reducing the amount of waste we generate, even as deliveries have increased. Figure 7.4-12 shows these results.

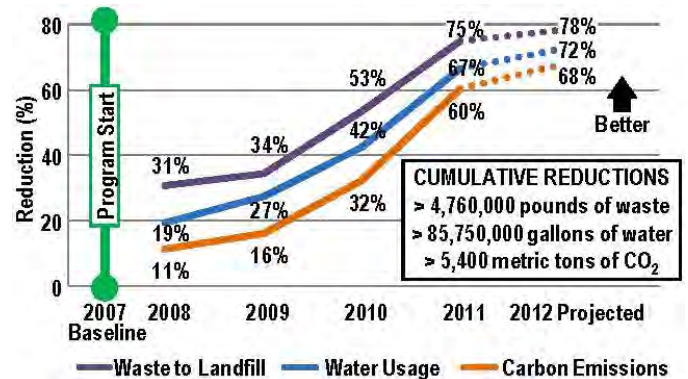


Figure 7.4-11 MFC Has Reduced Our Environmental Footprint

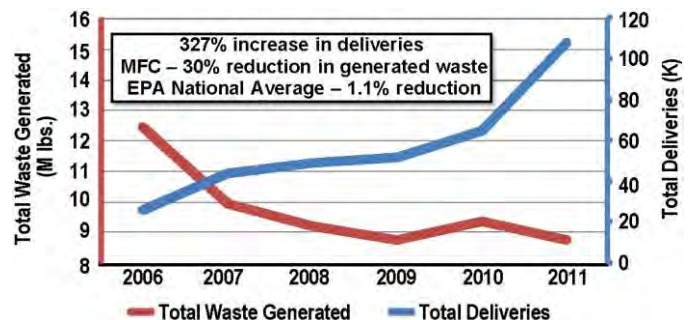


Figure 7.4-12 MFC is Reducing Generated Waste While Increasing Sales and Deliveries

Missiles and Fire Control

MFC and our employees support our local communities through charitable giving. While not shown in Figure 7.4-13, our leaders and employees commit time as well as dollars to our communities, and details are available on site. Figure 7.4-14 indicates the heavy involvement our leaders have with our communities, including serving on Boards of Directors with various charitable and community service organizations.

The results of the efforts by MFC leadership and employees on our Journey Toward World-Class Performance Excellence have been recognized at national, state and local levels. Each national award received is an external validation of our Performance Excellence system and confirms that our Journey has, and is, paying considerable dividends to the organization and the tax payers. We have received a number of coveted industry awards including: The **Cogswell Award**, the most prestigious honor in the industrial security field; the **William J. Perry Award** for significant contributions to precision strike systems; **Daedalians Distinguished Achievement Award** presented in recognition of outstanding feats of enduring achievements in the field of aeronautics; and the **Eisenhower Award for Excellence in Small Business Utilization**. Figure 7.4-15 segments the awards by type.

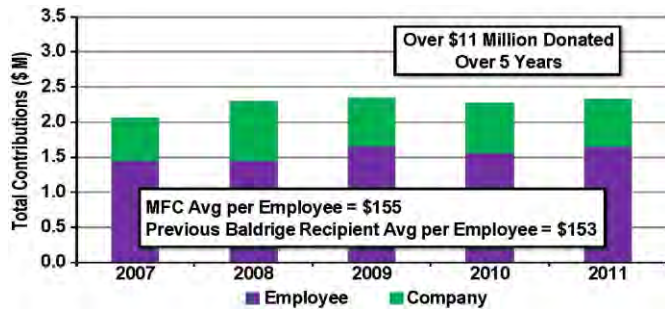


Figure 7.4-13 MFC is Generous to Our Communities

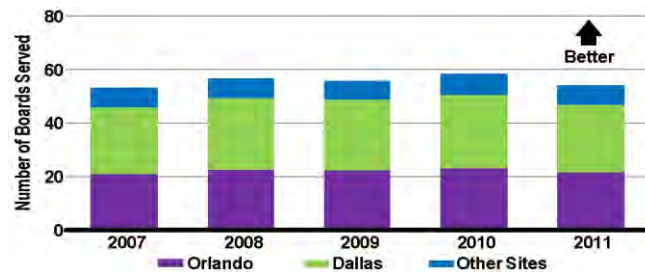


Figure 7.4-14 Executives Serve on Many Community Boards

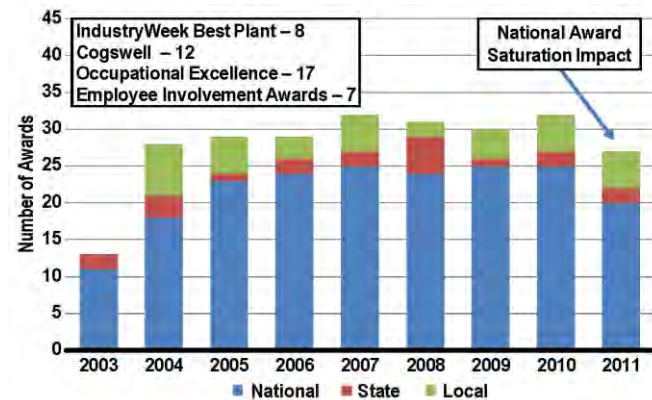


Figure 7.4-15 MFC is Widely Recognized for Excellence by National, State and Local Entities

