National Nuclear Security Administration

Honeywell FM&T

Fiscal Year 2014 Performance Evaluation Report (PER)

Kansas City Field Office

Performance Period:
October 2013 – September 2014

November 14, 2014

Executive Summary

This Performance Evaluation Report (PER) provides the assessment of Honeywell Federal Manufacturing & Technologies (FM&T) performance for the period of October 1, 2013 through September 30, 2014, as evaluated against the objectives defined in the Fiscal Year (FY) 2014 Strategic Performance Evaluation Plan (PEP). The National Nuclear Security Administration (NNSA) took into consideration and consolidated all input provided from NNSA Program and Functional Offices both at Headquarters and in the field. The five basic Performance Objectives (POs) in the PEP were graded using adjectival ratings as described in the Federal Acquisition Regulation. Comments on the performance of each Contributing Factor (CF) and Site Specific Outcome (SSO) under each PO identified in the PEP are provided as well.

FM&T submitted a Performance Self-Assessment Report for the rating period highlighting another strong performance year while candidly discussing issues. Nearly all FY 2014 performance targets exceeded expectations, most notably meeting challenging delivery commitments while proficiently executing the KCRIMS move. FM&T's continuous improvement culture and strong commitment to the NNSA mission drove efficiency and cost savings at the Kansas City Plant and across the Enterprise. Excellent performance in each of the PO areas summarized below resulted in an overall Excellent adjectival rating for FM&T in FY 2014.

PO-1: Manage the Nuclear Weapons Mission (25% of at-risk fee) was rated as Excellent. Overall, FM&T exceeded expectations by effectively and efficiently managing Nuclear Weapons activities at the site. While executing one of the largest industrial moves in North America and adapting to a government shutdown and Continuing Resolution (CR) extensions, FM&T exceeded Program Implementation Plan work scope (Level 2 milestones) funded through Directed Stockpile Work (DSW). Most notably, FM&T completed the KCRIMS transition ahead of schedule in a transparent manner with no adverse impacts to weapon stockpile activities. FM&T also exceeded expectations in delivering over 11,000 parts for high priority development programs while simultaneously implementing an Earn Value Management System and satisfying other weapon program commitments. The nuclear weapons mission portfolio was executed within overall cost, schedule, weapon quality, and operational parameters, with no adverse impacts to safety and security. Furthermore, FM&T fully embraced Additive Manufacturing (AM) initiatives and exceeded expectations in implementing significant manufacturing process, product, and service improvements.

PO-2: Broader National Security Mission (12.5% of at-risk fee) was rated as Excellent. While concurrently relocating National Secure Manufacturing Center (NSMC) operations from Bannister to the National Security Campus, Global Security managed over 1,200 projects delivering approximately 70,000 items with greater than 99% on time delivery. This resulted in a total of $245.2M in sales ($165.3M Global Security and $79.9M Defense Programs) and $102.1M in overhead recovered for the NNSA. FM&T also fully supported NNSA non-proliferation, nuclear detection and prevention, emergency response, and counterterrorism activities. FM&T staff filled DOE/NNSA principal representative and technical delegate roles on multiple interagency committees and also provided numerous resources, training, assessments and analyses to support national security missions.

PO-3: Science, Technology & Engineering (ST&E) and Other DOE Mission Objectives (12.5% of at-risk fee) were rated as Excellent. Work scope funded through discretionary Plant Directed Research &

Development (PDRD) and institutionalized Non-Nuclear Readiness (NNR) was efficiently managed to deliver leading edge research and technology maturation aligned with NNSA priorities. The PDRD program budget increased by more than 60% from $13.4M in FY 2013 to a total budget of $22M in FY 2014. Approximately $16M was directly overseen by each of the 6 Centers of Excellence (COE) leaders and supported approximately 45 new start or continuation projects. Approximately $6M in PDRD funding was reserved for rapid response projects. These projects directly supported technology maturation for requirements on multiple programs.

PO-4: Operations & Infrastructure (25% of at-risk fee) was rated as Excellent. Overall, FM&T performed above expectations in their ability to meet the DOE/NNSA mission by ensuring Site Operations and Infrastructure was maintained. While Operations and Infrastructure encompasses most of the mission support areas, a primary performance driver for PO-4 was the exceptional execution of the KCRIMS relocation project one month ahead of schedule and under the budgeted $324.9M by $17.4M. Due to the detailed planning and day-to-day oversight of the security organization, FM&T completed eighteen months of relocation activities without a major security incident. Safety performance was outstanding during relocation resulting in no Days Away From Work injuries associated with the move while attaining OHSAS 18001 certification and receiving recognition as a finalist for the highly competitive National Safety Council's Robert W. Campbell award. IT and Cyber Security continuously supported operations during the move while completing several initiatives to increase KCP's security posture, improve mobility, and reduce costs. Environmental management continued executing a mature program and implemented improvements to facilitate efficient management and permitting processes at the NSC. FM&T also continued to provide excellent support during the move for Bannister disposition including planning and design for PCB-contaminated equipment disposal, planning for surplus personal property, and providing expertise in environmental management.

Business operations also continued to perform at a high level. FM&T was highly adaptive to changing conditions associated with funding and demonstrated unwavering commitment to NNSA goals and objectives. FM&T earned an Office of Field Financial Management Good rating (highest available) for the year and provided positive responsiveness to closing management assurance system concerns, providing prompt submissions to budget related matters, and validating financial management assessments. FM&T legal exhibited a high degree of expertise and competency in support of operations and efficiently managed complex toxic-tort litigation securing a positive result at minimal legal costs.

PO-5: Leadership (25% of at-risk fee) was rated as Excellent. Overall, FM&T performed above expectations in effectively providing leadership to support the achievement of NNSA's vision and mission in Kansas City and around the Nuclear Security Enterprise. Effective leadership across the business resulted in strong mission performance and enterprise collaboration. FM&T led impactful enterprise-wide initiatives including the Supply Chain Management Center, Enterprise Risk Management, Defense Programs Business Process System (DPBiz), Manufacturing Production Steering Committee, Export Control Implementation and traditional technical contributions and residencies to the NSE. In production, over 100,000 directive schedule items were delivered while achieving stretch quality goals. One of the largest industrial moves in North America was completed one month ahead of schedule and $17.4M under the budgeted $324.9M. Safety performance was outstanding during production and relocation operations resulting in an 87% better than industry

average for total safety recordable cases. There were no security events in production or during the 581 classified moves transported on over 290 trucks. These examples and others captured throughout this report demonstrate the commitment and focus of leadership to deliver continuous improvements and innovative solutions to the challenges facing the enterprise.

