

National Nuclear Security Administration

Honeywell FM&T

Performance Evaluation Report (PER)

NNSA Kansas City Field Office (KCFO)

Evaluation Period: October 1, 2021 – September 30, 2022

December 15, 2022

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# **Executive Summary**

This Performance Evaluation Report (PER) provides the National Nuclear Security Administration (NNSA) assessment of the performing entity, Honeywell Federal Manufacturing & Technologies (FM&T) LLC; performance of the contract requirements for the period of October 1, 2021 through September 30, 2022 as evaluated against the Goals defined in the Performance Evaluation and Measurement Plan (PEMP).

Pursuant to the terms and conditions of the Contract, the PEMP sets forth the criteria by which NNSA evaluates FM&T performance, as required by Federal Acquisition Regulation (FAR) Part 16.4, which outlines expectations for administering award-fee type incentive contracts. This is the type of contract in place between NNSA and its management and operating (M&O) partners. A key requirement of FAR Part 16 is to establish a plan that identifies award-fee evaluation criteria and "how they are linked to acquisition objectives which shall be defined in terms of contract cost, schedule, and technical performance.

In accordance with the regulation, the PER assesses FM&T performance against the PEMP and provides the basis for determining the amount of award fee earned by FM&T. NNSA took into consideration all input provided (e.g. CAS, Program Reviews, etc.) from NNSA Program and Functional Offices both at headquarters and in the field.

FM&T is the M&O contractor for the Kansas City National Security Campus (KCNSC), which includes several facilities, along with a variety of satellite operations. The primary facility is located in Kansas City, Missouri, and consists of a Government-leased nuclear weapon component production plant that manufactures and/or procures non-nuclear electronic, mechanical, and engineered material components. The site also supports Nuclear Nonproliferation, Emergency Management, Counterterrorism missions, as well as a Global Security mission that involves development and delivery engineering solutions for other government agencies' missions. Satellite operations include facilities located in Albuquerque, New Mexico, that provide support to other DOE organizations

FM&T submitted a Performance Self-Assessment Report that covered the rating period. FM&T is to be commended for the thoroughness of its report, which embraced the expectation of being selfcritical as well as highlighting accomplishments. NNSA reviewed the self-assessment report and considered it in conducting its evaluation.

Performance against the Goals summarized below resulted in an overall adjectival rating of Excellent for FM&T.

Performance issues and accomplishments were present throughout FY 2022. Significant performance accomplishments in Goals 1-6 were noteworthy this reporting period: FM&T quickly implemented redesigned B61-12 LEP component ahead of schedule, collaborated with the design agency to increase producibility ratings, and improved quality performance (Goal 1). FM&T was vital in supporting NEST's response to the Russia's war on Ukraine and the surrounding region (Goal 2). FM&T completed \$497 millionn (M) of total Strategic Partnership Project (SPP) work to include critical programs and SPP sponsors (Goal 3). FM&T partnered to accelerate technology readiness and production modernization (Goal 4). FM&T established an Annual Controlled Baseline (ACB) framework. Security's efforts to support factory modernization drove the receipt of funding commitments from multiple Program Offices for Wireless Intrusion Detection System (WIDS) installation, monitoring, and maintenance (Goal 5). FM&T continued to effectively operate the Supply Chain Management Center (SCMC) and reported strategic enterprise savings of \$388M (Goal 6).

Issues include the need for continued collaboration to address the remaining W80-4 producibility and production-readiness challenges and delays in getting piece parts through the procurement and inspection cycle drove some lower level assembly baseline changes and increased the overall W80-4 schedule risk (Goal 1). Inadequate training, work instructions, and hazard analyses led to safety incidences; proactive versus reactive leadership is needed. Additionally, there is a need for more rigor in factory assessments to ensure execution targets are achievable (Goal 6).

Specific observations for each Goal are provided in the following pages.