7.5 Financial and Market Outcomes

7.5a Financial and Market Results

7.5a(1) Financial Performance: **NOTE:** Missiles and Fire Control operates as a business unit within the Electronics System business Area of Lockheed Martin. Disclosure of financial information for the business unit is governed by the reporting practices that are in place for SEC filings and other public information release. Any information required for clarification, that cannot be publicly released, will be discussed on-site.

As MFC has moved toward world-class Performance Excellence, our financial management has followed suit. Figure 7.5-1 depicts 11 years of consistent improvement in key financial metrics. In-depth information about all financial measures shown here are available on site.

Figure 7.5-2 illustrates our Return on Investment (ROI) over the same period. These financial returns are driven by MFC's superior asset management and outstanding efficiency.

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Figure 7.5-3 shows Sales per Employee compared to the S & P 500 Capital Goods Manufacturing Index.

Figure 7.5-4 displays Cost Performance Against Contract Baseline for our LOBs.

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Since 2008, because of innovations and improvements, we have consistently improved cost performance as compared to both the targeted contract cost and our continually tightening performance baselines.

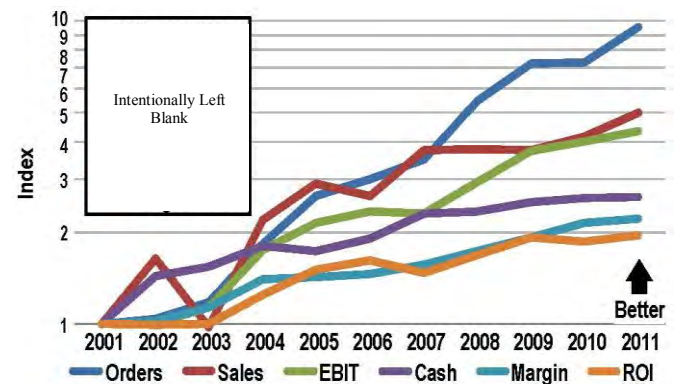


Figure 7.5-1 As MFC Has Focused on Operational Results, Growth and Financial Performance Have Flourished

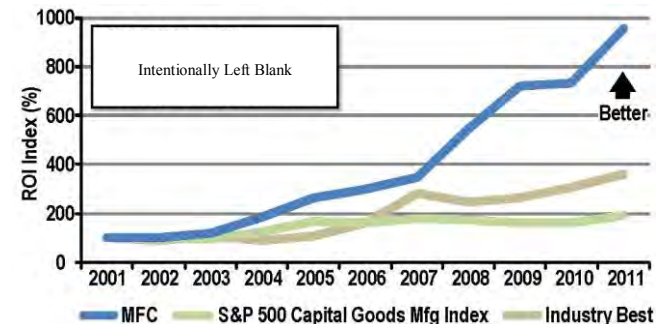


Figure 7.5-2 MFC Exceeds High-Quality Benchmarks in Return on Investment

Missiles and Fire Control

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surpassing our Plan. MFC is also capturing orders at a level above our Plan in our LOBs, as shown in **Figure 7.5-8**.

MFC is now taking an offensive marketing approach in our International and Adjacent market segments, as shown in **Figure 7.5-9**. As these results show, MFC is growing in a market that is shrinking.

Figure 7.5-3 MFC Exceeds National Benchmark When Reporting Sales per Employee

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Figure 7.5-5 shows MFC accomplishments in space utilization by presenting our Total Annual Facility Cost per Square Foot. Despite the inevitable increase in energy costs, MFC is more than offsetting cost growth by reducing facilities cost elsewhere and utilizing resources efficiently.

Figure 7.5-6 MFC's Market Share is Growing in a Contracting Market at a Faster Pace Than Our Primary Competition

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Figure 7.5-4 MFC LOBs Consistently Perform Under the Contract Cost Target

Figure 7.5-7 We are Increasing Market Share and Orders Growth in All of Our Key Market Segments

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Figure 7.5-8 MFC Has Strong Orders Growth Across All Lines of Business (LOBs)

Figure 7.5-5 High Productivity Helps Reduce the Total Annual Facility Cost per Square Foot

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7.5a(2) Marketplace Performance: Although the defense industry market is contracting, **MFC is both increasing our market share and increasing the share at a faster rate than our primary competitor.** These data are shown in **Figure 7.5-6**. The DoD strives to maintain multiple competitors in the same markets to prevent dominance of one company with a large market share. Based on this knowledge we derived a theoretical Market Cap at 50% market share.

