

## National Nuclear Security Administration

**FY 2013 PEP** 

Honeywell FM&T Performance Evaluation Report

Kansas City Field Office Kansas City Plant Performance Period: October 2012 – September 2013

December 20, 2013

#### **Executive Summary**

Honeywell Federal Manufacturing & Technologies (FM&T) exceeded almost all FY13 performance targets during a year of significant organizational challenges including; transitioning to a new facility while simultaneously operating the existing facility, maintaining weapon delivery performance, and positioning the Kansas City Plant (KCP) for National Security Enterprise (NSE) support. Although a few specific issues are identified in this report, summarily FM&T has performed in an exceptional manner under difficult and challenging circumstances.

PO 1- Nuclear Weapons Mission: While satisfying W76-1 AF&F production and multiple weapon program maintenance schedules, implementing an Earned Value Management System (EVMS) on the B61-12 LEP, delivering > 18,000 hardware items to support development efforts, KCP completed ~50% of a complex KCRIMS relocation with no major impacts to weapon product quality. In FY13, KCP realized \$7-9M in development program cost savings, reduced requalification costs by ~\$2M, saved ~\$450K in labor costs on the dismantlement program, and identified a \$30M cost avoidance over the life of the W88 ALT 370 Program. FM&T closed the fiscal year under budget across the entire Defense Programs Directed Stockpile Work portfolio. Of particular note was FM&T's work on a new gas-transfer system for the B61-12 where operational performance consistently paralleled theoretical calculations. In addition, FM&T improved manufacturing, decreased production flow time, and leveraged welding schedules resulting in reduced manufacturing costs and improved War Reserve (WR) product for the W76-1 Arming, Fuzing, and Firing (AF&F) assemblies, Neutron Generators (NG), and Gas Transfer Systems (GTS). FM&T's pre-build efforts for B61-12 and W88 ALT 370 components attributed to program cost savings and Bell XI sensor verification testing provided cost avoidance to the W88 ALT 370 program. FM&T partnered with LANL to develop multiple options for B61-12 stress cushion replacement foam material and established a long term contract for Commercial off the Shelf (COTS) component testing, enabling reduced program risk and efficiencies. FM&T exceeded Access Control and Office Secure Transportation (OST) Web work scope and completed Demilitarization/Retirement deliverables ahead of schedule and under budget. FM&T met all Level 2 surveillance milestones for the stockpile systems in accordance with directive documents and within site budget allotments. FM&T effectively collaborated with Design Agencies to drive down requalification costs, manage Directed Stockpile Work requirements, and complete Life Extension Program (LEP) component development and manufacturing deliverables through a complicated KCRIMS transition to a new National Security Campus (NSC). While FM&T achieved quality performance objectives as described in the KCFO Quality Performance Index, NNSA remains concerned with their failure to detect and address vendor production changes (deviations from drawing requirements) and impacts to programs. Also of concern is FM&T exceeding the Advanced Radio Enterprise System (ARES) Project Task Agreement (TA) budget and failing to communicate the situation within a reasonable timeframe.

**PO 2 – Broader National Mission:** FM&T performance in support of NA-20, NA-40, and Interagency Work is noteworthy. FM&T generated an estimated \$500K in savings to NA-42 by implementing training and process improvements on existing HE Detector operation and maintenance activities.

FM&T excelled in maintaining operational readiness in support of the NA-40 DOE Forensics Operations team (DFO) and identified ~\$35K in savings by reducing weight and balance of the DOE

Forensics Operations load. FM&T completed 100% of NA-40 Science and Technology program deliverables within budget, with all but one on time, which significantly exceeds the average deliverable rate for the program as a whole, achieving success despite the continuing resolution and other budget issues outside of its control, and no corrective actions were required. FM&T continues to work closely with NA-40 to reduce costs to the government in meeting this year's and out year's FM&T leveraged its printing capacity to print, bind and ship all NA-242 International Non-proliferation Export Control Program (INECP) workshop materials at no additional cost to the program or Department, generated ~\$100K savings to INECP and supported more than 74 NA-242/INECP workshops in the US and abroad. Serving as a member of the INECP's Demonstration Kit Management Team, FM&T made substantial progress in the establishment of standardized training display kits, centralized all INECP planning, logistics, and printing at the KCP, and acquired information across seven DOE Laboratory and NNSA sites, shipping final consolidated, packaged material directly from KCP. FM&T exceeded its Interagency Work overhead recovery goals by 10.3%, producing \$257.2M in sales and \$106.4M in overhead recovery, split between business segments as follows: National Secure Manufacturing Center (NSMC) \$146.8M with \$61.5M in overhead recovery, Kirtland Operations \$23.2M with \$7.8M in overhead recovery, and KCP \$87.3M with \$37.1M in overhead recovery. In addition to achieving overhead recovery goals, FM&T earned a 92.2% Global Security Voice-of-Customer (VOC) feedback rating, against a 90% goal, demonstrating above expectation performance in 9 VOC performance elements, including cost, quality, and delivery.

PO 3 – Science, Technology and Engineering Mission: FM&T proactively seeks excellence in a business structure for technology portfolio management. Groups of similar technologies, Centers of Excellence (COE), with a common goal are being managed in six technology focus areas. Selection criteria value is given to emerging technologies, workforce development and business strategies that align with the goals of the NNSA. Support continues for Additive Manufacturing (AM) of both metals, plastics and electronics, a technology that has the promise of reducing costs and lead time to manufacturing low quantity tooling and hardware. FM&T procured 25 "MakerBots" as a relative inexpensive method to enhance technical staff's engagement of this unique capability. It allows new ways of making product, as it has the capability of producing working assemblies and "parts-within-parts". The use of desktop AM machines netted a \$4M saving in FY13 on the B61 LEP and W88 ALT370. A metal AM machine printed a W88 ALT370 Housing in 6 weeks, compared to the 26 weeks quoted by a machining supplier. FM&T has been active in early engagement and partnering with other NSE technical counterparts, academia and industrial entities. During the PDRD project selection process the COE focus area lead is required to mentor new, less experienced project leads, to assist in the alignment of innovative research ideas to business needs.

