LOCKHEED MARTIN MISSILES AND FIRE CONTROL'S (MFC) ASCENT TO GREATNESS: PERSPECTIVES OF A SECDEF FELLOW

BY

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by

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LOCKHEED MARTIN MISSILES AND FIRE CONTROL'S (MFC) ASCENT TO GREATNESS: PERSPECTIVES OF A SECDEF FELLOW

<u>Introduction</u>

The Secretary of Defense Corporate Fellows Program (SDCFP) was championed and underwritten by Secretary of Defense William Perry in 1994 and the program was launched the very next year. Secretary Perry's intent was to grow and shape future military leaders "who understand not only the profession of arms, but also the organizational and operational opportunities made possible by the revolutionary changes in information and related technologies." The program has endured and matured; it remains a long-term investment and a key part of the Department of Defense's (DoD) strategy to prepare its future leaders for the imminent and iterative transformation of our military forces and capabilities. Fellows in the program are exposed to business practices that allow them to "glean the best of change, innovation, and leading edge business practices that could be implemented to transform DoD."² This once-in-a-lifetime, invaluable opportunity for DoD's future leaders begins with a 5week orientation centered in the Military District of Washington (MDW). Officers are exposed to the best and brightest minds in academia, industry and defense; they are accorded unprecedented access to political, academic and defense leaders; and inculcated with current and future strategic issues and challenges in, and involving DoD, that they are likely to encounter or engage in—perhaps foreshadowing for decisions they are to make as senior leaders. An individual and a group report are among the deliverables at the conclusion of the fellowship; the group also provides briefings to the

Secretary of Defense, Deputy Secretary of Defense, Service Secretaries and Chiefs, and other senior leaders.

Officers in the SDCFP have been assigned to a myriad of companies and each has probably had a unique experience, but with key commonalities emphasized by the program director as the program's raison d'etre—"change management, adaptive and collaborative structures, knowledge management, the virtual workplace, and how to leverage the best of new technologies and human intellect." Among the companies that have participated in the quid-pro-quo afforded by the program are: Amgen, Boeing, CNN, Caterpillar, Cisco, Citicorp, DuPont, FedEx, General Dynamics, Honeywell, Hewlett-Packard, IBM, Lockheed Martin, McKinsey, Merck, Microsoft, Northrop Grumman, Oracle, Pfizer, Raytheon, Sears, Southern Company, Sun, 3M, and United Technologies. The diversity among the businesses is evident; also clear is the concept for selection criteria—it's about what the officers can learn and contribute vis-à-vis leadership and management, as opposed to the type of business or industry. Despite the diversity in businesses and corporate structures, all officers in the program are accorded the access and protocol commensurate with the mid-to-senior leadership level of their respective companies; therein lies the aforementioned guid-pro-quo—the appropriate access to learn and make contributions. "In addition to learning, they (the sponsoring companies) provide DoD an opportunity to showcase some of its finest officers at high levels in the corporate world, allowing each to share his or her leadership capabilities, critical and analytical insights, and a first-hand knowledge of military life. The payback for these assignments is enormous, not only for the respective officer, but also for the Services and DoD at large."4

The DoD Directive governing the SDCFP delineates the criteria for selecting sponsoring companies; Lockheed Martin epitomizes those criteria and as a result, has provided me an invaluable experience during my tenure at the company. The directive mandates selection of "sponsoring institutions that are leading the revolution in business affairs and have a reputation for insightful long-range planning, organizational innovation, and adaptation. The selection of sponsoring institutions shall place special emphasis on corporations and other institutions that: have successfully managed and exploited the revolution in information and other technologies, reshaping their organizational structures and methods of operation to remain competitive in a dramatically changed global business environment; are characterized by a strong strategic planning capability, constant innovation, and continuous efforts to exploit the principles behind time-based competition and the cultivation of corporate organizational agility; are able to significantly advance an assigned officer's understanding of how the information revolution is influencing American society and business in ways that shall influence the culture and operation of the Department of Defense and how it might organize, equip, train, and experiment to fight in the future."⁵

My assessment of Lockheed Martin and its ability to achieve the aforementioned station in industry starts and ends with leadership. Therefore, I have used *Good to Great*⁶, by Jim Collins, as the framework of this paper. I will present empirical data gleaned from my ten-month assignment to Lockheed Martin to support the principles outlined in *Good to Great* and present an argument that the company leadership and its business practices have propelled Lockheed Martin toward greatness. I will conclude with recommendations on mechanisms to affect "the culture and operation of the

Department of Defense and how it might organize, equip, train, and experiment to fight in the future."

Lockheed Martin

Lockheed Martin has a rich and accomplished history in aviation and defense and aerospace-related breakthroughs since the early 1900's; however, that history is not relevant for this paper. I will provide a link to the company's webpage in the endnotes, for those who wish to peruse that history. What is relevant is that in 1995 Martin Marietta and Lockheed merged; in 1997 Lockheed Martin merged with Loral; together those mergers formed one of the largest aerospace, defense, and technology companies in the world; and with those mergers, Lockheed Martin began a successful decade-plus of organic growth and high business margins. Further, Missiles and Fire Control (MFC), my assigned business segment, has achieved a Compounded Annual Growth Rate (CAGR) in excess of 5-percent per year, over the past five years; this trend continued in 2007, as MFC exceeded all of its financial goals—orders, sales, profit, and return on invested capital among them. The recent success is likely to continue and I will delineate the reasons why throughout my paper.