**Goal 1: Mission Execution: Nuclear Weapons--** Successfully execute Nuclear Stockpile mission work for Defense Programs in a safe and secure manner in accordance with DOE/NNSA priorities, Work Authorizations, and Execution/Implementation Plans.

Honeywell FM&T Amount of At-Risk Fee Allocation: \$18.1M Available Award Fee

Under this Goal, FM&T earned a rating of Excellent and 91 percent of the award fee allocated to this Goal. FM&T exceeded almost all of the Objectives and Key Outcomes, and generally met the overall cost, schedule and technical performance requirements of the contract under this Goal in the aggregate. During the year, the accomplishments significantly outweighed issues and no significant issues in performance exist. FM&T is meeting performance expectations within expected cost.

FM&T finished the year graded as "blue" on 93 of 95 Level 2 milestones recovering twelve milestones throughout the year that were at one point, "red" or "yellow". The remaining two Level 2 milestones that ended the year as "red" were one Multi Weapon Systems and one B61-12 LEP milestone.

FM&T proactively developed testers for establishing specific production capabilities and actively worked Mobile Guardian Transporter (MGT) facility production space.

FM&T met development programs, enduring stockpile system surveillance, and Limited Life Components (LLC) expectations for all weapon systems. FM&T delivered the majority of hardware on-time, within expected cost, and manufactured in a safe and secure environment. In addition, FM&T accomplished the following:

- Achieved First Production Unit (FPU) for a Telemetry Transmitter (HEATT) one month early.

- Achieved W88 ALT 940 component FPU and shipped to the customer ahead of schedule.
- Shipped B61 Stockpile Management flight recorders ahead of schedule to meet accelerated Pantex Plant (Pantex) Joint Test Assembly (JTA) build dates.
- Collaborated with Pantex to ship B61 SM disassembly containers two months ahead of need date.
- Plutonium Modernization successfully delivered Process Prove In (PPI) and War Reserve (WR) pedigree items in support of the NNSA's pit production mission, meeting all build milestones.
- Established an optics lab and a suite of testers to support the NA-11 Technology Readiness Team

FM&T executed high-priority weapon modernization activities, supporting the NNSA's Getting the Job Done List. Specific programmatic accomplishments included the following:

- Completed B61-12 LEP components redesigned first production unit ahead of schedule, which had significant positive impacts on United States Air Force (USAF) weapon deployments.
- Mitigated numerous production impacts to key components and successfully increased rate production quantities on the B61-12 subassemblies.
- Achieved production recovery for W88 ALT 370 components from original plan.
- Delivered W88 ALT370 conventional high explosive hardware with more than 18 months of margin and delivered all JTA parts on time or early.
- Collaborated with Sandia National Laboratories (SNL) and Lawrence Livermore National Laboratory (LLNL) to hold W80-4 producibility deep dives leading to increasing C or greater producibility ratings from 74 percent to 89 percent.
- Completed four of four Mk21 Category (CAT) 0 Milestones ahead of schedule.

Specific programmatic issues included the following:

- Additional collaboration needed between FM&T and the Das to address the remaining producibility and production-ready challenges to support W80-4 rate production.
- Delays in getting piece parts through the procurement and inspection cycle drove some lower level assembly baseline changes and increased the overall W80-4 schedule risk.
- Factory floor issues drove original major assembly schedule reduction and pushed additional scope in out years but noted improvement executing to the newly established April baseline.

FM&T weapon quality assurance initiatives resulted in positive quality data trends and metrics in FY 2022. Met four of six KCFO Quality Performance Scorecard (KQPS) metrics. Additionally, FM&T weapon quality assurance is recognized for the following performance improvements:

- FM&T aggressively reduced defects and quality escapes.
  - The QAIP/COI ratio improved 54 percent compared to FY 2021. This is the fourth consecutive year of improvement and is the best QAIP ratio that KCNSC has executed since FY 2011.