PO4 – Security, Infrastructure, Environmental Stewardship and Institutional Management: Performance was overall above expectations. The major deliverables within PO 4 for FY13 were the completion of the new facility and completion of about 50% of the move. These initiatives mark a significant milestone in the modernization of the nuclear weapons complex. FM&T delivered the new NNSA facility on time, under baseline budget and met or exceeded stringent performance requirements. FM&T responded very quickly to emerging issues for the very complex move ensuring the move was done safely and with no impacts to production. KCRIMS new facility financial performance for tenant improvements was outstanding in FY13.

Of note was the successful resolution of all claims with no delay claims avoiding \$190K/day of damages. Through the outstanding efforts of FM&T, all the technical issues were successfully resolved while still maintaining a very aggressive 29 month design/build schedule. FM&T received the highest OFFM financial rating possible. FM&T closed the Retirement Earnings Plan for new hires effectively and replaced this with an enhanced 401(k) which reduced costs. management met expectations with appropriate measures to minimize costs for document scanning activities, an increase in off-site storage, and the relocation of the records center from Bannister to NSC. FM&T Physical Security has fully supported KCRIMS construction activities and developed detailed relocation plans which are about 50% executed for the NSC. Under this very heavy workload, the security function overall met expectations. Several key IT projects were delivered, in support of the NNSA mission making significant improvements and reducing costs. demonstrated sustained excellent performance in Safety and Health and Emergency Management during relocation activities. FM&T is implementing Industrial Safety ISO at the KCP and KO. Certification for KCP is only waiting upon the outside entity reviewing KO. FM&T has kept ahead of environmental statutory and regulatory requirements involving new and closing facilities; provided excellent support to the disposition of the existing facility including NEPA/EA activities; and, has effectively managed business and legal operations. FM&T's performance on the KCRIMS Relocation Project has met or exceeded all key milestones to date. The project is approximately 50% complete. FM&T responded quickly to emerging issues for the very complex move ensuring the move was done safely and with no impacts to production. Risk management processes drove the rigor for ensuring excellent planning and response to events. FM&T continues to effectively manage the Transition Readiness and Production process ensuring all relocation phases were started on time. There have been no production schedule performance issues as a result of the relocation project. performance to date has yielded no major incidents and only a few minor ones. The contractor emergency management POCs are effectively managing both facilities. Transformation deliverables have all been met and of special importance is the overall reduction in annual operating costs which are ahead of pace to deliver over \$140M of annual savings in FY14 dollars.

<u>PO5 - Contractor Leadership</u>: Honeywell Federal Manufacturing and Technologies, LLC (FM&T) continues to bring best business practices to both Kansas City Plant (KCP) and to the Nuclear Security Enterprise (NSE) while providing excellent manufacturing services in a safe, secure, and cost effective manner. FM&T is aligned with NNSA's strategic goals and works to satisfy KCFO and NNSA senior management's expectations. Achievements are specifically recognized in two areas:

1) <u>Transformation:</u> FM&T is executing the largest industrial move in North America ahead of schedule and on budget with no significant safety or security events. KCP continues to meet all schedules and performance expectations while relocating all operations to effect a major and permanent cost reduction in non-nuclear weapon component manufacturing. <u>Contributions to NSE:</u> FM&T has demonstrated significant contributions to the NNSA including delivering more than \$117M in strategic sourcing cost savings to NNSA and EM. They have led improvement initiatives around Enterprise Risk Management, manufacturability, and export control of nuclear technologies. They have partnered with laboratories and production sites to address issues in production and infrastructure support and provided senior leadership as an LLC partner at SRS and Pantex.

#### **Performance Objective 1: Nuclear Weapons Mission**

#### **Narrative Summary**

FM&T exceeded expectations by working aggressively with Sandia National Laboratories and Los Alamos National Laboratories to drive down FY13 requalification costs by \$2M while managing Directed Stockpile Work (DSW) requirements through a complicated transition to KCRIMS. There were no

Excellent/97

major weapon quality assurance issues identified as a result of relocation activities (with ~50% of move complete). KCP met all Level 2 maintenance milestones for the W76-1, W76-0, W87, W88, W78, B61, B83, and W80 stockpile systems in accordance with directive documents and under site budget allotments, returning ~\$1M to HQ Programs to support activities at other NSE sites. exceeded expectations within the dismantlement program's component disposition by streamlining the legacy hardware destruction process saving ~\$450K in labor for FY 2013. expectations within the gas transfer systems program by improving manufacturing, reducing production flow time and eliminating non-value added process steps, and leveraging welding schedules resulting in reduced manufacturing costs and improved WR product resulting in delivering high priority W76-1 AF&F, NGs, and GTS IAW directive documents and within site budget allotments. KCP met program management expectations by providing a comprehensive analysis for the B61-12 development workload and risk assessment and for the W88 ALT 370, and completing the W78/88-1 LEP activities within budget profile, scope, cost and schedule. KCP met expectations overall in support of NA15 Task Agreements required deliverables for agreed cost, scope and schedule. NNSA remains concerned with KCP's failure to detect and address vendor production changes (deviations from drawing requirements) and impacts to programs.

FM&T met all Level 2 surveillance milestones for the W76-1, W76-0, W87, W88, W78, B61, B83, and W80 stockpile systems in accordance with directive documents and within site budget allotments that led to accomplishing lifetime estimates and lifetime assessments for future LEPs.