Lockheed Martin Corporation is a global defense and aerospace contractor headquartered in Bethesda, Maryland. It currently employs approximately 140,000 people; 70,000 of those employees are engineers or scientists; 25,000 are information technology (IT) professionals. The corporation had approximately forty-billion dollars in sales in 2007. Lockheed Martin is organized into four business areas: Electronic Systems; Aeronautics; Space Systems; and Information Systems and Global Services, which includes Integrated Systems and Solutions and Information Technology.

I was assigned to the Electronic Systems (ES) Business Area, specifically MFC, in Orlando, Florida, one of three business segments in ES. MFC develops, manufactures, and supports advanced combat, missile, rocket and space systems principally for DoD, but has a significant market with other government entities and international customers as well.

Fellow's Assignment

The first half of my assignment at MFC provided me an incredible perspective of the intricacies of business and how MFC pursues, develops and maintains business with customers. My sponsor was the Vice President of Business Strategy and Development (BS&D), under whose purview falls the company's strategic planning process. I was exposed and provided unfettered access to one of the most comprehensive planning processes I have witnessed to date. My experience included insight to the New Business Acquisition Expense (NBAE) Plans and Processes; New Business Council (NBC); New Business Review (NBR); the New Business Pipeline Review; Orders Campaign Management; and the Enterprise Leadership Council (ELC). I witnessed these processes through an entire business cycle, culminating with an approval meeting / decision briefing to the company president. I intend to detail my observations and lessons learned, including those on an impressive process rigor and application of metrics, during the discussions on the tenets of *Good to Great*.

The latter half of my tenure at MFC gave me invaluable insight to human resources and a commensurate understanding of complex human resource processes, under the tutelage of the Vice President and Director for Human Resources (HR). I was exposed to the company's talent management and development; workforce strategy,

recruiting, retention and training initiatives—to include an exceedingly comprehensive recruiting process, which I will elaborate on in my discussions related to hiring and retaining the right people. Moreover, I gained considerable knowledge and insights in managing organizational change—one of the tenets and key objectives of the SECDEF Corporate Fellows Program. Finally, my exposure to the metrics that define Human Resources' herculean efforts on behalf of the business units and functional staff, proved invaluable for my preparation as a senior leader.

I was exposed to a myriad of functions and systems simultaneous with my assignment to BS&D, where I participated in recurring meetings, customer interaction, brainstorming sessions and in-progress reviews on a bevy of on-going projects and processes, at all levels of development; and in some cases as a student—as was the case in the training on Lean and Six Sigma for executives I attended. Equally as important was the fact that I met dozens of the company's best and brightest employees—from the scientists and engineers who bring ideas to fruition, to program managers and directors who provide the products to customers, to executives under whose leadership it all coalesces. The common thread from everyone I met was an earnest and sincere desire to live the company's mantra—"we never forget who we work for." There's an incredible drive and work ethic to provide the customer principally US warfighters—the best and most reliable equipment possible. Recent data shows MFC's focus on quality and performance is reflected in the company's unprecedented mission success rate and on-time deliver rate. I witnessed and was privy to many testimonials from warfighters lauding the quality, performance, and precision of MFC's products. There's also the tacit understanding that everyoneincluding executives, business area leaders, and the functional and support staff—is committed to the company and customer over self.

Good to Great

I intend to present an argument codifying Lockheed Martin's ascent to greatness based on the benchmarks outlined in Good to Great, by Jim Collins; those benchmarks are: Level 5 Leadership; First Who...Then What; Confront Brutal Facts; The Hedgehog Concept; A Culture of Discipline; and Technology Accelerators. Collins describes the transformation of a good to great company "as a process of buildup followed by breakthrough, broken into three broad stages: disciplined people, disciplined thought, and disciplined action." The six benchmarks above comprise the three stages—two in each—and we will begin by detailing MFC's level 5 leadership.

Level 5 Leadership

The first two benchmarks comprising stage one (disciplined people) are level 5 leadership and First Who...Then What; we'll begin with level 5 leadership. Good to great companies are led by leaders who are "more like Lincoln and Socrates than Patton or Caesar." Among the salient points Collins details with respect to level 5 leaders are: they embody a paradoxical mix of personal humility and professional will; they are ambitious for the company and not themselves; they set-up their successors for greater success; they are modest, self-effacing and understated; they are fanatically driven to produce results and make the company great; they are "more plow horse than show horse;" they take blame for failure and attribute success to others; and they come from inside the company. 12