Figure 7.5-7 indicates that MFC is increasing market share and orders growth in our key market segments (see Fig. 7.1-29 for segmentation). Our results in these areas are

Figure 7.5-9 MFC is Capturing an Increasing Share of Incumbents' Markets

Glossary of Abbreviations and Terms

4-blocker A tool used to communicate, address and solve issues (Blocks: Data, Assessment, Problem, Action)

A

A&D Aerospace and Defense
 ABR Average Base Rate
 ADA Americans With Disabilities Act
 AEC Atomic Energy Commission
 AMD Air and Missile Defense Line of Business
 APECS An ERP system (Orlando)
 APQC American Productivity and Quality Center
 ASR Acquisition Strategy Review
 ASTD American Society for Training and Development
 ATACMS Army Tactical Missile Systems
 ATF Alcohol, Tobacco and Firearms Administration
 ATP Advanced Targeting Pod

B

B&P Bid and Proposal
 BCG Business Conduct Guidelines
 BCMS Business Continuity Management System
 BCP Business Continuity Plan
 BD Business Development
 BMP Best Manufacturing Practices Organization
 BNA Bureau of National Affairs
 BOM Bill of Materials
 BPR Business Performance Reviews
 BSD Business Strategy Development
 BS&D Business Strategy and Development

C

C/T Cycle Time
 CAB Corrective Actions Board
 CAGR Compound Annual Growth Rate
 CAS Cost Accounting Standards
 CC Core Competencies
 CDR Critical Design Review
 CFO Chief Financial Officer
 CIB Continuous Improvement Board
 CMMI Capability Maturity Model Integration
 Command Media Central System for storing MFC procedures and policies
 Co-op Cooperative employee (basically a 6 month internship)
 COP Culture Optimization Process
 CPAR Contractor Performance Assessment Report
 CPI Cost Performance Index
 CPR Contract Progress Report
 CRAD Corporate Research and Development
 CRI Customer Relationship Index
 CSR Contract Status Report

D

DCAA Defense Contract Audit Agency
 DCMA Defense Contract Management Agency
 DFAR Defense Foreign Acquisition Regulations
 DMAIC Define, Measure, Analyze, Improve and Control
 DoD Department of Defense
 DoE Department of Energy
 DPU Defects per Unit
 DSS Defense Security Service

E

EAR Export Administration Regulation
 EBIT Earnings Before Income Taxes
 EEO Equal Employment Opportunity
 EEOC Equal Employment Opportunity Commission
 EES Enterprise Excellence System
 EIA Enterprise Integrated Architecture
 ELC Enterprise Leadership Council
 ELDP Engineering Leadership Development Program
 EMD Engineering & Manufacturing Development
 EMS Enterprise Metric Suite
 EMU Enterprise Metric Utility
 EPI Enterprise Performance Index
 EPA Environmental Protection Agency
 ERP Enterprise Resource Planning
 ESH Environment, Safety, and Health
 EVMS Earned Value Management System
 Employee Resource Groups Lockheed Martin sponsored groups focused around culture and ethnicity

F

FAR Federal Acquisition Regulation
 FC Fire Control Line of Business
 FEP Functional Excellence Plan
 FLDP Finance Leadership Development Program
 FMEA Failure Modes and Effects Analysis
 FMS Foreign Military Sales
 FOIA Freedom of Information Act
 FRACAS Failure Reporting, Analysis, and Corrective Action System
 FRP Full Rate Production
 FSL Full Spectrum Leadership
 FSR Field Service Representative

G

GCAR Government Corrective Action Reports
 GDAT Global Disaster Assessment Tool
 GIDEP Government Industry Data Exchange Program
 GTE Get to Excellence, a plan associated with Value Stream Mapping
 Go Green Organizational program to promote environmental awareness and action

Glossary of Abbreviations and Terms

Growth, Sustainability and Profitability
Strategic Tenets by which we consider and measure our business

H

HCFS Human Capital Framework System
High pot High potential employee
HOB Height-of-Burst Sensor
HR Human Resources
HW Hardware

I

IAM International Association of Machinists and Aerospace Workers
IBD International Business Development
IBEW International Brotherhood of Electrical Workers
IBR Initial Baseline Review
ICE Independent Cost Evaluation
INROADS Nonprofit organization focusing on minority career development
IOP Internal Operating Plan
IPT Integrated Product Team
IRAD Internal Research and Development
IRA Instant Recognition Award
IRST Infrared Search and Track
ISO International Standards Organization
ISR Integrated Systems Review
IT Information Technology
ITAR International Traffic in Arms Regulations
ITOC Integrated Tech Operations Center
ITMP Integrated Talent Management Process