Performance Objective 1: Manage the Nuclear Weapons Mission

Summary

Excellent

Overall, FM&T exceeded expectations by effectively and efficiently managing Nuclear Weapons activities at the site. While executing one of the largest industrial moves in North America and adapting to a government shutdown and Continuing Resolution (CR) extensions, FM&T exceeded Program Implementation Plan work scope (Level 2 milestones) funded through Directed Stockpile Work (DSW). Most notably, FM&T completed the KCRIMS transition ahead of schedule in a transparent manner with no adverse impacts to weapon stockpile activities. FM&T also exceeded expectations in delivering over 11,000 parts for high priority development programs while simultaneously implementing an Earn Value Management System and satisfying other weapon program commitments. The nuclear weapons mission portfolio was executed within overall cost, schedule, weapon quality, and operational parameters, with no adverse impacts to safety and security. Furthermore, FM&T fully embraced Additive Manufacturing (AM) initiatives and exceeded expectations in implementing significant manufacturing process, product, and service improvements. NNSA reviewed the FM&T Self-Assessment and agrees with the overall adjectival rating of Excellent. Specific observations follow.

Overall, FM&T performed above expectations by accomplishing negotiated work with program sponsors, achieving the expected level of quality to ensure safe, secure, and reliable weapon performance and transportation, and providing cost-effective operations. In collaboration with Design Agencies, FM&T executed an additional 44 Qualification Engineering Releases (QERs) ahead of the baseline KCRIMS re-qualification schedule. FM&T delivered over 100,000 directive schedule items using both manufactured and KCRIMS built-ahead inventory to maintain continuity in deliverable requirements during production department shutdown and re-instatement periods. Additionally, FM&T demonstrated timely responsiveness to weapon quality issues and implemented multiple supplier improvement initiatives as preventive actions in response to an FY 2013 quality issue identified at an FM&T supplier.

Overall, FM&T met NNSA Office of Secure Transport (OST) expectations by completing 2 of 17 Task Agreements (TAs) at the above expectations level, 12 TAs at the meets expectations level and 3 TAs at the below expectations level. Specifically, FM&T worked closely with the Albuquerque Mobile Electronics Maintenance Facility to resolve issues and improve troubleshooting techniques. When Agent Operations Eastern Command (AOEC) requested to accelerate deployment by six weeks, FM&T exceeded expectations in delivering a highly successful deployment. FM&T has taken a proactive approach to analyze issues and perform trend analysis, resulting in a reduction in system faults. Secondly, FM&T played a key role in the successful deployment of enhancements to the Transportation Command and Control System used in the Transportation Emergency Control Center. FM&T accomplished this by supporting extensive and thorough testing. FM&T made significant enhancements in the software in response to OST requirements. While FM&T's dedicated and talented engineering resources on this project should be commended, three FM&T TAs incurred cost overruns at the end of the year and ample notification was not provided to the NNSA. The late notice did not allow sufficient time to develop and implement approved corrective actions to avoid the cost overruns.

Overall, FM&T performed above expectations to increase knowledge of the state of the stockpile. FM&T's efforts led to the successful execution of the stockpile surveillance program and a robust scientific and engineering understanding of component aging characteristics and supported delivery of the annual stockpile assessment. FM&T kept high priority surveillance programs on track. FM&T executed REST and Stockpile surveillance requirements in support of Design Agency Annual Assessment and Weapon Reliability activities and delivered hardware used in a successful Development Joint Test Assembly flight test. FM&T also developed a streamlined process for a component that reduced damage to internal components, reduced shock and vibration to the unit, reduced flow time from approximately 3 days to 30 minutes, and contributed to the overall integrity of surveillance data. FM&T delivered materials to LANL to facilitate aging studies, executed Component Material Evaluation tests on two components, and completed high temperature electrical standoff testing, which supports annual surveillance evaluations with Design Laboratory partners. FM&T supported Joint Test Assembly Modernization (JTAM) activities, other program deliverables and a program Producibility Plan. Moreover, FM&T resurrected and reinstated an approximately 30 year old production test capability and exceeded expectations by demonstrating feasibility to support deliverables. FM&T met expectations for the production of LANL and SNL-designed components, ensuring the NNSA met FY 2014 production requirements and DoD warhead delivery schedules.

Overall, FM&T performed above expectations while executing deliveries during the KCRIMS transition to meet limited-life component exchanges (LLCE) and dismantlements in accordance with directive documents, within schedule and on budget. FM&T delivered program hardware three months ahead of schedule and rapidly responded to deliverable quantity and schedule changes to support urgent DoD needs. FM&T completed the KCRIMS re-qualification activities and restarted qualified production processes at the new National Security Campus on schedule. FM&T delivered maintenance and re-qualification activities as required by directive documents and provided on-time delivery of monthly reports.

Overall, FM&T performed above expectations to demonstrate the application of new strategies, technologies, and scientific understanding to support stewardship of the existing stockpile and future stockpile needs. FM&T identified, programmed and characterized new Improved Mechanical Inspection Technology (IMIT) automated visual inspection equipment that realized more than a 90% reduction in inspection time. Moreover, FM&T significantly reduced costs, improved manufacturing processes, and delivered additional developmental assemblies all while transitioning to a new site. For example, FM&T enhanced management of engineering staff work load and identified direct work opportunities that ultimately reduced indirect charges by more than $1M. Additional noteworthy FM&T efforts include: built, tested, and delivered multiple developmental lots for several major components to the design agency before the third quarter; further developed additive manufacturing capabilities; and established an effective supply chain risk management program.