My experience at MFC has taught me a lot about leadership, by observing the Great Americans who lead this company. They are the result of a concerted effort by the company's leadership to develop its leaders and concomitantly drive growth for the company. MFC is committed to leadership development and expends considerable time, energy and resources on growing future leaders. There is an unprecedented nexus between the company's vision, as defined in Vision 2020¹³, and what the company has coined as Full Spectrum Leadership. In essence, Vision 2020 lays-out the path and Full Spectrum Leadership delves into the specific leadership imperatives to achieve those results. Leaders at MFC, like one of the imperatives delineated in the SDCFP, want to grow the company's leaders to "shape the future." The company's Institute for Leadership Excellence Program is an all-encompassing educational approach to that end, using didactic and empirical sources, and focused on connecting personal and business objectives--individual goals with the changing needs of the business. Among the tools leading to the successful development of leaders at MFC is the mentorship program¹⁵, where budding relationships between mentors and "mentees" provides for open dialogue leading to everything from best practices to input for succession. The mentorship program includes a collaborative website that provides mechanisms for goal-setting and feedback. MFC takes full advantage of web-based learning and has approximately 2,000 courses available. This collaborative and exceedingly effective learning environment is supported by ancillary tools and responsive subject-matter-experts to help leaders and employees grow and become more effective. MFC has six leadership development programs commensurate with their respective level of responsibility—from the "Foundations for Leadership Program",

tailored for the high potential employees in the early stages of their careers (3 – 10 years), to the "Executive Leadership Program" geared toward new vice presidents. High-potential leaders can also participate in leadership development programs analogous to an extended fellowship or exchange program. The "Engineering Leadership Development Program" is emblematic of the aforementioned leadership development programs; engineers selected for the program rotate through program manager positions to broaden their perspectives, increase their knowledge base and further their leadership skills. I met a twenty-year employee of the company who had been through the aforementioned track and I was impressed with the return the company got from its investment; this person combined the best attributes engineers, program managers and leaders could hope to amass—what a boon for the company! Imagine a corps of leaders who can express requirements in scientific terms to engineers and layman terms to customers, while simultaneous leading a program to success and growing future leaders—it is the epitome of leadership synergy in my view. The program has been codified and is in practice, as evidenced by the two junior engineers I met who are being groomed that way. Further, the company has built and fostered a talent pipeline, as a result of its leadership development efforts and initiatives. More than one-third of the company's open positions have been filled by internal candidates or current employees—a clear testament to MFC's commitment to provide new career opportunities and upward mobility to its employees.

There are innumerable examples of level 5 leadership I can cite from my tenure at MFC; I will limit my observations to the forums which brought together the company leadership; both were indicative of the culture company leaders are

dedicated to fostering—the Enterprise Leadership Council (ELC) and the New Business Acquisition Expense (NBAE) meetings. The President of MFC chairs the ELC, which is comprised of the company's senior leadership; and the Vice President of BS&D chairs the NBAE, also attended by senior VPs, who comprise a rotational decision-making body. The ELC is designed to pulse the organization's performance through the use of a complex and comprehensive set of metrics. The result is a snap-shot in time for decision-makers to assess priorities, direction and vision, among other factors relating to the company's standing. Each of the business units and functional and supporting staffs has a voice to influence the company's future. The NBAE focuses on funding decisions for the future; the process culminates with a decision brief to the Company President.

The Company President and Vice President for BS&D have given me ample empirical data during the ELCs and NBAEs I attended to make my case for the company's ascent to greatness. Both are level 5 leaders who possess the personal and professional attributes indicative of the leaders outlined in Good to Great, as reflected in the following examples. The Company President became increasingly dubious of the metrics and bridging associated with key projects, during succeeding ELCs. It had become intuitively clear to him the primary purpose of the process had become convoluted. The matrices produced from the metrics were no longer the reliable tools he had used in the past to undertake the predictive analysis necessary to support decision-making to grow the business. He then directed the metrics and bridging be "renormed" to reflect the

qualitative and quantitative realties of each program, line of business and staff function. The manner in which he handled the entire process was emblematic of level 5 leadership. He took much of the blame for allowing the process to go awry and before directing the "renorm", asked probing questions of other executives who in essence swayed his decision to "renorm", after deferring to them—displaying the humility and will indicative of level 5 leaders. He also displayed the "plow horse over show horse" and "self-effacing" attributes in a couple of instances—both very similar. When briefed on a couple of programs with red flags (not on a glide-path for success) he asked one be brought to him and one to the Executive Vice President; in each instance one or the other had bona fides with the customer and experience with turning similar programs around in the past. Further, it displayed the unwavering resolve to do what must be done to make the company great; Collins calls it a "ferocious resolve, an almost stoic determination." 16 It was quite evident that none of the leaders' actions were for personal gain or self-aggrandizement; examples abound, on the part of all the leaders, in both forums, of looking out the window, not in the mirror; I literally lost count of the times they praised subordinates for the programs' or company's success and blamed themselves for failures; it was always about doing what was best for the company.