FM&T exceeded or met the deliverables for the B61-12 LEP, W78/88-1 Study, and the W88 ALT 370. KCP has a number of areas they performed above expectations. Of particular note was their work on a new gas-transfer system whose performance consistently matched theoretical calculations for the new design, efficiencies and cross program leveraging opportunities that contributed to cost savings, and pre-build efforts for the B61-12 and W88 ALT 370 components saving \$7-9M throughout the KCRIMS transition. KCP contributed to the various reporting requirements throughout the year, including the program and component requirement documents, Selected Acquisition Reports, schedule and risk information for the Integrated Master Schedule, CAPE reviews, cost and study information associated with the option development and feasibility studies, Quarterly Program Reviews, and monthly reporting which included EVMS data. While maintaining production schedules, implementing EVMS, and managing a complex KCRIMS move, KCP also delivered more than 18,000 B61-12 LEP development hardware items, ending the FY 2013 under the B61-12 LEP budget.

FM&T provided engineering and physics-based lifetimes estimates and aging assessments on nuclear explosive package components and materials for weapon refurbishment/replacement.

FM&T enhanced the development of component material evaluation knowledge and capabilities for selected non-nuclear components.

FM&T exceeded expectations by leading the Nuclear Weapons Enterprise in driving the completion of the NNSA phase gate process requirements and early implementation of these requirements support of active and future LEPs.

FM&T exceeded expectations in a number of activities for the B61-12 LEP in FY13. KCP identified and received Federal Director concurrence to use \$1M in funding to expedite work on the B61-12 LEP EVMS implementation. Partnering with LANL, KCP identified acceptable options for stress cushion replacement foam material on the B61-12. Finally, KCP with the long term contract for COTS testing allowed for reduced risk and efficiencies to the B61-12 Program. Also of note was KCP's work in implementing the Integrated Master Schedule on an aggressive timeline, their Work for Others on the Air Force Tail-Kit, and the design improvements of the Aerodome for the B61-12 Nose Bomb Subassembly. While KCP met component development and manufacturing deliverables, it is important to recognize their success in light of the simultaneous life extension program efforts and the move to KCRIMS.

FM&T supported all Phase 6.2 W78/88-1 LEP program activities, often responding within hours to quick-turn requests for data updates, and providing necessary manufacturing information for down-select decisions. KCP also provided SME experience in MRL maturity, production strategy documentation, and IPG methodology that provided valuable guidance to the direction of the program.

FM&T completed some noteworthy achievements for the W88 ALT 370 in FY13. KCP's testing of the legacy W88-0 FBIA to verify functionality of Bell XI sensors provides a \$30M cost avoidance for the W88 ALT 370 program. Additional testing throughout the year met test schedules, facilitated the improvement of process improvements, and improved manufacturing practices. Early engagement in PRTs and implementation of lessons learned from the W76-1 has the potential to yield additional cost savings for the W88 ALT 370.

FM&T exceeded expectations by meeting overall quality performance objectives while transitioning to KCRIMS. In addition to meeting the core metric objectives, KCP exceeded expectations through innovative approaches to WQA-related issues including Calibration Services efforts to provide timely and effective support at both facilities during the transition; development of advanced measurement technologies to improve consistency and reliability while improving efficiencies and reducing inspection labor requirements; and sharing of good work practices and WQA methodologies with the NNSA enterprise during the 2013 WQA Workshop.

#### Performance Objective 2: Broader National Security Mission

#### **Narrative Summary**

FM&T executed over 500 projects within the statement-of-work cost, scope and schedule and satisfied 59,405 Interagency Work (IW) deliverables with greater than 99% on-time delivery. FM&T's Global Security business segment generated \$170M in revenue, a 10.3% increase over the FY13 goal of \$154M

Excellent/98

and a 26.3% increase over the \$134.6M FY12 actuals. FM&T earned a Global Security Voice-of-Customer feedback rating of 92.2%, against a 90% goal, demonstrating above expectation performance in 9 VOC performance elements, including cost, quality, and delivery.

FM&T leveraged resources between Stockpile Stewardship and Interagency Work to develop the technical expertise to understand manufacturing capabilities and limitation for emerging technologies. The National Secure Manufacturing Center was instrumental in formalizing the Rapid Response Accelerator (R2A) Task Force as an interagency effort codified with a memorandum of agreement between the National Secure Manufacturing Center and the Office of the Secretary of Defense Manufacturing Technology Program. The R2A platform provides a venue to allow disparate government organizations to share emerging problems and priorities in search of broader coalitions to work together to solve problems faster while producing enduring results. Participating organizations to date include: the Department of State, the Army Rapid Equipping Force, the Combating Terrorism Technical Support Office, Special Operations Command, the Defense Intelligence Agency, and others. In addition, FM&T is utilizing its experience in supply chain management to improve the security and trustworthiness of acquisition processes.

FM&T established the Rapid Response Accelerator (R2A) Task Force with the Office of the Secretary of Defense Manufacturing Technology Program focused on prioritizing national security issues.

FM&T participated in the National Additive Manufacturing Consortium and developed an additive manufacturing capability bridging Interagency Work and Directed Stockpile Work requirements with sponsor funded equipment; examples include a B61 cutaway, prototype reservoir, JTA housing and Rapid Agent Aerosol Detector logistics model.

The KCP Interagency Work leaders participated in the FM&T Technical Centers of Excellence model to ensure Interagency Work (IW) and Stockpile Stewardship Program technical capabilities are aligned.

FM&T partnered with key stakeholders to develop a secure supply chain construct and established analytical capabilities unit at NSMC similar to other DOE labs to support enduring and emerging national security issues.

FM&T leveraged its printing capacity to print, bind and ship all NA-242 International Non-proliferation Export Control Program (INECP) workshop materials at no additional cost to the program or Department, generated ~\$100K savings to INECP and supported more than 74 NA-242/INECP workshops in the US and abroad.