Overall, FM&T exceeded many NNSA expectations by developing innovative additive manufacturing capabilities which reduced response time for prototype hardware, reduced tooling costs, and identified significant development program cost efficiencies. In addition, FM&T implemented new Integrated Programmatic Scheduling System (IPSS) features that will enable all sites to more effectively anticipate and schedule developmental program requirements. FM&T also maintained critical calibrations above 95% for the entire fiscal year, providing continuity in production operations during the KCRIMS relocation. FM&T utilized over $13M in FY 2014 Plant Directed

Research and Development (PDRD) funding to execute R&D projects that align with NNSA Nuclear Weapon mission priorities. Finally, FM&T avoided approximately $6M in costs using 3-D printers to develop tools and prototypes for existing and emerging Nuclear Weapon programs.

Overall, FM&T exceeded most of the expectations for high priority development programs. In particular, the NNSA commends the FM&T can do attitude and significant effort to embrace and implement the new Earn Value Management System (EVMS) and related processes at the site. Please see below for additional achievements related to this Contributing Factor.

Overall, FM&T exceeded expectations for executing the Quality Performance Index (QPI) by achieving 3 out of the 4 stretch goals established for measuring weapon quality performance. FM&T site specific Quality Performance Index (QPI) metrics consist of Escapes, Scrap, Rework, and Vendor Lots Accepted Trouble Free (LATF). LATF is the percentage of purchased production lots accepted with no supplier reportable product defects and no reportable errors in supplier documentation. Weapon quality performance goals are developed each year to drive improvements by utilizing historical performance data and planned production schedules. Although FM&T failed to meet the stretch goal for Escapes, the target goals for Scrap, Rework and LATF were exceeded.

Overall, FM&T exceeded expectations in implementing resource-loaded schedules and is recognized for their effort to adopt Project Control System Description (PCSD) directed Earn Value Management System (EVMS) practices on select programs. FM&T also effectively managed the cultural change involved in integrating new EV tools and business practices, which is one of the most challenging tasks. FM&T created a site resource-loaded schedule ahead of schedule, and submitted a site Performance Measurement Baseline and final site contributions to the NNSA Integrated Master Schedule (NIMS) on time while focusing effort towards baselining the NIMS. FM&T is on track to support Integrated Baseline Review (IBR) of site project controls system in FY 2015 in accordance with revised NNSA direction. FM&T entered and refined risks in the Active Risk Manager (ARM) database, and submitted required monthly reports including status and financial/EVMS data submissions as required. FM&T worked with NNSA to refine site contributions to the NIMS thereby improving compliance with the Project Controls System Description, Project Controls Manual guidance, and critical path management.

Overall, FM&T expertly maintained development program hardware deliveries during KCRIMS relocation without disruption. This reflects extraordinary pre-planning on the part of NSC management and Product Realization Team (PRT) members. FM&T exceeded expectations in two areas: rapid responsiveness to emerging issues and development program efficiencies. In regard to rapid response, FM&T manufactured major components in four days to meet a required Air Force flight test, delivered redesigned major components in six weeks which resolved an Air Force personnel safety concern, and procured two late request components inadvertently omitted by the design agency order process. Regarding efficiencies, FM&T successfully integrated Additive Manufacturing (AM) techniques in the design and fabrication of development components that realized significant benefits in both cost and cycle time reductions, including an 82% cycle time reduction using AM prototypes and a $145K cost savings using AM test and assembly fixtures. By improving component extraction yield, FM&T reduced program labor cost by approximately $1.5M. FM&T developed and manufactured the Assembly Tooling Lifting Alignment System (ATLAS) which eliminates more than 1,200 hoisting operations and significantly benefits capacity, efficiency,

ergonomics, safety, and quality. In addition, FM&T delivered over 9,000 development hardware items to support Joint and System level development, qualification, and certification tests.

Overall, FM&T met all development program requirements and demonstrated a great attitude and demeanor in executing this effort despite the program being closed at the end of FY 2014. FM&T provided component design and cost information to the labs for the 120-day Study. FM&T also completed prioritized activities and efforts on controlled program close-out activities. FM&T's monthly reports met expectations and deadlines and executed a budget that conformed to the spend plan. FM&T contributed capacity data to support Enterprise Modeling and Analysis Consortium (EMAC) analytics. Finally, FM&T applied a new coating process to select parts increasing the component's operational threshold; this technology has potential emerging technology insertion opportunities.

Overall, FM&T exceeded most expectations in supporting select program activities through the KCRIMS transition by providing more than 1,800 hardware deliverables in accordance with the test and qualification schedule and the approved Level I and II milestones. FM&T received positive remarks from both the Navy and NNSA for this effort. In collaboration with the Design Agency, FM&T hosted a Mechanisms Design for Manufacturing Workshop that resulted in early identification of mistake-proofing opportunities and manufacturing flow time reductions. FM&T re-baselined their respective portion of the project schedule by integrating development prototype builds with development of production processes. FM&T fulfilled their Inter-Contractor Order (ICO) agreements with SNL for development hardware on schedule and within the ICO budget, and successfully supported the SNL-led component and system design reviews for the year.

Areas for Improvement: Work is needed to ensure there is consistent alignment between DA integrated site schedules (ISS), the PA ISS, and the NNSA Integrated Master Schedule (NIMS).

Performance Objective 2: Broader National Security Mission

Summary

Excellent

Overall, FM&T performed above expectations in managing the Broader National Security Mission. While concurrently relocating National Secure Manufacturing Center (NSMC) operations from Bannister to the National Security Campus, Global Security managed over 1,200 projects delivering approximately 70,000 items with greater than 99% on time delivery. NNSA reviewed the FM&T Self-Assessment and in all cases agreed with the overall adjectival assessment of Excellent. Specific observations follow.

Overall, FM&T performed above expectations to support NNSA non-proliferation priorities, including training sessions, technology assessments, and logistic analyses. FM&T supported the International Nonproliferation Export Control Program (INECP) training events designed to create cadres of technical experts in foreign partner countries to assist with controlling the trade of strategic goods. Moreover, FM&T created INECP logistics and training support for all INECP training materials enabling 48 engagements in the United States, Saudi Arabia, Switzerland, and Malaysia. FM&T supported the US Customs, Border Protection, and World Customs Organization commodity "fingerprints" analysis used for targeting strategic goods and technology development which included 34 days of high priority global assessments.