The New Business Acquisition Expense Process also provided ample evidence of level 5 leadership attributable to the Vice President of BS&D. He remained level-headed and firm throughout an exceedingly arduous process with varying levels of passion displayed at any given time, by those bringing funding

initiates forward. His calm, cool and collected demeanor was never mistaken for weakness, as all who were involved knew the process rigor he stood-by was critical to the company's success. The dialogue was interesting and eventually quite repetitive; he simply asked to be walked-through the thought processes for sticking to core competencies, mission threads, or technology threads to grow the business. Presenters usually made the decision academic and knew it, by answering the basic questions inherent in the process. There were instances of ideas and proposals for innovation and research and development that did not conform to the process metrics and presented more than the acceptable risk, but were approved for funding as a result of the dialogue that predicted the risk was worthwhile to achieve success or grow the company. This interaction displayed yet more level 5 leader attributes on the part of the Vice President of BS&D; he was ambitious for the company first and foremost. His initial decisions were inconsequential if the argument was sound enough to make him change his mind; there was no tally of how many times he was right or wrong, only success stories or failures for the company leadership to draw upon when making decisions of this ilk. Of significance, was the fact that despite the daunting tasks and responsibilities, the Vice President of BS&D gave every voice a quorum to be heard—be it a director, program manager, engineer, or anyone with a good idea; small wonder why he commands the respect of all and the company has enjoyed the success it has.

Yet another example of MFC's proclivity to those practices indicative of level 5 leaders in good to great companies is the dedication toward developing a

succession plan for the company. The Company President is intimately involved in the hiring, moves, development and mentoring of all executives; he personally conducts quarterly talent reviews; and he is responsible for putting much of the current leadership in their positions; the results speak for themselves. All the executives clearly want their legacy to be that they left the company better than they found it and postured it for greater success in the future. Interestingly, many of the senior leaders I interacted with already have a good idea of the company's succession scenarios for the coming years; it is not that anyone has been preordained, or that there is any hint of favoritism or nepotism, but they have recognized their most talented subordinates, who possess the best potential and are preparing them for increased responsibility—for the company's sake.

First Who...Then What

DoD's proclivity to the "genius with a thousand helpers" model Collins addresses is the antithesis of the practice that makes good company's great. DoD has tendencies toward this model; it hires the right leader who gets subordinates to do what he wants; this method is short-lived and the method and its associated initiatives last only as long as that leader's tenure. Much like Lockheed Martin's Vision 2020 and Full Spectrum Leadership, Collins stipulates the need to first get the right people and then figure out the path to success. He also emphasizes "who questions come before what decisions—before vision, before strategy, before organization structure, before tactics. First who, then what—as a rigorous discipline, consistently applied." Collins goes on to differentiate between rigorous versus ruthless leaders vis-à-vis people decisions and he delineates three practical disciplines for being rigorous: when in doubt, don't hire—

keep looking; when you know you need to make a people change, act; and put your best people on your biggest opportunities, not your biggest problems.¹⁹ Finally, two points worthy of mention and discussion: "the old adage 'people are your most important asset' is wrong.....the right people are;"²⁰ Collins describes the right person as one with the requisite character traits and innate skills, as opposed to one with specific knowledge background or skills.²¹

There were no better examples of MFC's drive to stick to a major benchmark of a good to great company vis-à-vis getting the right people first and then figuring out the path to success than the ones I will address. The company assessed the past cycles, and current defense budget and the associated supplemental funding, which represented a boon for the company, are coming to an end. That assessment coupled with the need to pursue new customers, products and technologies necessitated out-ofthe-box thinking to assure the company's growth in the future. The result of brainstorming the challenge was the decision to establish an element within the company to study and pursue "White Space" (the term coined to represent the aforementioned pursuit) opportunities. The modus operandi followed serves as a prime example of First Who...Then What. The company searched its workforce for innovative minds that could undertake this challenge; and after a long, thorough and arduous search, appointed a long-term employee who proved worthy of the challenge and recognition for his past accomplishments; he, in turn, brought with him "pros-from-Dover", with proven track records to help undertake the endeavor and also infused the team with new, innovative talent. It is noteworthy, and bears emphasizing, that the company sought-out who would be the right person for the job, before even defining

"White Space"—let alone determining the path forward. The initiative is taking root and already beginning to pay dividends to include strategic acquisitions to propel the company's pursuits.

Equally emblematic of the benchmark as the previous example and the company's adherence and discipline for "Who First...Then What", is the very organization I was assigned to. Business Strategy and Development (BS&D) is a relatively new organization and was the brainchild of the current leadership. Despite the benefits of "matrixing" business development employees throughout the organization, there lacked a structure to coalesce the disparate efforts of the business units and their pursuit of new business or new customers; hence, the creation of BS&D. Again, before determining the way-forward and defining roles, missions and responsibilities, the company leadership took-on the same rigorous search to find the right person, with the requisite leadership skills to pull it all together. The process resulted in the selection of the current VP for BS&D and my sponsor during the first half of my tenure at MFC; the results speak for themselves—continuous years of organic growth; high business margins; CAGR in excess of 5-percent per year, over the past five years; an increase in the company's program portfolio; and most importantly, a culture where everyone counts and is treated with dignity and respect, irrespective of position. Moreover, employees are happy to make a difference and are encouraged to be creative, innovative and motivated—leadership indeed makes a difference!