FM&T served as a member of the INECP's Demonstration Kit Management Team and made substantial progress in the establishment of standardized training display kits. FM&T centralized all INECP planning, logistics, and printing at the KCP, acquiring information across 7 DOE Laboratory and NNSA sites, and shipping final packaged material directly from KCP.

FM&T completed 100% of the NA-40 Science and Technology Program's deliverables within budget, with all but one on time, which significantly exceeded the average deliverable rate for the program as a whole. FM&T achieved this success despite the continuing resolution and other budget issues outside of its control, and no corrective actions were required. FM&T continues to work closely with the program to reduce costs to the government in meeting this year's and out year's deliverables.

FM&T performed NA-45 tasks in accordance with written guidance and exceeded some technical requirements by successfully responding to exceptional challenges and executed all tasks (schedule and budget) according to plan. FM&T excelled in maintaining operational readiness in support of the NA-45 DOE Forensics Operations team (DFO) and identified ~\$35K in savings by reducing weight and balance of DOE Forensics Operations load. FM&T demonstrated exceptional flexibility and responsiveness.

FM&T provided scientific expertise and support during NA-40 Gauntlet Challenge exercise. In addition, FM&T saved the NA-42 program ~\$500K by implementing training and process improvements on existing HE Detector operations and maintenance activities. NA-42 Emergency Response customer rated KCP "Excellent" in eight of nine VOC performance areas (including cost, quality, and delivery) indicating NA-42 uses KCP Kirtland Operations because KCP gets the job done and because NA-42 receives great value. The remaining element HS&E was rated "Average" because it did not apply to the customer's project and KCP's rigorous business processes require an HS&E review of every project.

FM&T supported NA-40 Render Safe JD's, Marble Challenge exercises, NLE planning. During the fourth quarter of FY13, FM&T met expectations in support of the Render Safe Program. FM&T executed assigned training events and program meetings in a very satisfactory manner, provided required personnel to fill watchbills and rosters when needed, exceeded expectations in providing logistics and communications support, and provided planning to minimize impacts with available funding during sequestration and maximize planning for spending overtarget during the quarter. FM&T also supported the Seattle City Roll-out for the certifying STAB Team, providing STAB capability.

In FY13, FM&T generated \$257.2M in Interagency Work sales and \$106.4M in overhead recovery, split between business segments as follows: NSMC \$146.8M with \$61.5M in overhead recovery, KO \$23.2M with \$7.8M in overhead recovery, and KCP \$87.3M with \$37.1M in overhead recovery. FM&T exceeded its overhead recovery goals by 10.3% for a total recovery of \$106M. The total Intelligence Work program for FY13 executed \$110M, an increase of 14%. This was an outstanding accomplishment given the IW sponsor's increasingly tight budgets and uncertainty due to sequestration.

#### Performance Objective 3: Science, Technology & Engineering (ST&E) Mission

#### **Narrative Summary**

FM&T has proactively engaged with other NSE technical counterparts, academia, and industrial entities evidenced by the number of invitations to publish in referred journals, speaking invitations to academic groups, patent applications, and general participation in national technical societies and

Excellent/95

professional organizations. Center of Excellence (COE) leaders are constantly challenged to engage the technical environment seeking trends and ideas. A total of 69 research projects (\$13M) were funded by PDRD in FY13. In FY14 PDRD has selected funding for 60 projects (\$14M) to continue to support technology roadmaps and future mission needs. Proactive planning for future systems like the W78/W88 LEP and LRSO assure technologies are mature when required to support product development. FM&T provided a well-developed list of current FY13 projects and abstracts for submission to the Atomic Weapons Establishment (AWE) of the United Kingdom supporting potential collaboration with AWE for ongoing and future manufacturing R&D.

Product Engineers actively engage internally and across NNSA sites to develop component manufacturing readiness level (MRL) assignments and to share lessons learned from past manufacturing experiences. FM&T initiated the "Component Maturity Network" to align with the goals of the NNSA. A new adhesive material was developed to replace a commercially obsolete product for the Aerodome on the forward end of the B61 Nose Case Assembly. Simulation technology developed specifically for the forge operations supporting GTA production has enabled production solutions to be realized prior to actual vendor processing. Savings on the order of \$150,000/yr. are being realized consistently with this new process.

Mechanical Products Centers of Excellence has funded research enabling FM&T to become a primary contributor and resource for Additive Manufacturing (AM) of both metals and plastics, a technology that has the promise of reducing costs and lead time to manufacture low quantity tooling and hardware. FM&T procured 25 "MakerBots" as a relative inexpensive method to enhance technical staff's engagement of this unique capability. The overall strategy for AM technology is to use it for WR hardware as a method to reduce time, cost, and waste stream. AM is especially cost effective when using it for fast turnaround, low quantity needs such as prototype tooling and hardware which is significantly faster than traditional methods of manufacturing. Using KCP procured AM equipment has already yielded fast turnaround and cost savings on the B61 LEP and W88 Alt programs in specific areas when compared to support these same needs without traditional methods. An example is a metal AM machine which printed a W88 ALT370 Housing in 6 weeks, compared to the 26 weeks quoted by a machining supplier.

During the PDRD project selection process the Centers of Excellence COE focus area lead is required to mentor new, less experienced project leads, to assist in the alignment of innovative research ideas to business needs. FM&T's "Technical Fellowship" program, student research program that leads to advanced degrees, has more than doubled to fill identified critical skill gaps for future NNSA missions.

Centers of Excellence structure groups of similar technologies with a common goal for technology portfolio management continues to mature to assure that appropriate customer needs are supported. FM&T is deploying a "Systems Engineering" capability that will map out the requirements of future Weapon Programs. This will enable the COEs to define the requirements and timing to develop the appropriate technologies to support the B61-12, W88 ALT370, B83 ALT353, W87 AFA and starting to review the W78 LEP and LRSO requirements.