Overall, FM&T performed above expectations to support nuclear detection and prevention activities. FM&T assigned a staff member to the Office of Nonproliferation & International Security who served as DOE/NNSA's principal representative to the Missile Technology Export Control (MTEC) working group, DOE/NNSA's technical delegate to the multilateral Missile Technology Control Regime, and DOE/NNSA's technical delegate to the Department of State led Missile Annex Review Committee (MARC). In addition, FM&T provided nine ad hoc technical assessments for the Department of Energy Intelligence/Counterintelligence office, and twenty ad hoc technical assessments in support of the Department of State's Visa Mantis Program. FM&T also provided technical and intelligence based assessments in support of DOE/NNSA's Weapons of Mass Destruction (WMD) interdiction programs. Assessments focused on missile technology and supported the Missile Trade Analysis Group (MTAG) with 720 MTAG assessments completed and 40 export control technical assessments provided. FM&T also completed three Global Initiatives for Proliferation Prevention (GIPP) projects through a joint venture with scientists from the former USSR.

Overall, FM&T performed above expectations to provide technical and policy solutions to reduce nuclear dangers. FM&T is currently procuring Shipping Packages. Through continuous improvement efforts and no additional funding, the procurement quantity provided to the customer increased 15% over the original procurement quantity. As the designated procurement site, FM&T hosted the annual Office of Packaging and Transportation (OPT) Packaging Program Review at the new New Mexico National Security Campus facility and was chartered to assess the development of an Enterprise Logistics System for shipping packages.

Overall, FM&T performed above expectations in support of Emergency Response, Incident Response and Nuclear Forensics. In the area of Emergency Management, a two week review of documents

indicated NSC emergency management plans and internal procedures were prepared from high level requirements (CFR, DOE, NFPA, etc.). FM&T supported the DOE Forensics Operations (DFO) team by participating in emergency response drills and providing 24/7 watch bill coverage. In September, observations of the NSC annual exercise met all of the objectives. FM&T also supported Stabilization (STAB) operations, Improvised Nuclear Device (IND) initiatives, and Radiological Dispersal Device (RDD) initiatives through training and equipment maintenance. FM&T exceeded expectations in support for the NUWAIX 14 and Marble Challenge 14-02 exercises in the areas of logistics and communications. A proactive approach helped FM&T collaborate with labs on next generation detection devices to provide manufacturability information and improve timely production and delivery. In the area of Stabilization, FM&T provided satisfactory technical, training, and logistic support for nine training sessions and three city maintenance events. Efforts to purchase new equipment on a compressed schedule exceeded expectations. FM&T provided support to the Tempest Wind Field Training Exercise in the form of equipment and communications. In the area of Technology Integration (TI), FM&T produced 100% of its deliverables on time. The site excelled in equipment recapitalization by meeting 100% of its goals on an extremely tight schedule. Management of the TI program is excellent in its forward thinking response and demonstrates a commitment to getting the job done on time and within budget. In the area of Nuclear Forensics, FM&T performed tasks in accordance with written guidance and supported schedule and budget for all items.

Overall, FM&T performed above expectations supporting NNSA counterterrorism priorities. In addition to serving as DOE/NNSA's technical delegate to the multilateral Missile Technology Control Regime and on the Missile Annex Review Committee, FM&T staff served as DOE/NNSA's principal representative to the interagency Taiwan Game plan engagement. This included coordination with the Department of State's Office of Missile, Biological, and Chemical Nonproliferation to prepare DOE/NNSA's contributions to the 2014 Taiwan Game plan meetings. FM&T also led the Mission Executive Council directed Microelectronics Capability Assessment for DOE.

Overall, FM&T performed above expectations in other DOE mission work. FM&T partnered with four interagency sponsors to help solve prioritized national security problems through the Rapid Response Accelerator (R2A) Program.

Overall, FM&T performed above expectations in managing broader national security mission work. FM&T managed over 1,200 projects delivering approximately 70,000 items with a greater than 99% on time delivery rate. FM&T initiated the Honeywell Operating System within the NSMC including bi-weekly white board meetings to facilitate communication and rapid problem solving. A monthly program review meeting was instituted that provides the same level of project visibility as the Weapons Program Briefing within Defense Programs.

Performance Objective 3: Science, Technology, and Engineering and Other DOE Mission Objectives

Summary

Excellent

Overall, FM&T performed above expectations in managing the Science, Technology and Engineering (ST&E) portfolio. Work scope funded through discretionary Plant Directed Research & Development (PDRD) and institutionalized Non-Nuclear Readiness (NNR) was efficiently managed to deliver leading edge research and technology maturation aligned with NNSA priorities. NNSA reviewed the FM&T Self-Assessment and in all cases agreed with the overall adjectival assessment of Excellent.

The FY 2014 PDRD program budget increased by more than 60% from $13.4M in FY 2013 to a total budget of $22M. Approximately $16M was directly overseen by each of the 6 Centers of Excellence (COE) leaders and supported approximately 45 new start or continuation projects. Approximately $6M in PDRD funding was reserved for rapid response projects. These projects directly supported technology maturation for requirements on multiple programs.

Overall, FM&T performed above expectations to implement a research strategy aligned with NNSA priorities. Under the Centers of Excellence (COE) strategy, FM&T grouped and managed similar technologies under six technology focus areas (Electrical Products, Mechanical Products, Materials, Software & Simulation, Test Equipment and People - Critical Skills). Categorization was determined based on emerging technologies, workforce development and business strategies aligned with NNSA priorities. Leveraging the COE strategy, FM&T organized, developed and promoted a technically and scientifically rigorous FY 2014 PDRD program.

Overall, FM&T performed above expectations in applying research to support national security and NNSA missions. Specific examples include partnering with Kansas State University to develop a new automated Bearing Run-In machine expected to save nearly $350,000. Research and development continued to mature product coatings. FM&T also contributed to the content of the NNSA Advanced Manufacturing Roadmap that was presented to the House Armed Services Committee (HASC) by NNSA. Many examples in the roadmap captured current and future benefits in the areas of electronics, metal, and plastic additive manufacturing and Direct Ink Write (DIW).

Overall, FM&T performed above expectations to research leading edge technology and advance the Kansas City Plant's manufacturing capabilities. The quality of FM&T research as transformative, innovating and leading edge is supported by the number of patent applications, awards, leadership and participation in technical societies and professional organizations, and collaborations with leading academic, industrial, and national lab researchers. Ten patents were issued, published, filed, or converted in a variety of technology areas. FM&T also continued rapidly advancing Additive Manufacturing (AM) of metals, plastics, and electronics which has the potential to reduce costs and lead times especially when manufacturing low quantity tooling and hardware. FM&T provided proposals to the NNSA Additive Manufacturing Implementation Team (AMIT) for short term metal studies that were accepted by Defense Programs Administration and secured $3.6M in additional site funding.