J – K

JDI Just Do It events
KPMG External Auditors

L

L&D Learning and Development
LAN Local Area Network
LDP Leadership Development Programs
LM Lockheed Martin
LM *Commit* Our employee Performance Management System
LM *Notify* A crisis communication system that enables rapid communication through work/home phones, automated notifications, work/home emails and media communication
LM *Voice* Annual employee engagement and satisfaction survey
LM21 Lockheed Martin 21st century initiative
LMAP Lockheed Martin Acquisition Procedures
LOB Line of Business (Includes TM/CMS, FC, & AMD)
LRIP Low Rate Initial Production
LRP Long Range Plan
LSS Lean Six Sigma

LT Long Term

M

M&A Mergers and Acquisitions
MAP Market Analysis Process
MFC Missiles and Fire Control
MOR Monthly Operating Review
MPR Monthly Program Review
MSQ CAB Materials Supplier Quality Corrective Action Board
MSU Michigan State University
MRAR Mishap Risk Assessment Report
MFC homepage MFC intranet homepage
myMFC News MFC internal newsletter

N

NACE National Association of Colleges and Employees
NBAE New Business Acquisition Expense
NBC New Business Council
NBCP New Business Capture Process
NBR New Business Review
NOPAT Net Operating Profit After Tax
NOVA Lockheed Martin's highest recognition award
NRC Nuclear Regulatory Commission

O

OCDR Operations Critical Design Review
OCM Orders Campaign Management
OIPT Overarching Integrated Product Team
OPR Operations Performance Review
OSHA – Organizational Safety and Health Administration

P

P2P Procure-to-Pay system
PBL Performance Based Logistics
PCA Physical Configuration Audit
PDK Product Development Kaizen
PDR Preliminary Design Review
PE Performance Excellence
PEP Performance Excellence Plan
PI Process Index
PIP Product Improvement Program
PPMP Program Performance Management Process
PMR Program Management Review
PMT Performance Management Team
PRR Production Readiness Review
PSP Preferred Supplier Program

Q

QFD Quality Function Deployment
QPR Quarterly Presidents Review
QNN Quality News Network

R

R&D Research and Development

Glossary of Abbreviations and Terms

RFDB	Review Findings Database	TKO	Technical kick off
RFI	Request for Information	TM/CMS	Tactical Missiles and Combat Maneuver Systems Line of Business
RFP	Request for Proposal		
RFQ	Request for Quote	TOAR	Technical Operations and Advanced Research
ROHC	Return on Human Capital		
ROI	Return on Investment	TRR	Technical Readiness Review
ROMP	Risk and Opportunity Management Plan		
ROS	Return on Sales (Operating Margin)	U	
RRC	Reverse Report Card	UAW	United Auto and Aerospace Workers Union
RTG	Return to Green	USO	United Service Organization
S			
SA	Strategic Advantage	V	
SAP	An enterprise resource planning system	VAR	Variance Analysis Report
SBA	Small Business Administration	VLK	Virtual Leverage Kit
SBIR	Small Business Innovation Research	VMV	Vision, Mission, Values
SC	Strategic Challenge	VoC	Voice of the Customer
SCAR	Supplier Corrective Action Request	VoIP	Voice over Internet Protocol
SCM	Supply Chain Management System	VP	Vice President
SELC	Strategic Enterprise Leadership Council	VPN	Virtual Private Network
SFR	Systems Functional Review	VSM	Value Stream Mapping
SHAPE	Supplier Health Assessment for Performance Excellence	W	
SIA	Structured Improvement Activity	WAN	Wide Area Network
SOX	Sarbanes-Oxley Act of 2002		
SP	Strategic Plan		
SPES	Strategic Planning and Execution System		
SPI	Schedule performance Index (EVMS)		
SPMT	Strategic Performance Management Team		
SPR	Supplier Performance Review		
SLT	Senior Leadership Team		
SPMT	Strategic Performance Management Teams		
SPR	Supplier Performance Review Process		
SRA	Special Recognition Award		
SRR	System Requirements Review		
ST	Short Term		
STAR	Operations Safety Teamwork and Responsibility, a safety program		
STEM	Science, Technology, Engineering and Math		
STMP	Strategic Talent Management Process		
SW	Software		
SWOT	Strengths, Weaknesses, Opportunities, Threats analysis		
Spiral Development	Adding new capabilities and innovations to existing products		
T			
Target Zero	Employee safety program		
Tier I	Enterprise metrics		
Tier II	LOB/Functional-level metrics		
Tier III	Process/Program-level metrics		
Tier IV	Team-level metrics		
TINA	Truth in Negotiations Act		
TIPS	TOAR Innovative Proposals and Suggestions		