The above examples and facts are made possible because of MFC's thorough and comprehensive recruiting strategy. The strategy addresses all hiring challenges—from entry level to executives and everything in between. The

company's leadership has recognized the atrophy of some skills and the corresponding availability. Consequently, MFC participates and is committed to a strategic partnership with many colleges and universities and has partnerships or working relationships with government agencies (local, federal and DoD) in search of talent. The company's commitment to foster a sustained interest in mathematics and sciences in our youth begins with its K-12 sponsorship and mentorship program and evolves to internships that are provided to college students interested in a career in aerospace. In fact, MFC is an industry leader in hiring from all corporate pools, including INROADS, Lockheed Martin (LM) Scholars, National Action Council for Minorities in Engineering (NACME) and the Hispanic Association of Colleges and Universities (HACU); the company was named INROADS 2007 Top Corporate Sponsor, lending further credence to its commitment. The aforementioned efforts in recruiting, as well as retention, have created an excellent pipeline for a diversified talent pool—diversified not just in minority hires, but more importantly, in critical skills in engineering and science. MFC also adheres to "Who First...Then What" with its hiring methodology; if the talent is not developed within, they go-out and find it; military veterans is among the demographic groups the company woos to fill critical skill positions.

Confront the Brutal Facts

The second two benchmarks, which make-up stage two (disciplined thought) are confront the brutal facts and the hedgehog concept; first confronting the brutal facts.

Collins says all good to great companies are frank and up-front about their current realities. It is only then and from there, that the right decisions can be made and in

MFC's case, it's the process rigor that allows the company to meet this objective of great companies; I will amplify later. In his key points about confronting the brutal facts Collins goes on to talk about creating a culture and climate for people and for the truth to be heard. That climate includes four basic practices: lead with questions not answers; engage in dialogue and debate, not coercion; conduct autopsies, without blame; and build red-flag mechanisms that turn information into information that cannot be ignored. Also key to leading companies to greatness is what Collins refers to as the "Stockdale Paradox", named for former Prisoner of War, Admiral Jim Stockdale; the essence of his analogy is that one must never lose faith, no matter the difficulties, while tempering that faith with the realities of the situation at hand.²²

An element of the defense and aerospace business that struck me early-on in my assignment was the dexterity with which the business handles being at the whims of the defense budget—hardly a reliable and predictable variable on which to base business decisions. MFC is not fazed by it at all; everyone understands the uncertainty and unreliability of the defense budget and it is incorporated in the planning, modeling and decision-making for every program in which DoD is a customer. MFC confronts the brutal facts daily and it begins with the aforementioned defense budget. The company has already assessed the windfalls from supplemental funding are likely to end within the next year or two; it has confronted that reality and moved-on. I have already mentioned the company's venture into "White Space" to pursue new markets and customers; it is among the strategies to make up the differential from potentially less DoD business in the coming years; MFC also has initiatives in international markets, fire control, directed energy and logistics to make-up the potential shortfall. There is also a

very vivid example of the culture and climate Collins discusses in confronting the brutal facts, which I cite above. I was on board when the company received the news they had not been selected to receive the contract for a major proposal / project—MFC lost the contract. It was amazing to witness what transpired in the immediate aftermath of the bad news. That climate and the four basic practices Collins speaks of was in practice in spades. Leadership led an autopsy by asking tough questions, not playing arm-chair quarterback; engaged in incredibly open and forthright dialogue and debate, while never once blaming anyone—although lots of character was displayed, as many admitted they could have done several things under their purview better. Also key to why MFC is among the best companies and on its ascent to greatness is how the leadership created an atmosphere analogous to the "Stockdale Paradox"; they licked their wounds, but never lost faith, in spite of the difficulties; then outlined the realities of the situation at hand and moved-on to possible integration opportunities, as a subcontractor on the same proposal / project.

The company has also confronted the brutal facts about the dearth of scientists and engineers available to fill increasing voids left by an aging workforce. The company's recruiting strategy discussed above outlines the approach to solving the issue—principally through enhanced recruiting efforts and partnerships, as well as community involvement. Clearly, MFC is putting its best foot forward to be the company of choice among aspiring young people—a lesson and practice applicable to DoD, as discussed later, under "Mechanisms to Affect Change in DoD."

The Hedgehog Concept

"The hedgehog concept is not a goal, strategy, or intention; it is an understanding."²³ The concept is one Collins makes exceeding simple and clear; he synthesizes it into three interrelated pursuits: what you are deeply passionate about; what you can be the best in the world at; and what drives your economic engine.²⁴ It is absolutely essential a good to great company understand its core competencies, those of the competition, and what it can be the best at. This was one of the areas that impressed me most about MFC and the leaders I spent time with; they never wavered on their adherence to the process rigors that have made them successful. They continually applied metrics against their core competencies vis-à-vis business areas and markets to determine value for the company. Their thirty-three strategic mission threads and fourteen strategic technology threads form the foundation of the aforementioned metrics. Further, leadership always clearly defined its priorities by articulating a hierarchical structure for all of the company's programs; this structure apportioned the level of responsibility and decision-making for each program. For instance: two of the categories are focus and priority programs; each with commensurate visibility—the former at the CEO / Board of Directors level and the latter at the Executive VP / VP level. The priorities are further defined by "keep sold" and "fully-funded" programs, each with corresponding metrics and requirements, so there is no confusion in anyone's mind about what the priorities are.