Overall, FM&T performed above expectations to develop and enhance workforce capabilities. In addition to the technological and capability development provided through PDRD projects, FM&T has also taken numerous leadership roles within professional societies and university advisory boards. FM&T continued developing technical capability in critical areas through the Technical Fellowship Program by targeting engagement with academic institutions and researchers. Specific examples include a Technical Fellowship at Ohio State University in high penetration welding and a Technology Fellowship in RF testing.

Overall, FM&T performed above expectations in executing technology transfer. FM&T developed an Intellectual Property (IP) centered roadmap which included the establishment of an IP committee to identify and advocate invention disclosures, patent applications and other types of IP. Forty invention disclosures were filed in FY 2014, representing a significant growth over the 20 total disclosures filed in FY 2013. FM&T provided technical presentations at international, national and NSE conferences and is expected to publish and disclose additional intellectual property.

Overall, FM&T performed above expectations in pursuing and performing high impact work to support future national security missions. Several initiatives demonstrated focused translation of research into weapons production. A large efficiency was gained by improving rework processes for a component resulting in a potential cost avoidance exceeding $2M. FM&T also incorporated new technologies to influence the production lifecycle including purchasing 30 MakerBot desktop printers in order to change the "design thought process" and enable staff to take advantage of new capabilities provided by 3D printing. The printers were used to print development tools and parts saving over $6M in development costs.

Overall, FM&T performed above expectations in managing ST&E programs. FM&T effectively managed scope changes and resources within approved budgets. More than 320 abstracts were submitted during the FY 2015 PDRD call for proposals, demonstrating high levels of interest in technology and an innovative staff. FM&T improved the PDRD proposal process and moved most of the paperwork intensive process later in the proposal cycle reducing labor costs by approximately $100,000.

Overall, FM&T performed above expectations to actively engage with local, national, and international industry and academia to drive relevant and impactful research and development efforts. Collaborators include the following:

- National Security Enterprise Sites
- Atomic Weapons Establishment
- Ministry of Defence
- Other National Laboratories
- Local, national, and international institutions of higher learning
- A broad spectrum of industry partners
- Honeywell International

FM&T's self assessment provided 24 specific examples of new or continued collaboration. Highlights include new collaboration with the University of Connecticut's Center for Hardware Assurance, Security, and Engineering; new and continuing relationships with DOD depots (8) to advance trusted supply chain activities; a new collaborative contract with Iowa State University; and new collaborations with the University of Kansas, University of Tennessee, Oak Ridge National Laboratory, and Wyatt Technology.

Performance Objective 4: Operations and Infrastructure

Summary

Excellent

Overall, FM&T performed above expectations in their ability to meet the DOE/NNSA mission by ensuring Site Operations and Infrastructure was maintained. NNSA reviewed the FM&T Self-Assessment and in most cases agree with the overall assessment of Excellent. While Operations and Infrastructure encompasses most of the mission support areas, a primary performance driver for PO 4 was the exceptional execution of the KCRIMS relocation project one month ahead of schedule and under the budgeted $324.9M by $17.4M. Other support areas are summarized below and discussed in detail in the individual Contributing Factors and Site Specific Outcomes sections.

Physical Security: FM&T supported classified production operations at both the Bannister and NSC facilities and supported relocation to the NSC. Eighteen months of relocation activities were completed without a major security incident due in no small part to the detailed planning and day-to-day oversight of the security organization.

Cyber Security: FM&T focused on security innovation projects that laid the groundwork for strengthening the cyber security posture at the National Security Campus. In addition, FM&T completed several initiatives to improve cyber security through enhanced application and database defense, continuous monitoring implementation and Insider Threat reduction all while ensuring support for key mobility and collaboration projects such as wireless in secure manufacturing spaces, Virtual Desktop Infrastructure (VDI), Microsoft Outlook migration and LYNC Federation.

Information Technology: FM&T delivered efficient and effective site Information Technology (IT) systems and executed mission-supporting enterprise IT projects. Even with these highly complex projects, the KCRIMS move, and Outlook migration, the IT program reduced cost in FY 2014 by 9.8% saving almost $3M.

Environmental Management: FM&T's highly mature and cost efficient environmental management program was recognized as a finalist for the highly competitive National Safety Council's Robert W. Campbell award and received several other National Safety Council, Honeywell Aerospace, and environmental awards. FM&T completed Occupational Health and Safety Assessment Series (OHSAS) 18001 certification and continued exceptional environmental compliance, reporting and permitting.

Safety: FM&T maintained outstanding safety performance and metrics even with the additional large increase in transition workload. The Total Recordable Case (TRC) rate of 0.29 was 87% better than comparable industry and the Days Away From Work Case (DAFWC) rate of 0.06 was 99% better than comparable industry.

Facilities: FM&T facilities engineering, maintenance, utilities management, and asset management provided excellent support for production requirements with no impact to production despite the minimal investment for infrastructure and workforce reductions in planned areas.

KCRIMS/Transformation: FM&T successfully completed the relocation to the NSC one month ahead of schedule and $17.4M dollars under the baseline budget of $324.9M while effectively coordinating over 125 separate move phases without impacting production deliverables. FM&T also exceeded expectations in completing the KO transformation to leased facilities completing the project within budget and one month ahead of schedule while repurposing over $500,000 worth of office furniture and equipment.

Bannister Disposition: FM&T provided excellent support to NNSA including planning and design for PCB-contaminated equipment disposal, planning for surplus personal property, and providing expertise in environmental management. This support significantly minimized the transfer cost and facilitated the transition to a non-Federal entity.

Business Operations: FM&T worked successfully with the Kansas City Field Office to deliver efficient and effective business operations and systems. FM&T was highly adaptive to changing conditions associated with funding and demonstrated unwavering commitment to the NNSA goals and objectives.

Financial Management: FM&T earned an Office of Field Financial Management Good rating (highest available) for the year and provided positive responsiveness to closing management assurance system concerns, providing prompt submissions to budget related matters, and validating financial management assessments (no issues noted).