- The Incoming Material Report /Unsatisfactory Report (IMR/UR) ratio was 73 percent better than the goal and is the best performance since FY 2014.
- Process improvements implemented on components resulting in a \$6.95M per year cost avoidance. This is one example of targeted efforts to improve scrap performance.
- Non-Conformance Report (NCR) creation rate reduced by 25 percent vs FY 2021, and by 38 percent vs FY 2020 through implementation of an enhanced, robust Management Operating System (MOS).

**Goal 2: Mission Execution: Global Nuclear Security**—Successfully execute authorized global nuclear security mission work in a safe and secure manner to include the Defense Nuclear Nonproliferation, Nuclear Counterterrorism, and Counter Proliferation and Incident Response missions in accordance with DOE/NNSA priorities, Work Authorizations, and Execution/Implementation Plans.

Honeywell FM&T of Amount At-Risk Fee Allocation: \$4.5M Available Award Fee

Under this Goal, FM&T earned a rating of Excellent and 95 percent of the award fee allocated to this Goal. FM&T exceeded almost all of the Objectives and Key Outcomes, and generally met the overall cost, schedule, and technical performance requirements of the contract under this Goal in the aggregate. During the year, the accomplishments significantly outweighed issues and no significant issues in performance exist. FM&T is meeting performance expectations within expected cost.

FM&T strengthened U.S. proliferation and nuclear security capabilities by completing a design to manufacture an advanced prototype material processing technology in the Olympic Marmot project. FM&T proactively developed a science and technology plan to fabricate, test and develop models addressing component behaviors.

FM&T supported the Office (b)(7)(E). (b)(7)(F) by continuing multiple procurements significant to the (b)(7)(E). (b)(7)(F) program. FM&T maintained high quality, on-time delivery in support of th (b)(7)(E). (b)(7)(F) Program. Some materials were found to not meet design specifications, but through strong communication and cooperation with Sandia National Laboratories (SNL) and Savannah River Nuclear Solutions (SRNS), issues were resolved and a path-forward determined. FM&T facilitated multiple visits by Office (b)(7)(E). (b)(7)(F) (b)(7)(E). (b)(7) taff and SRNS in support of increased coordination and the development of future (F) communication contained to be used by the matching by the strong results of the second strong strong results of the second strong strong

ovements. Communication continues to be excellent, and integration between FM&T and SRNS has been extremely effective.

FM&T provided crucial support to the Office of Nonproliferation Policy's Regional Analysis & Engagement program through close contract and budget management. FM&T provided excellent leadership and planning in support for Office of Nuclear Export Controls International Nonproliferation Export Control Program (INECP) engagement with Taiwan, and was instrumental in delivery of a complex event in summer 2022. In response to INECP's need, FM&T rapidly developed and implemented a two-day, online Missile Technology Course for U.S. law enforcement.

FM&T completed	(b)(7)(E), (b)(7)	(F)	assessments in support of the NNSA's			
(b)(7)(E), (b)(7)(F)		programs. I	FM&T technical and policy subject matter			
experts provided assessments and recommendations on			(b)(3)	cases		
submitted to NNSA by the Department of Commerce.						

FM&T provided effective operational support to the Nuclear Emergency Support Team's (NEST) response to Russia's war on Ukraine for radiological monitoring. FM&T remained consistently flexible and responsive in meeting equipment procurement needs for the Office of Counterterrorism and Counterproliferation international mission partners and for Ukraine related mission support. FM&T staff's expertise proved indispensable. FM&T continued to provide critical planning for nuclear incident response and nuclear forensic exercises, sustained demonstration of technology development to enhance mission readiness, effective management of the 100 percent watch bill requirements, and support for special requests for information and assistance. FM&T effectively provided successful equipment management, maintenance, procurement, and depot operations for nuclear forensics operations, including participation in operational exercises and training events.

**Goal 3: DOE and Strategic Partnership Projects (SPP)**—Successfully execute high-impact work for DOE and Strategic Partnership Projects Mission Objectives safely and securely. Demonstrate the value of the work in addressing the strategic national security needs of the U.S. Government.