# Performance Objective 4: Security, Infrastructure, Environmental Stewardship & Institutional Management

#### **Narrative Summary**

Physical Security - The last year has been an extremely challenging year for the FM&T Physical Security organization. The breadth of responsibility in Kansas City increased from a static 3.5 million square feet at one facility to five million square feet at two facilities & over-the-road relocation of classified

Very Good/90

assets. In order to support classified production operations at both facilities the organization stood up a second protective force and intrusion/detection monitoring capability. Due to the significant change in protection strategies the organization also had to develop and implement an entirely new set of plans, processes, and procedures for operations at the NSC - while maintaining those still in use at the Bannister facility. FM&T actively engaged in finalizing construction activities and conducting verification activities at the NSC and executing detailed relocation plans for the NSC. ensured modifications to existing facilities in Albuquerque to meet security requirements in preparation for relocation activities for Kirtland Operations. These activities represent an enormous workload without increase to security staffing levels, which at times during the year, impacted the performance of the Security organization. Overall, the organization has ensured activities are being executed securely and therefore is rated as "meets expectations." Cyber Security - Honeywell's AOP metrics for Q4 and the year were Green, no issues. All AOP milestones were delivered on time. Cyber Security completed certification and accreditation for the Integrated Building Management System at NSC and commenced red-team testing for vulnerability discovery and remediation. This allowed the development and implementation for the first HSPD-12 compliant system within the Department of Energy. Cyber Security supported the secure development and delivery of several key business projects such as Virtual Desktop Infrastructure (VDI), Visitor Request Access Control (VRAC), GOOD implementation for mobility, and 802.11 Wireless network deployment for NSC visitors. Additionally, Honeywell has implemented several new layers of IT infrastructure defense such as FireEye for email defense and DECS for email and web traffic (DNS) defense. Cyber Security was assessed by the DOE Inspector General's Office during their non-financial system FISMA audit in Q4 which resulted in no issues. Honeywell's performance in Cyber Security for FY13 Meets Expectations.

FM&T business systems, such as the Management Assurance System (MAS) and Honeywell Operating System (HOS), are mature and operating effectively. The operating philosophy and continuous improvement culture has resulted in productivity savings of \$6.7 million and six sigma cost savings of \$17.3 million during FY13 representing 283 process improvements.

The KCRIMS relocation project (one of the largest industrial moves in the U.S.) is comprised of eight purchase orders with a current total value of about \$89M with a production move schedule from 01/23/2013 to 08/07/2014. Execution to the established Integrated Project Plan schedules is on track to complete each move phase without impact to production schedules, and to date, KCP procurement has negotiated greater than \$9 million or 10.4% in cost savings/avoidance. OFFM Rating for FM&T, Good, which is the highest rating. FM&T closed the Retirement Earnings Plan (REP) for new hires effective 1/1/13 and replaced it with an enhanced 401(k). This will reduce costs and reduce long term liability to the Department. Contractor purchasing and human resources are rated as Outstanding as measured by the FY13 Objective Matrix performance standards. KCP has completed 35 eAuction/sealed bid by rank eSourcing events against a target of 30, reported \$18.9M of eSourcing spend against a target of \$18M and has 1,082 eStores transactions against a target of 600. KCP is reporting SCMC savings to date of \$5.3M (9.7% of total SCMC savings) and Strategic Site Savings of \$678K for a total Strategic Savings of \$5.9M (5.6% of total Strategic Savings). Records Management - Performance met mission and operational requirements. The contractor has taken appropriate measures to minimize costs for document scanning activities, increased off-site storage, and relocated records from Bannister to the NSC. The contractor has addressed most opportunities for improvement identified within the annual formal assessment.

FM&T has met expectations as stated in the Strategic PEP and NA-IM's Performance Execution Guidance (PEG) for IT performance objectives. IT has supported the KCRIMs relocation while maintaining 99.9% reliability, and met all IT milestones. Several key projects were delivered in support of the NNSA mission. FM&T deployed classified computing for Craddock C; enabled a mobile working environment inside the NSC with hotel wireless, VDI and GOOD infrastructure; upgraded the NSC-to-Bannister link to increase bandwidth and capacity and enable fail-over of the circuits reducing potential outages from hours to a few minutes.

Facility Operations at the Kansas City Plant (KCP) were very well managed. Of note was FM&T's execution of mover with utilities scope which was performed in-house rather than contracted as originally planned. This resulted in an RTBF cost savings of over \$4.5M. KCP facilities engineering, maintenance, utilities management, and asset management continued to meet or exceed expectations while focusing on cost reduction. FM&T effectively maintained plant utility systems with no impact to production operations despite the pause plan for any system modifications. Execution of the KCP Facility pause plan was effectively managed eliminating upgrades without imposing undue risk. This strategy eliminated over \$100M of projects over the recent years by limiting facility-related spending to corrective maintenance of critical infrastructure and production equipment in support of the mission while maintaining a safe and secure facility. All other maintenance has been deferred at a significant RTBF savings. RTBF management was transferred into the Program Management organization which has provided improved financial management across the plant. maintenance had to continue to meet Bannister expectations but also had to support production equipment at both sites. There were no schedule impacts due to localized facility downtime (100%) Facility Availability) and no facility downtime impact from RTBF activities. Honeywell FM&T continued excellent management of the Roof Asset Management Program (RAMP) for the NNSA and Idaho National Laboratory (INL). This significant contribution in leading the program is recognized throughout the NSE. RAMP was positioned to transition to a new funding source in future years as work was completed under the Facilities and Infrastructure Recapitalization Program (FIRP). KCP is in the process of moving out of the Bannister facility to a new (leased) LEED gold facility which will significantly reduce energy costs.