Legal: FM&T legal exhibited a high degree of expertise and competency in support of operations. The office efficiently managed complex toxic-tort litigation securing a positive result at minimal legal costs.

Overall, FM&T performed above expectations for Environment, Safety and Health (ES&H) and demonstrated FM&T's highly mature and cost efficient management processes. In FY 2014, FM&T maintained a Total Recordable Case (TRC) rate of 0.29 or 87% better than comparable industry and a Days Away From Work Case (DAFWC) rate of 0.06 or 99% better than comparable industry. There were no Days Away From Work injuries associated with the relocation to the National Security Campus (NSC).

FM&T completed Occupational Health and Safety Assessment Series (OHSAS) 18001 certification and maintained International Organization for Standardization (ISO) 14001 certifications at both Kansas City and New Mexico locations. FM&T was additionally recognized as a finalist for the highly competitive National Safety Council's Robert W. Campbell award and received several other National Safety Council, Honeywell Aerospace, and environmental awards.

Environmental compliance, reporting and permitting continue to remain exceptional and timely despite the redundant reporting required for the maintenance of two Kansas City facilities. Compliance inspections by environmental regulatory agencies have not identified any significant issues or concerns. ES&H communications and awareness programs with employees have been augmented, and data and chemical material management updates have continued to facilitate efficient and effective management and permitting processes at the NSC.

There were no Capital Construction Projects at FM&T in FY 2014.

Overall, FM&T met expectations for Physical Security. FY 2014 has once again been a challenging year for the FM&T Physical Security organization. The organization supported classified production operations at both the Bannister and NSC facilities and supported relocation to the NSC. Eighteen months of relocation activities were completed in July and were accomplished without a major security incident, due in no small part to the detailed planning and day-to-day oversight of the security organization. The organization also completed modifications to facilities in Albuquerque and successfully completed relocation activities there as well without a security incident. FM&T completed activities relating to several IT, physical, and cyber security integrated performance targets including delivering and demonstrating an implementable proof of concept for maturing the physical security system to Personal Identity Verification Maturity Model (PIMM) level 5 and developing system search alerts that utilize the physical access and logical access logs to detect anomalies. A major physical security system outage occurred in the 2nd quarter. In restoring the system, FM&T inappropriately assumed risk without the proper authority. The organization worked to correct system and procedural issues related to the outage and restoration for the remainder of the year. Despite this and other issues identified during the year, the organization has ensured activities are being executed securely and is therefore rated as meets expectations.

Overall, FM&T met expectations for Cyber Security. Cyber delivered several key Annual Operating Plan (AOP) elements to enhance the security posture of the NSC networks and information resources including database defense and utilization of continuous monitoring tools. Cyber and IT organizations completed DOE Insider Threat initiatives without additional funding or FTE support finishing well ahead of the enterprise. Cyber was also able to provide the technical assurances necessary to enable implementation of several new mobility initiatives, enterprise collaboration, Kirtland Operations (KO) facility transitions and KCRIMS disposition efforts. Cyber initiatives this year included: completing several studies for enhancements of data and network access control by leveraging the NSC's Physical and Logical access controls systems; isolating information through tiered-network segmentation; securing against information loss through Data Loss Prevention implementation; and initiating enhancements to packet capture analysis that were key for critical information analysis.

External audits resulted in positive ratings for the NSC unclassified systems and NSC COMSEC accounts. The Command Cyber Readiness Inspection (CCRI) results of NNSA Secure Network systems within the National Secure Manufacturing Center (NSMC) produced less than favorable audit scores and resulted in an unsuccessful overall audit. However, of note were the commendable efforts by IT and Security leadership to understand the issues and develop corrective action plans to immediately fix the issues. A team of IT/Cyber personnel was created to investigate causal analysis. KCFO validated corrective action measures taken to ensure system issues were fixed.

Overall, FM&T performed above expectations in delivering efficient and effective site Information Technology (IT) systems and executing mission-supporting enterprise IT projects. IT planned and delivered all IT Service Delivery services at both the Bannister facility and NSC through the relocation period. During this highly dynamic environment, all IT score card metrics were maintained at an acceptable level. Additionally FM&T, in support of NNSA 2NV, migrated from Lotus Notes to Microsoft Outlook and Link Federated with six enterprise sites, more than any other NNSA site. Even

while executing these highly complex projects, the IT program reduced planned FY 2014 costs by 9.8% saving almost $3M.

Overall, FM&T performed above expectations in managing Facility Operations at the Bannister facility as relocation to the NSC was completed. KCP facilities engineering, maintenance, utilities management, and asset management provided excellent support for production requirements with no impact despite the minimal investment for infrastructure and workforce reductions planned in these areas. Execution of the pause plan continued through relocation which minimized maintenance expenditures at the Bannister facility. FM&T effectively utilized fuel oil reserves at the Bannister facility this past winter, reducing the usage of natural gas for a $450,000 cost savings. However, FM&T did experience cost growth associated with surveillance and maintenance operations at Bannister.

FM&T is effectively stabilizing the Bannister facility in preparation for disposition leaving the vacated areas in a very clean condition. In addition, FM&T provided outstanding support for the new leased facility helping to resolve a number of building interface issues which were identified during relocation. While the roles and responsibilities regarding facilities and infrastructure are different at the NSC than those typically performed by FM&T at Bannister, FM&T effectively supported the NSC landlord and maintained equipment as needed.

Related to sustainability, FM&T is meeting expectations in energy intensity reduction, greenhouse gas reduction and renewable energy offsets. Of note, several of the sustainability goals such as metering and EISA audits are not applicable to the Bannister Federal Complex (BFC) due to the move to the NSC.

Overall, FM&T performed above expectations in business operations. In FY 2014, FM&T provided strategic business operations reviews focused on key business performance initiatives. These reviews provided greater visibility across all functional areas and utilized a mature Management Assurance System allowing best value solutions to the NNSA. Continuous improvement occurred all year long resulting in a validated cost savings/avoidance of $31.4M. Management systems such as the Contractor Assurance System (CAS), Honeywell Operating System (HOS), ISO 9001, and ISO 14001 are mature and operated effectively with improvements that exceeded CY13 levels. The HOS was an effective tool that drove strong performance for the relocation, start-up activities and ongoing operations.