The process that facilitates the hedgehog concept—and by extension senior-level decision-making at MFC—is the strategic planning process. The process is under the purview of the king hedgehog, the VP for BS&D. The rigor and discipline displayed

and applied during this months-long undertaking is admirable and rivals any strategic planning, mission planning, or mission analysis in DoD. The conviction and discipline to stick to the core competencies, strategic mission threads and strategic technology threads is what will keep MFC viable and growing in years to come. Incredibly, the process and culture also superimposes enough flexibility so as to not stifle initiative to pursue new technologies and customers, but all the metrics are in place to assure the company does not stray too far or deviate from what it is good at. While the process is exemplary, it is not without fault. I found that the VP for BS&D reviews too many proposals that should have been stopped at the cutting-room-floor; there is just not enough buffering between the idea and the decision to press-forward with the proposal, in my view. Program managers, directors and business area vice presidents could, and should, be more discriminatory in the selection process to obviate the need for the volumes of redirected proposals and "reclamas" during the process, mostly by the VP of BS&D himself; decision-making and accountability at this level is not commensurate to the level of responsibility and compensation; delegation of authority or powering-down would go a long way toward alleviating the issue.

There is also a need to improve the mechanisms for feedback to those who make, and are associated with, the proposals. This observation was one of the very few negative threads I heard from employees—"we just don't know why our stuff is not getting approved / funded." The feedback is provided and discussed at the executive level, but is just not being disseminated or filtered down to the lowest level. It is something that can be easily resolved at the lowest level with all-hands meetings. The other recommendation I have is that perhaps the process can be automated with

toggled approval / disapproval and comments provided at each level, so the employee can see exactly why a proposal was not approved for funding; a mechanism for "reclamas" can be included in the automated process.

Culture of Discipline

The final two benchmarks comprising stage three (disciplined action) are culture of discipline and technology accelerators. Culture of discipline is a benchmark where MFC's mastery of intangibles and metrics are combined to achieve excellence and comes shining through; so much so, I will provide empirical data from my experience at MFC as a microcosm of what Collins describes in the chapter. The aforementioned process rigor and adherence to the company vision results in a culture of selfdisciplined people who take disciplined action, fanatically consistent with the interrelated pursuits delineated in the hedgehog concept. MFC's leadership demands discipline and process rigor, but not at the expense of hamstringing or stifling initiative. Many socalled once-in-a-lifetime opportunities have passed to fully fund other initiatives that conform to the company's core and the hedgehog concept; hence, keeping the company viable and strong for the foreseeable future, by sticking to its core and not chasing fads or jumping on bandwagons. The leadership was never shy about making the tough calls on funding; there were never decisions made based on equitable distribution or fairness; it was always about the best business decision for the company and the workforce accepted it as such—notwithstanding the aforementioned problems with feedback. The other shortfall is one I alluded to earlier as well—the reluctance of mid-level leadership to stanch unqualified proposals early in the NBAE process, to limit the number of proposals that reach the VP of BS&D.

The culture is one that promotes the synergy of centralized planning and decentralized execution to encourage a workforce that is engaged in disciplined thought and takes disciplined action to move the company forward. It is interesting to watch the formal company briefings to the Company President; it gives one the illusion that there's not much effort to winning a proposal or keeping products sold. Only after meeting the folks at the front-end of the business, did I get a good appreciation for the level of intensity and effort that is put-in by the majority of the workforce; MFC's employees certainly ascribe to what Collins calls "rinsing their cottage cheese." The analogy comes from former world-class tri-athlete Dave Scott, who apparently took such literal draconian measures to trim fat from his strict diet. The stunning part of this analogy is the thought of a world-class athlete like Scott worried about calories and fat, but when one stops to think, it is the reason he won one of the most demanding athletic events multiple times; he took measures to get the edge over the competition. I repeatedly saw folks at MFC "rinsing their cottage cheese" during my time at the company. Scientists and engineers worked feverishly to improve algorithms that would improve current technologies and give them the edge in emerging technologies to meet customer demands. Leaders and executives were constantly evaluating processes to build the dashboards that would result in unprecedented success for the company; the decision and efforts exacted to re-norm metrics mentioned earlier is a prime example of what goes on daily at MFC and another major reason the company is postured for greatness and built to last.

The final point worthy of discussion that bears repeating from previous discussions is that MFC's leadership does not mistake the culture of discipline it has

fashioned and fostered with strong-armed leadership and discipline. It obviously recognizes the need and value of giving a disciplined workforce, whose objective is to improve the company and make a profit, the confidence and latitude necessary to succeed in today's business environment. No one I encountered was working out of fear; quite the contrary, they were motivated by positive, consistent, level 5 leadership, who treated everyone with dignity and respect.