Honeywell FM&T Amount of Fee Allocation: \$21.43M SPP Fixed Fee (\$12.07M GS/\$9.36M NWP)

Under this Goal, FM&T earned a rating of Excellent and 95 percent of the award fee allocated to this Goal. FM&T exceeded almost all of the Objectives and generally met the overall cost, schedule, and technical performance requirements of the contract under this Goal in the aggregate. During the year, the accomplishments significantly outweighed issues and no significant issues in performance exist. FM&T is meeting performance expectations within expected cost.

FM&T's total work executed was \$497M, [Nuclear Weapon Programs (NWP) \$222M and Global Security (GS) \$275M] in FY 2022 scope. GS continued to support NWP with 26,000 hours of testers and tool and gage work, servicing multiple tools and the repair and restoration of copies of the Torque Tester Gage for critical programs. FM&T executed (b)(7)(E), (b)(7)(F) assessments in support of Nuclear Enterprise Assurance, comp high impact acquisition deliverables, and developed 103 COVID-19 briefings, dashboard/heat maps, and medical data statistical analysis to aid management decisions related to workplace safety and production continuity. Other support included laser marking capability to supplement the NWP capacity when the equipment needed maintenance, printed internal transportation containers to move hardware in a safe configuration to support schedule requirements, and building a fixture for the Mk21 Fuze after several "no bids" from outside vendors.

FM&T continued support for the Mk21 Fuze, proceeding through Process Prove-In (PPI), Quality Evaluation (QE), and Production Readiness Reviews (PRR) for multiple Major Components (MCs) and testers. The First Production Units (FPU) for the Terminal Protection Device (TPD),

Thermal Battery Assembly (TBA), Pathlength Module (PLM), and cables were completed ahead of schedule.

National security related projects included work for the National Asset Sustainment program, the Department of Defense, and other sponsors. FM&T developed and delivered a tailored communications system for use in sensitive operations.

GS, NWP and Sandia National Laboratories (SNL) collaborated to produce and deliver External Naval Test Bed units and experimental units on time while using an innovative radio frequency tuning approach. The partnership allowed the team to reduce the cycle time from three months to one month while providing support for sensitive programs.

FM&T created a training guide for G-Invoicing and shared it with the DOE Director of Accounting Operations. The Director indicated plans to send the training guide to all DOE offices for use in G-Invoicing testing.

**Goal 4: Mission Execution: Science, Technology, and Engineering**—Successfully advance national security missions and advance the frontiers of ST&E. Effectively manage Kansas City National Security Campus Plant Directed Research and Development (PDRD) and Technology Transfer programs in a safe and secure manner in accordance with DOE/NNSA priorities, Work Authorizations, and Execution/Implementation Plans.

Honeywell FM&T Amount of At-Risk Fee Allocation: \$0 Available Award Fee

Under this Goal, FM&T earned a rating of Excellent and 100 percent of the award fee allocated to this Goal. FM&T exceeded almost all of the Objectives and generally met the overall cost, schedule, and technical performance requirements of the contract under this Goal in the aggregate. During the year, the accomplishments significantly outweighed issues and no significant issues in performance exist. FM&T is meeting performance expectations within expected cost.

FM&T deployed technology using computer vision and machine learning technique to screen components for defects.

FM&T developed Conformal Sensor Arrays that can detect compression in discrete areas with high fidelity measurement and used Additive Manufacturing (AM) to print proof-of-concept connectors for rapid prototyping and Test Equipment use. FM&T enhanced the development tooling capability by 3D printing mandrels. This development saved 80 days of flow time for each mandrel as compared to legacy mandrels.

FM&T developed a Test Engineering Dashboard as a Big Data solution to resolve a problem for monitoring the overall Test System health. Using Artificial Intelligence (AI) and data science, the technology avoided a total of 2,600 NCR-eligible events in FY 2022 most associated with critical ReSpin components. FM&T delivered a Test System to the Los Alamos National Labortory

(LANL) ahead of schedule. The system met form, fit, and functional requirements for output and integration with the overall system.