FM&T also focused on improving human capital through the Talent Management Program, which identified top leadership talent and succession planning strategies. Two phases of workforce restructuring were implemented seamlessly and without controversy resulting in a leaner more efficient workforce with an annualized cost savings of $15M. FM&T coordinated well with NNSA Headquarters on the restructuring and legal reviews received outstanding feedback from approvers. During this transition, productivity remained strong and no significant safety events occurred.

Regarding Supply Chain initiatives, FM&T completed a total of 256 eSourcing events totaling $67.5M in spend, a 500%+ and 200%+ growth respectively over FY 2013. Commodity agreement spend reached $3.2M realizing 18% savings and 1,638 eStores transactions were completed, a 51% improvement over FY 2013. This level of tool usage by FM&T yielded $10.2M of strategic tool enabled

savings. FM&T is also reporting strategic site savings of $6.8M for a total Strategic Savings of $17.0M (5.4% Strategic Savings rate & 11% of overall program total exceeds expectations) against a total invoice spend of $294M.

Additional Business System and Operational highlights include attaining the highest manager hiring score, cost avoidances of $7.9M on KCRIMS relocation purchases, and $15.9M in savings through development of a strategic cost savings strategy using eSourcing templates, implementation of ePro which reduced the complexity and quantity of approval workflow projects, and implementation of continuous improvements and shared best practices with other sites in the enterprise.

Overall, FM&T performed above expectations by continuing to manage legal risk and provide legal support to operations in a highly professional manner. In FY 2014, FM&T efficiently managed the defense of a toxic tort wrongful death claim, employing an efficient strategy of delaying discovery pending summary judgment ruling and securing a just dismissal of the case with minimal cost. FM&T Legal provided leadership on development of NNSA Policy guidance regarding Export Control issues and shared best practices in export control reform to reduce enterprise risk. Effective oversight of export control compliance was maintained during move operations and disposition of excess personal property. The legal office partnered with IT to perform analysis of three internally developed legal database systems and assess the best technical option while managing systems costs. A review of licensing agreement templates was also initiated to incorporate current best practices using outside Intellectual Property counsel; counsel was utilized to provide an overview of current patent law issues to the Intellectual Property Exploratory Team.

Overall, FM&T performed above expectations in managing the KCP and KO Transformation plans. Despite being a highly complex scheduling project, KCRIMS Relocation was completed one month ahead of schedule and $17.4M under the baseline of $324.9M. Move-related safety and security performance were both at high levels. No issues impacted production due to the move and all build-ahead components were completed, both major accomplishments in light of the move disruption and production in two facilities. FM&T completed stores reduction goals on schedule in support of making operations more efficient. All requalification activities associated with the move in FY 2014 were completed on or ahead of schedule. KCRIMS cost reduction targets from the Functional Transformation Initiative are on target for an FY2015 workload-adjusted cost savings of $141 million. Management and procurement of capital equipment has had issues requiring unanticipated plant modifications resulting in increased costs. However, FM&T continued work to understand causation and prevent future recurrence.

FM&T exceeded expectations in completing the KO transformation to leased facilities. The project was completed within the budget and one month ahead of schedule. In addition, KO repurposed over $500,000 worth of office furniture and equipment as part of this effort.

Overall, FM&T performed above expectations in managing the Bannister disposition. FM&T provided excellent support to NNSA including planning and design for PCB-contaminated equipment disposal, planning for surplus personal property, and providing expertise in environmental management. This support significantly minimized the transfer cost and facilitated the transition to a non-Federal entity.

Overall, FM&T met expectations established in the KCP Financial Management Implementation Plan. The Office of Field Financial Management (OFFM) rating for the fourth quarter was Satisfactory. FM&T met requirements for submission of monthly STARS reconciliations, FY15 rate submission, and financial statements including the environmental liabilities report, annual Improper Payments report, Entity Assessment tool, and the Financial Management Assurance tool. An issue discovered during the CAS 402 audit was corrected prior to issuance of the final report and corrective action continues for an issue discovered in CAS 418 audit. FM&T is supporting the on-going OFFM review of Cost Disclosure Statements 14.1 and 14.2. FM&T hosted the Defense Programs budget meeting for NA-14. Finance partnered with the Integrated Supply Chain (ISC) to drive improvements in hourly time report approvals resulting in weekly time savings.

Overall, FM&T performed above expectations in achieving Occupational Health and Safety Assessment Series (OHSAS) 18001 joint certification for the Kansas City Plant and Kirtland Operations. Neither facility was found to have non-conformances, and the final certificate was issued by Det Norske Veritas in March 2014. This was an excellent replacement needed due to withdrawal of contractor unions from Voluntary Protection Programs (VPP).

Overall, FM&T performed above expectations in proactively managing environmental compliance. FM&T continued to maintain an excellent working relationship with the Missouri Department of Natural Resources (MDNR), the Environmental Protection Agency (EPA), and other permitting authorities. All environmental deliverables were submitted early exceeding all requirements imposed by Resource Conservation and Recovery Act (RCRA) Permit modifications and other permits. FM&T aggressively addressed the data gaps self-identified in the Description of Current Conditions Report (DCCR), and discussions with MDNR indicated no additional data gaps have been identified. As a result, approximately $5.3M in contaminant source reductions can reasonably be deferred until the FY18 time frame. FM&T also responded rapidly and appropriately to recently discovered legacy natural uranium contamination at the Bannister Kansas City Plant and to multiple GSA related compliance issue challenges. Overall, FM&T continued to provide environmental leadership for the entire Bannister Federal Complex.

Overall, FM&T performed above expectations in executing the KCRIMS Relocation Project. One of the largest industrial moves in North America was completed 30 days ahead of schedule and $17.4M dollars under the baseline budget of $324.9M resulting in an EAC of $307.5M. FM&T effectively coordinated and executed over 125 separate move phases without impacting production deliverables. Throughout the move, FM&T effectively responded to building interface issues and unrelated events that required responsive and innovative solutions to avoid impacting relocation. Examples include the concrete demolition required for the 5 axis SIP, the overhead steel installation in AEF to maintain future flexibility, and the response to the building water incident on December 15, 2013. The water event required a comprehensive recovery plan that was effectively executed. This was a noteworthy effort requiring daily communication and coordination with all involved parties. FM&T completed the NSMC relocation in January 2014 on schedule and under budget. Schedule performance was outstanding in light of the complexity and security requirements of the NSMC move.