<u>Technology Accelerators</u>

The final benchmark to gauge good to great companies is technology accelerators. It is among the greatest challenges facing businesses today; the ubiquitous questions of which technologies to chase, which to develop, and which to ignore can be daunting at times for decision-makers. Collins says "good to great companies avoid technology fads and bandwagons, yet they become pioneers in the application of carefully selected technologies." He also relates to the company's hedgehog concept; if the technology fits directly with the company hedgehog concept, then the company should become a pioneer in the application of that technology; and if not the company can settle for parity or ignore it entirely. He goes on to say "good to great companies use technology as an accelerator of momentum, not a creator of it." Interestingly, MFC takes technology and related issues through the same process rigors as all other business, conforming to another characteristic of good to great companies—avoiding the chase for the latest and greatest. Similarly, it is disciplined in applying innovation versus technology vis-à-vis transformation, when appropriate. However, the company is intent on protecting its core, while growing the company; and is therefore

investing in technology on a level commensurate with its standing as a technology leader and integrator, but with the requisite discipline.

I have witnessed some of the most amazing technologies being developed before my very eyes; and while I have been "wowed" by the near science fiction developments, it has all been tempered by the fact that MFC is only pursuing those technologies because it fits its hedgehog concept; customers expect the company to always be at the leading edge of those technologies and they are determined not to disappoint. I witnessed the almost nonchalant way the company's decision-makers forego emerging technologies because of the inherent institutional discipline not to chase fads; if someone else is good at a technology MFC needs, it does not compete, the company simply leverages, and later, integrates the technology to suit its needs—more importantly, the needs of the customer.

MFC recognizes the criticality of keeping its technological edge, but it is not consumed by technology. The company's leadership recognizes people and processes are equally as important. This is the final piece of evidence that MFC is built to last. The company revealed its ability to handle the nuances of technology, people and processes to make the perfect mix for a company on the precipice of greatness and built to last.

Mechanisms to Affect Change in DoD

Among the key objectives of the Secretary of Defense Corporate Fellowship

Program is to "provide insights gained while at their Sponsoring Institutions......and
how insights might be exploited to change the culture and operations of the Department
of Defense and the Military Services."²⁹ I have compiled the following insights from my

ten months at MFC to comply with and meet that objective. The proposals below are provided with the recognition and understanding that DoD and industry have fundamental differences; utmost among them is that industry endeavors to make a profit and grow their respective business, while DoD's only focus is mission accomplishment. Notwithstanding those differences, I opine there are sufficient commonalities to allow a quid-pro-quo from which both industry and DoD can benefit; I provide the recommendations below with that in mind.

MFC's ability to stay disciplined in its core competencies, and by extension, mission and technology threads, is a major reason for my assertion that it is on the precipice of greatness and built to last. I believe DoD has the requisite discipline to be equally successful at protecting its core competencies, as well as mission and technology threads; it will keep the department focused on what it is good at, while pursuing the threads that will keep it viable and make it built to last, while simultaneously avoiding the pitfalls of mission-creep. However, like MFC, DoD has to maintain a flexibility to allow for "White Space" pursuits to maintain its standing as the world's premiere fighting force.

The last true national mobilization occurred in World War II. It is time we mobilize the nation and we can begin by fashioning an agreement between DoD and industry to share the talent available in critical skill-sets; we can't compete with industry's salaries, nor should we have to—they have an obligation and should be mobilized to provide and serve. MFC's recruiting strategy and development programs provide the conduit for such an agreement or partnership.

I believe it would benefit DoD immensely to expand business opportunities for leaders. My experience over the past year revealed that a partnership to provide permanent and / or rotational SECDEF Fellows would help DoD grow the pent athletes it is looking for in its future leadership. This program and a commensurate mentorship program would provide invaluable perspective and insight for our future leaders, as it has for me.

The next one is as difficult to undertake as it is intriguing, but DoD should model industry's succession model if it is indeed to be built to last. We must be wary of potential nepotism in such an undertaking, but it is certainly worth the effort. DoD needs to identify the next General Petraeus' long before there is a critical need to develop or find one.

Finally, DoD should invest early in people and technology; ride industry's coattails; perhaps it can be codified in one of the aforementioned agreements. MFC's K-12 program is a good start and different from how DoD does business; DoD principally concentrates on the 12+ population. It would serve the department well to propose the services and DoD as a career option among others during our youths' formative years.

Conclusion

My assignment at MFC provided me an incredible perspective of the intricacies of business and how MFC pursues, develops and maintains business with customers. I gleaned incredible insight on the strategic planning process under the sponsorship and tutelage of my sponsor at (BS&D). I was exposed and provided unfettered access to one of the most comprehensive planning processes I have witnessed to date. My

experience included insight to the New Business Acquisition Expense (NBAE) Plans;
New Business Council (NBC); New Business Review (NBR); the New Business Pipeline
Review; Orders Campaign Management; and the Enterprise Leadership Council (ELC).
I witnessed this process through its entire cycle, culminating with an approval meeting /
decision briefing to the company president. I detailed my observations and lessons
learned, including an impressive process rigor and application of metrics, during the
discussions on the tenets of *Good to Great*.