FM&T hosted the 6<sup>th</sup> AM Cross Joint Operations Working Group (JOWOG) on-site for the first time in over two years. FM&T welcomed 70 participants from Lawrence Livermore National Laboratory (LLNL), LANL, SNL, Pantex, the Y-12 National Security Complex, NNSA Headquarters, and the U.K. Atomic Weapon Establishment.

The DOE Office of Property of Technology Transitions (OTT) awarded the KCNSC Intellectual Property Team the "Excellence in Technology Transfer at Single-Purpose Laboratories, Plants and Facilities" for their achievements through FY 2022. Nineteen Office of Scientific and Technical Information submissions were accepted. FM&T reported 105 invention disclosures, filed 63 patent applications, and received 21 patents. In addition, FM&T submitted 99 products to the Office of Science and Technical Information (OSTI).

**Goal 5: Mission Enablement**--Effectively and efficiently manage the safe and secure operations of the Kansas City National Security Campus while maintaining an NNSA enterprise-wide focus; demonstrating accountability for mission performance and management controls; successfully executing cyber and physical security requirements, and assure mission commitments are met with high-quality products and services while partnering to improve the site infrastructure. Performance will be measured by the contractor's assurance system, NNSA metrics, cost control, business and financial operations, project baselines, implementation plans, assessment and audit results, with a focus on mission enablement.

Honeywell FM&T Amount of At-Risk Fee Allocation: \$13.6M Available Award Fee

Under this Goal, FM&T earned a rating of Very Good and 90 percent of the award fee allocated to this Goal. FM&T exceeded many of the Objectives and generally met the overall cost, schedule, and technical performance requirements of the contract under this Goal in the aggregate. During the year, the accomplishments greatly outweighed issues and no significant issues in performance exist. FM&T is meeting performance expectations within expected cost.

Some accomplishments include:

- Received zero non-compliances from 2 unannounced inspections from the Kansas City, Missouri Wastewater department and U.S. Environmental Protection Agency (EPA) Region 7 at the Botts Road facility.
- Developed and implemented an electronic eyewash inspection program and process that documented inspections and sent notifications and reports.
- Increased Gemba safety walks significantly by implementing a simplified tracking process to promote employee engagement with leadership.

- Completed the Low Humidity Production Revitalization in Building 2, increasing capacity for relative humidity (RH) rooms and electrical testing capacity for Nuclear Weapon Programs (NWP).

FM&T successfully supported the quick turnaround of information to support the federal purchase of Building 23. The timely and complete information FM&T provided in support of the purchase helped keep the Department of Justice (DOJ) Preliminary Title Opinion (PTO) on schedule, and likewise helped keep the purchase on schedule.

FM&T Security's efforts to support factory modernization drove the receipt of funding commitments from multiple Program Offices for Wireless Intrusion Detection System (WIDS) installation, monitoring, and maintenance. WIDS will provide an environment where select wireless devices can be utilized in a secure environment without jeopardizing security. Initial deployment is targeted at improving operational safety and efficiency.

FM&T made progress towards addressing complex contractual and cleared subcontractor facility security support concerns. This was an area identified as underperforming earlier this fiscal year. FM&T's effort showed progress toward comprehensively addressing these concerns.

FM&T delivered efficient, effective, responsible and transparent financial management operations and systems during FY 2022.

FM&T continued to collaborate with university partners and maintained relationships with Minority Serving Institutes (MSIs) in support of a robust Minority Serving Institution Partnership Program (MSIPP). Per the new requirements outlined in FY 2022 M&O Performance Measures, FM&T surpassed its goal of 10 new hires and 25 student interns with 31 full time job accepts and 29 interns brought on board.

FM&T Law, Contracts, and Export Control (LC&E) continued to improve KCNSC and NNSA operations through multiple initiatives.

FM&T led an interagency steering committee to standardize information sharing of best practices across NNSA and was a key contributor to address Organizational Conflict of Interest issues related to Honeywell International subsidiaries working within the National Security Element.