Safety and security performance throughout the KCRIMS Relocation project was also outstanding. There were over 500 classified moves transported on 290 trucks to the NSC with minimal events and no compromise of documents, material or equipment. All requalification activities associated with the

move have either been completed or are on schedule. FM&T is recognized for effectively executing a large and complicated relocation of NNSA's equipment, material and people on schedule and under budget.

Performance Objective 5: Leadership

Summary

Overall, FM&T performed above expectations in effectively providing leadership to support the achievement of NNSA's vision and mission in Kansas City and around the Nuclear Security Enterprise (NSE). NNSA reviewed the FM&T Self-Assessment and in all cases agree with the overall assessment of Excellent.

Excellent

Effective leadership across the business resulted in strong mission performance and enterprise collaboration. FM&T led impactful enterprise-wide initiatives including the Supply Chain Management Center, Enterprise Risk Management, Defense Programs Business Process System (DPBiz), Manufacturing Production Steering Committee, Export Control Implementation and traditional technical contributions and residencies to the NSE. In production, over 100,000 directive schedule items were delivered while achieving stretch quality goals. One of the largest industrial moves in North America was completed one month ahead of schedule and $17.4M under the budgeted $324.9M. Safety performance was outstanding during production and relocation operations resulting in an 87% better than industry average for total safety recordable cases. There were no security events in production or during the 581 classified moves transported on over 290 trucks. These examples and the others captured below demonstrate the commitment and focus of leadership to deliver continuous improvements and innovative solutions to the challenges facing the enterprise.

Overall, FM&T performed above expectations in supporting collaboration with the NNSA enterprise in all of its strategic planning activities. FM&T is currently a partner with M&O contractors at Pantex and Savannah River. Those relationships were utilized to bring corporate best practices and teaming opportunities to both sites. In addition, FM&T was proactive in reaching out to other NSE sites to collaborate on advanced product realization. Specifically, FM&T co-leads the NNSA Additive Manufacturing roadmap effort with LLNL. FM&T also collaborates with LANL, SNL, Y-12, ORNL, and SRS to define the role of additive manufacturing technology for NNSA and partners and plan leveraged efforts to harvest the most valuable benefits for NNSA's needs.

Other enterprise support included excellence in supply chain management, export control, centers of excellence execution, enterprise risk management, PRIDE, and Defense Programs Business Process System (DPBiz) support. NNSA also commended FM&T for its collaboration with design agencies on process, equipment, and tester requalification efforts which are on schedule. In March, FM&T completed production of over 21,000 build-ahead products across all programs ensuring consistent delivery of product during the KCRIMS relocation.

Overall, FM&T performed above expectations to critically self-assess performance and maintain transparency with the NNSA. FM&T's partnership with KCFO on Governance and oversight is leading the enterprise as an example of how to work toward a common goal and deliver value to the taxpayers. In addition to internal audit and quality assurance functions, FM&T utilizes outside certifications such as ISO 9001 and 14001 to drive performance excellence. FM&T became OHSAS 18001 certified in January 2014. Third party assessments of the Management Assurance System and Malcolm Baldridge based business model helped improve business performance by integrating

related systems and processes. FM&T was also recognized as a finalist for an international business excellence award for measurable achievements in HS&E performance. Overall, both self assessments and transparency of the results have driven consistent improvement throughout the performance cycle.

Overall, FM&T performed above expectations to effectively incorporate parent company systems and resources into the KCP business. Corporate systems like the Management Assurance System, Enterprise Business Operations Reviews, Honeywell Operating System, and Centers of Excellence continued to provide benefits to KCP as well as the NSE. FM&T was recognized by Honeywell's Aerospace sector for its outstanding safety performance and was presented the large aerospace site safety achievement award. System performance was reflected in the Purchasing & HR Performance Matrices, which exceeded targets. FM&T also completed 198 continuous improvement projects for a total savings/avoidance of $31.4M.

Overall, FM&T performed above expectations in working selflessly to bring value to the NSE. FM&T improved collaboration and brought expertise across the enterprise through employee residencies including at NNSA HQ, DOE-IN, USAF, DoD-Nuclear Matters, SNL, Pantex, and the Savannah River Site (SRS).

As a leader in Enterprise Risk Management (ERM), FM&T led meetings with SNL and SRS on joint enterprise risks influencing other sites to expand risk models to the site enterprise level. FM&T hosted an enterprise wide ERM forum to share processes and lessons learned and supported ERM implementation across sites. FM&T will also lead an NNSA championed ERM forum over the next year.

FM&T continues to provide leadership throughout the NSE and DOE/Environmental Management (EM) in the area of strategic sourcing through its Supply Chain Management Center (SCMC). NSE and EM cost savings were over $163M, far exceeding the $100M goal. At the end of FY 2014, the SCMC received DOE Headquarter funding to start a pilot initiative expanding SCMC use into Office of Science sites.

Finally, FM&T was a key player in helping NNSA finalize NAP-23 content related to export control elements and enhanced implementation at other sites.

Overall, FM&T performed above expectations in aggressively pursuing professional excellence supporting and aligning itself with quality programs such as Malcolm Baldridge, Six Sigma, and residency programs across the NSE. FM&T's human resources program is performing well as reflected by their score of excellent against the HR Objective Matrix and their execution of workforce restructuring efforts. In addition, FM&T teamed with external organizations such as the Excellence in Missouri Foundation to promote continuous learning throughout the Kansas City area. The implementation of an integrated talent management system has strengthened FM&T's performance and development processes.

FM&T was awarded the FIRST Robotics Outstanding Volunteer of the year award and facilitated the merger of two Minority Serving Institution Partnerships focused on improving the Science, Technology, Engineering, and Mathematics (STEM) pipeline from kindergarten to graduate school.

Numerous academic institutions have recognized FM&T'S talented and highly skilled workforce by nominating employees to serve on boards and leadership forums. All salaried employees are required to be Six Sigma certified and continuous improvement activities have resulted in $31.4M in cost savings or avoidances in FY 2014.