This initiative enables a great improvement in sustainability for the KCP. KCP maintained focus on applicable sustainability metrics despite resources that were stretched thin by the move to the new facility. KCP reported on-track performance for energy intensity and renewable energy (through REC purchases). Several of the other goals for the old facility are not applicable due to the move to the new-leased space. KCFO determined metering to allow "Power Utilization Effectiveness" calculations was not cost effective as the new data center is state of art and there are no current efficiency opportunities. The water intensity reduction goal at the old facility was not pursued due to NNSA ceasing operations there which is another example of best commercial practice.

FM&T has demonstrated sustained very high performance in Safety, Health and Emergency Management during the largest industrial move in the nation. There have been no significant safety occurrences during the move. FM&T is managing both the existing and new sites effectively while ensuring programmatic requirements are met. FM&T is a leader in government compliance and continues to partner with the NNSA to drive down costs. The pressure safety ASME requirement for a newly procured piece of equipment was originally not recognized but was self-identified and quickly brought to resolution by bringing in an outside expert. In a complex regulatory environment involving new and closing facilities in numerous political jurisdictions, Honeywell FM&T has kept ahead of changing environmental statutory and regulatory requirements and has been early or on-time with all necessary submittals, documents and plans. All necessary permits for the new National Security Campus (NSC) were completed on or ahead of schedule, facilitating the effective and efficient transfer of KCP production capabilities. Outsourcing plating and other hazardous processes greatly reduced the environmental footprint for the new facility. Chemical inventory and associated management systems have been automated and improve the accuracy and efficiency of NSC recordkeeping, permitting, and emergency response requirements. FM&T ensured effective Emergency Management preparedness was in place for the new site as well as continuing to meet requirements at the old site. Additional drills were conducted at the new site along with ensuring all new personnel had briefings and maps for evacuation routes. FM&T proactively increased the drills to familiarize people with the new facility.

FM&T ensured full compliance with legal requirements and contract mandates through consistently high quality legal office work product. FM&T thoroughly reviewed Lease and Operating Agreement requirements to preserve widest span of NNSA operation in the new National Security Campus while respecting landlord required mandates. Litigation involving FM&T contract operations were handled by both in-house counsel and contracted counsel with superior results, securing summary judgment. FM&T provided complex-leading support in Export Control Act compliance.

FM&T continues to exercise a rigorous self-assessment program for identification of Quality Management System deficiencies and has a responsive corrective action process to prevent recurrence of deficiencies identified. For example, the Supply Based Management Team incorporated process modifications that led to improved supplier performance. FM&T's quality management system has continued to function at a high level and delivered cost savings from Six Sigma and Lean projects which reduced operations cost by \$10M+ . The Honeywell Operating System (HOS) provides communication of quality issues from the factory floor (Tier 1) up to senior management (Tier 4) ensuring rapid identification and resolution of quality issues.

FM&T is ahead of plan towards cost savings of \$100M per year and this was externally validated. Spending was at about 90% of budgeted target. This is a very significant achievement in driving down KCP costs. Overall, spending from the FY06-FY13 period is about \$260M less than originally projected due to the "pause plan" where all but corrective maintenance was cancelled. The overall cost savings from the pause plan (only corrective maintenance was performed) more than offset the entire cost of the KCRIMS/NSMC Occupancy project. The new NNSA facility was delivered on time, fully meeting or exceeding the Program of Requirements, despite the very aggressive design/build schedule and under budget. The modernization of the KCP was accomplished primarily with private funding and ensures facilities for non-nuclear production for decades to come. Effective project management prevented delay claims on a very complex, state of the art, design-build project completed in only 29 months. KCRIMS new facility cost performance was outstanding in FY13. Critical IT and security activities were completed in support of classified occupancy despite numerous challenges in working with the developer team. Building 4 National Security Manufacturing Center completed slightly ahead of schedule and was certified by DOE-IN for secure operations. Build aheads were completed ensuring continuous delivery of components throughout the move and requalification. The Honeywell Transition process assured very detailed risk based planning that prevented production impacts. Daily tiered accountability meetings facilitated rapid, effective responses to issues as they arose and FM&T proactively implemented corrective actions to prevent future recurrences. Coordination of regualification requirements was outstanding with the Design Laboratories.. The weapon inventory reduction initiative reduced storage requirements to less than 20% of prior square footage resulting in a significant cost reduction. This process was vetted very well with all stakeholders to ensure necessary assets were not dispositioned. FM&T completed the design criteria for the Kirtland Operations NC-135 transition and leased facilities were secured. The facilities require minor remodeling to adapt for KO usage and this is underway and on schedule. This was a major step which enables successful transition from KO AFB in support of Kirtland AFB requirements.

FM&T performed above expectations by completing several key activities critical to disposition of the Bannister Federal Complex (BFC) Kansas City Plant (KCP). These include: a) Contracting and finalizing an initial business case for real property disposition; b) Updating a personal property disposal plan; c) Completing actions required for compliance with the National Historic Preservation Act (NHPA) with Federal/State requirements; d) Providing expertise in support of the National Environmental Policy Act (NEPA) Environmental Assessment (EA). They also placed a Purchase Order with the Preferred Planning Partner which is critical to ensuring the Urban Redevelopment process required by local statutes executed prior to transfer of the facility.

Positive notes include collection of all accounts receivable, Cost Accounting Standard Disclosure Statement 13 adequacy review, submission of Disclosure Statement 13.1, Financial Management Assurance testing, and the schedule status of the internal auditing function. Corrective actions are being developed to bring into compliance issues that address the use of a DSW Production Support account as a clearing house for WFO and KO costs that do not comply with the National Work Breakdown Structure, and the manual pegging process which allowed the W78 program to incur weapons costs inappropriately. The FY14 Internal Audit Plan was submitted on schedule, and a proposed risk assessment methodology for conducting subcontractor audits was presented. A new travel management system was implemented along with green belt projects addressing inventory transaction process improvements, divisional expense forecast load process, RTBF program tracking, commitment reporting, and production support program visibility.