The latter half of my tenure at MFC gave me invaluable insight to human resources, under the tutelage of the Vice President and Director for Human Resources (HR). I was exposed to the company's workforce strategy, recruiting, retention and training—to include an exceedingly comprehensive recruiting process, which I elaborated on in my discussions related to hiring and retaining the right people—First Who...Then What. I also gleaned invaluable insights into Change Management and by extension the metrics behind Human Resources' efforts to make MFC the company of choice among employees and prospective employees.

I was exposed to a myriad of functions and systems simultaneous with my assignment to BS&D and HR, where I participated in recurring meetings, customer interaction, brainstorming sessions and in-progress reviews on a bevy of on-going projects and processes, at all levels of development; and in some cases as a student—as was the case in the training on Lean and Six Sigma for executives I attended.

Equally as important was the fact that I met dozens of the company's best and brightest employees—from the scientists and engineers who bring ideas to fruition, to program managers and directors who provide the products, to executives under whose

leadership it all coalesces. The common thread from everyone I met was an earnest and sincere desire to live the company's mantra—"we never forget who we work for." There's an incredible drive and work ethic to provide the customer—principally US warfighters—the best and most reliable equipment possible. There's also the tacit understanding that everyone—including executives, business area leaders, and the functional and support staff—is committed to the company and customer over self. I have included recommendations on mechanisms to affect "the culture and operation of the Department of Defense and how it might organize, equip, train, and experiment to fight in the future," 30 based on my observations during my tenure as a SECDEF Fellow at Lockheed Martin Missiles and Fire Control.

I intended to present an argument codifying Lockheed Martin's ascent to greatness based on the benchmarks outlined in Good to Great, by Jim Collins; those benchmarks are: Level 5 Leadership; First Who...Then What; Confront Brutal Facts; The Hedgehog Concept; A Culture of Discipline; and Technology Accelerators. Collins described the transformation of a good to great company "as a process of buildup followed by breakthrough, broken into three broad stages: disciplined people, disciplined thought, and disciplined action." Based on the principles and benchmarks applied from Good to Great, I opine Lockheed Martin Missiles and Fire Control is on its ascent toward greatness; it is comprised of disciplined people, with disciplined thought, who take disciplined action. I predict the next publication of "Good to Great" will include Lockheed Martin Missiles and Fire Control.

ENDNOTES:

- ¹ Secretary of Defense Memorandum; 6 October, 1994; available from Secretary of Defense Corporate Fellows Webpage; http://www.ndu.edu/sdcfp/; Internet; accessed 28 November 2007.
- ² Secretary of Defense Corporate Fellows Overview; available from Secretary of Defense Corporate Fellows Webpage; http://www.ndu.edu/sdcfp/overview.htm; Internet; accessed 28 November 2007.
 - ³ Ibid.
 - ⁴ Ibid.
- ⁵ Department of Defense Directive 1322.23; 22 February 2005; available from Secretary of Defense Corporate Fellows Webpage; http://www.ndu.edu/sdcfp/; Internet; accessed 28 November 2007.
 - ⁶ Jim Collins, Good to Great, (HarperCollins Publishers Inc, 2001).
- ⁷ Department of Defense Directive 1322.23; 22 February 2005; available from Secretary of Defense Corporate Fellows Webpage; http://www.ndu.edu/sdcfp/; Internet; accessed 6 December 2007.
 - ⁸ View Lockheed Martin's history @ http://www.lockheedmartin.com.
 - ⁹ Jim Collins, Good to Great, (HarperCollins Publishers Inc, 2001), p12.
 - ¹⁰ Ibid, p13.
 - ¹¹ Ibid, p39.
 - ¹² Ibid.
- ¹³ Vision 2020; Performance is Our Objective; Lockheed Martin Internal Webpage; http://vision202.orl.lmco.com; Internet; accessed 3 December 2007.
 - ¹⁴ Ibid.
- ¹⁵ Mentoring: Connection for Career Growth; http://fulspectrum.global.lmco.com/fullspectrum/; Internet; accessed 3 December 2007.
 - ¹⁶ Collins, p39.
 - ¹⁷ Collins, p63.
 - 18 Ibid.
 - 19 Ibid.
 - ²⁰ Collins, p64.
 - ²¹ Ibid.
 - ²² Collins, p88-89.
 - ²³ Collins, p118.

- ²⁴ Ibid.
- ²⁵ Collins, p127.
- ²⁶ Collins, p162.
- ²⁷ Collins, p144-161.
- ²⁸ Collins, p162.
- ²⁹ Department of Defense Directive 1322.23; 22 February 2005; available from Secretary of Defense Corporate Fellows Webpage; http://www.ndu.edu/sdcfp/; Internet; accessed 6 December 2007.
 - ³⁰ Ibid.

³¹ Jim Collins, Good to Great, (HarperCollins Publishers Inc, 2001), p12.