FM&T successfully completed the OHSAS 18001 certification process for KCP and is awaiting Kirtland Operations certification which is required for overall certification. They are implementing improvement opportunities noted during the assessment and they were also recognized for a number of best practices. Implementing OHSAS 18001 facilitates continued high performance in safety while driving costs down.

FM&T continues to effectively manage and keep KCFO informed with a combination of Management Assurance and Honeywell Operating system tools that meet Contractor Assurance System elements. FM&T has deployed an effective CAS that has been validated by 3rd party reviews. Implementation of Honeywell's Operating System (HOS) aligns the workplace with management goals that is transparent to workers, management and KCFO. FM&T has used best in industry employee engagement tools to drive a culture of workplace satisfaction. FM&T's programs for continuous improvement include all levels within the workforce resulting in over \$10M in cost and productivity saving in FY13.

Honeywell FM&T has provided superior performance and support while executing the additional Bannister Federal Complex (BFC) wide coordination responsibilities and tasks contained in the Missouri Hazardous Waste Management Facility Permit. They have continued to deliver outstanding quality documents and technical field performance under compressed and challenging schedule requirements, including the following: Sampling and Analysis Plan; Groundwater Treatment System Optimization Study and Operation and Maintenance Plan; Community Involvement Plan; Institutional Controls Plan; Spill Plan and Emergency Plan; and PCB Fate and Study Work Plan. All deliverables were submitted on or ahead of schedule and have been well-received by the Missouri Department of Natural Resources (MDNR). They demonstrated superior data management and analysis capabilities by developing a BFC wide Description of Current Conditions Report, which summarizes the environmental conditions and combines and presents the results of over 40 years of environmental data collection for three federal agencies. They are also proactively gathering the additional field and other data necessary to complete identified "data gaps", prior to the receipt of further direction from the MDNR. The KCP has shown long term sustainability leadership by getting a plan approved and implemented which will vacate legacy Kansas City Area buildings with 50+ year old environmental technology into a new campus where all of the buildings meet LEED Gold requirements.

The KCRIMS Occupancy Project was managed very well in FY13. FM&T has demonstrated effective management of scope, cost and schedule and the project is below budget and the overall schedule is slightly ahead of pace. FM&T identified and implemented strategies to compress the transition readiness process for multiple move phases towards the end of relocation. As a result, the Integrated Project Team reduced the working schedule for relocation and should complete the project one month early. This significantly reduces schedule risk to KCRIMS and aids overall plant efficiency. The forecasted completion of KCRIMS is now July 2014, four weeks ahead of the baseline schedule. This is a significant accomplishment. FM&T also developed an effective strategy to allow the NSMC relocation contractor early access to the facility to begin utility drops prior to the start of relocation providing schedule contingency and reducing risk. The NSMC Relocation started on September 9, 2013, on schedule.

The current project EAC for KCRIMS is \$319.2M which includes all projected changes based on past experience. This is well below the baseline TEC of \$324.9M. While the project has faced cost pressures, FM&T continues to effectively manage cost and has responded to unplanned events and

issues associated with both the relocation and new building. FM&T has assisted in correcting deficiencies of developer as-built drawings which has resulted in increased costs to relocation and is being pursued through the new facility financial close out. Despite an increase in planned engineering resources to resolve technical problems, the project remains below budget.

FM&T has been very effective managing the complex scope of work for KCRIMS with a broad contractor base. The management and communication processes have been extremely effective in executing the day-to-day activities.

FM&T utilization of project management processes met expectations. Opportunity exists to increase the level of rigor on the schedule, earned value management and project controls. The project earned value management indexes are: CPI: 1.01, SPI 1.0. FM&T continues to effectively manage risk and utilizes a strong risk management process. This process was an important tool in the evaluation that resulted in compressing the KCRIMS working schedule by four weeks.

FM&T is executing the largest industrial move in North America ahead of schedule (approximately 50% complete) and on budget with no significant safety or security events. Safety performance during relocation has been outstanding. Overall safety performance measures are better than FY12 despite the large number of personnel and non-routine activities being accomplished. Relocation security performance has been very good with only minor issues to date than have been addressed very well. Overall, execution of KCRIMS has been very good. Cost estimating, funds management and competitive contractor procurements were performed at less than the above level and are an area for continuous improvement.

#### Performance Objective 5: Contractor Leadership

### **Narrative Summary**

Honeywell FM&T has developed and is executing a complete transformation of the KCP to increase mission success and reduce cost while maintaining excellent operational performance. FM&T is ahead of committed transition cost reductions without any reduction to performance. FM&T has provided

Excellent/97

capable resources and leadership to ensure on-time completion of the NSC and the planning to execute a major relocation project for KCP assets. FM&T is coordinating with NSE and HQ Program Managers to ensure requalification to meet timely production resumption without program impacts.

FM&T has brought leadership to the NSE by providing expert resources for design teams, problemresolution teams, and assisting other sites in quality and production issues. FM&T has led efforts in Enterprise Risk Management techniques and supported Enterprise Modeling where site wide capabilities and infrastructure data are integrated and analyzed to develop effective mission execution strategies. Effective collaboration on B61LEP is demonstrated in Enterprise Packaging Advisory Board, advanced manufacturing product realization strategic planning with LLNL, phase gate reviews, workshops on mistake proofing designs.

FM&T has expanded private industry and academia partnerships, increased Technical Fellowships, and engaged the public in scientific and engineering outreach events. Honeywell FM&T has

demonstrated exceptional leadership and technical acumen by serving as the sole integrator and regulatory point of contact for the modified Missouri Hazardous Waste Management Facility Permit. This RCRA Corrective Action Permit applies to the totality of the Bannister Federal Complex, and FM&T, in addition to the expected support provided to NNSA, has also supplied GSA with excellent data management, compliance solutions and experienced regulatory agency liaison. Without this unsolicited, skilled support, it is highly doubtful that GSA regulatory compliance could have been maintained. FM&T has increased community involvement and serves as communicator for the entire Bannister Federal Complex. FM&T has showcased the NSC within the media and to public officials and has enhanced NNSA's image in the community.

Honeywell Operating System (HOS) has been deployed at every level at KCP that aligns business goals to each plant work group. During this year, they increased deployment of advanced HOS tools and achieved improvements by 64% in overall employee engagement scores. Individuals are engaged in identifying and resolving manufacturing and operational issues. FM&T Leadership has done an excellent job focusing on essential activities excelling in prioritizing objectives in the Workforce Restructuring and Community Partnering areas.

FM&T actively worked with KCFO Leadership to effectively execute strategic priorities. FM&T enhanced Interagency Work (IW) processes to ensure business opportunities align with national security priorities, complement NNSA mission objectives and satisfy NNSA IW acceptance requirements. FM&T completed over 900 projects for an IW/WFO total of \$257M in FY 13 with excellent feedback from customers. Direct financial recovery for NNSA exceeded expectations by over 10%. They leveraged additive manufacturing capability with IW customer and Directed Stockpile Work (DSW) requirements, generating cost savings through labor and material processing efficiencies. Collaboration was excellent with Diminished Manufacturing Sources and Materials Shortages (DMSMS) customers, sustaining FM&T core skills and capabilities for legacy weapon system surveillance needs. FM&T was key in developing interagency agreements that increased collaboration on key national security issues.

FM&T has increased employee engagement in a way that results in measurable mission, safety, and security performance by using an industry model equivalent to Safety Conscious Work Environment surveys. This solid employee engagement resulted in successful, safe, and secure relocation project. Recruitment of critical skills is enhanced by a culture of excellence in national security. Recruitment processes are measured for effectiveness. National Security Campus (NSC) is the first NNSA site to complete HSPD-12 logical and physical authentication/authorization and the project lead was recognized by the KC Business Journal for improving efficiencies using new technologies.

FM&T has been a major contributor to NNSA's enterprise success in this year providing extensive business and technical support.

- o FM&T has deployed engineers and specialists to assist SRS, Pantex, OST, labs, and NNSA in meeting mission requirement as well as provides leadership in business management support. Joint partnership with NNSS will reduce low level waste management costs. Technical support has been provided across NNSA programs and sites which has contributed to resolution of complex wide program and processes issues.
- FM&T has lead NSE efforts to comply with U.S. export control laws. FM&T has developed training and is conducting site assistance visits. Export control solutions have been shared with Office of Non-Proliferation and Security and incorporated the principles into Supply Chain Management activities which has resulted in creation of a NNSA program for weapons production export control.
- The Supply Chain Management Center (SCMC) led the NSE and DOE/EM purchasing organizations to generate \$117 million in strategic sourcing cost savings in FY2013 despite

sequestration and continuing resolution. This exceeded the total DOE goal of saving \$102 million (\$91M NNSA and \$11M EM). In addition, the use of SCMC tools and processes expanded into a greater number of DOE/EM projects to enhance cost savings and purchasing efficiencies. The SCMC led a team to address the DOE-wide issue with obtaining commercial insurance as well as leading the commodity analysis of a NNSA-wide agreement for Oracle software. A new NSE-wide agreement was awarded for all sites to use for purchasing laptop & desktop computers at reduced prices.

- Other FM&T improvement initiatives have led to improvements in chemical management, fire protection standards, and enterprise risk management across the NSE.
- o FM&T have been leaders in the implementation of a formal Enterprise Risk Management program and contributed to the RMI Team led by NA-12.

FM&T is executing the largest industrial move in North America ahead of schedule and on budget with no significant safety or security events. FM&T's management and communication processes have been extremely effective executing the day-to-day activities. FM&T senior managers report directly to corporate level managers ensuring best-in-industry expertise is deployed and executed at the KCP. In addition, FM&T is using industrial best-in-industry practices to operate an effective plant with a professional workforce. Tools such as Six Sigma and LEAN have led to direct cost savings of over \$15M. Customer and employee surveys are used to drive continuous improvement and a training and development program has created strong managers and project leads. They lead the local Baldrige industrial forum and mentor other sites in performance excellence. They are using third party certification by OHSAS 18001 to validate best-in-class industrial safety program.

FM&T provides full transparency to KCFO through periodic briefings at all management levels, including federal staff in HOS meetings, full access to contractor metrics and inclusion in strategic planning sessions. Top Initiatives have been developed and tracking jointly with KCFO. FM&T weapon quality assurance leadership has continued to demonstrate timely communication of quality initiatives and issues. Leadership developed and shared with KCFO several FY13 initiatives that improved supplier quality, improved metric tracking/reporting, and dispositioned nonconforming product prior to plant departmental moves.

Honeywell corporate processes are a major contributor to KCP's success. A strong Management Assurance System is deployed and tested against Baldrige criteria. Enterprise balanced score card drives strategic plan elements through the management structure. Honeywell Operating System (HOS) involves all level of workforce and employees measured against line-of-sight goals. Honeywell tools such as Six Sigma, LEAN, and Value Stream Mapping drive continuous improvements. These tools resulted in a safe, and secure relocation, over \$17M in cost avoidance, reduced production cycle time, and outstanding on-time delivery rates with excellent quality control.

FM&T is using Baldrige criteria to drive performance excellence through KCP and executes a comprehensive self-assessment program across all elements. Internal assessments and performance self-assessments have been accurate and balanced. Identified weaknesses have been address by effective actions. Quality Management is certified to meet ISO 9001 and 14001 standards. The results of a strong internal assessment program are demonstrated in no major audit finding in any External Audits performed on KCP in FY 2013.