The Information Technology (IT) team delivered secure and reliable NNSA system, data, and facilitated mission execution. The IT team led the Nuclear Security Enterprise (NSE) in Federal Information Technology Acquisition Reform Act (FITARA) implementation, and provided leadership to the other sites within the NSE.

FM&T identified a potential cyber security risk and coordinated between internal Cyber, Energy Facility Contractors' Group (EFCOG) and the National Fire Protection Association (NFPA) to find a potential solution.

FM&T effectively managed its emergency management personnel and resources to ensure an acceptable level of readiness and response. FM&T Emergency Response Organization (ERO)

conducted seven virtual and functional exercises, and implemented corrective actions and lessons learned to meet Kansas City Field Office (KCFO) expectations.

FM&T established an Annual Controlled Baseline (ACB) framework for all NNSA directed programs tying statement of work to established costs. Additional work is needed to increase visibility of cost growth contributors, better link ACB financial data to work scope planned in its Enterprise Resource Planning System and NNSA's statement of work, to distinguish other factors (i.e. schedule delays, rework, inaccurate estimates) and to address future potential adjustments to award fee or the framework.

FM&T was just shy of meeting their recruitment goal for FY22, hiring 1,344 employees. Attrition is decreasing after distribution of the NNSA approved mid-year compensation adjustment.

FM&T was excellent in meeting its overall small business (SB) goals target of 54 percent and held SB outreach events, such as Virtual Supply Day, Veteran Owned Small Business (VOSB)/Service-Disabled Veteran Owned Small Business (SDVOSB) focused outreach event, procurement conferences, and a National 8(a) conference. Of the six small business goals, FM&T exceeded expectations in five categories year-to-date and met expectations in one SB category.

FM&T met the FY 2022 related cost, scope, and schedule commitments outlined in the rebaselined approved phases of the KC Short Term Expansion Program (KC-STEP).

FY 2022 On-Time Delivery (OTD) was 91.4 percent, exceeded the goal of 90 percent.

FM&T received a DOE Office of Enforcement Consent Order due to a vertical storage nitrogen asphyxiation incident. This incident occurred partly due to FM&T's failure to train employees on the respiratory hazards of inert atmospheres.

FM&T did not provide consistent responses to questions related to operations and maintenance program execution and forecasting. This led to confusion on priorities for funding during briefings to the Federal Program Manager (FPM) for Operations, as well as an incorrectly forecasted Above Standard Operations and Maintenance (ASOM) commitment in the maintenance program that impacted the amount of carryover for the year.

FM&T's late execution drove notable schedule delays and cost increases on facilities projects. Resource availability and planning issues delayed execution on multiple projects, contributing to the carryover balance. Of particular concern is the delayed construction and occupancy of the first floor and annex of a leased property. FM&T paid rent on this space for over two years and has not started the build out for use.

FM&T scored a 77.9 percent for the Purchase Order to Plan (POTP), and fell short of the scorecard goal of 87 percent. The influx of new negative demand lines during the final quarter of FY 2022 (13.56 percent in August and 20.12 percent in September) impacted FM&T's ability to recover from spikes throughout the year. The initial FY 2022 goal was set with a larger number of schedule lines anticipated. In addition, FM&T had 72 Past Due to Dispatches (PDD) this FY, in excess of the goal of 40. This metric was negatively impacted by KCSTEP and Stocking Period

drop-ins during the last week of September. Buyer responsiveness was above goal for majority of the year, despite drop in requirements remaining high.

FM&T struggled to properly plan for a Collective Bargaining Agreement (CBA), to include developing a work stoppage plan prior to the end of the previous CBA. Multiple iterations were submitted and rejected by the risk accepting official. Ultimately, there was not impact to mission.

**Goal 6: Mission Leadership**--Successfully demonstrate leadership in supporting the direction of the overall DOE/NNSA mission, cultivating a Performance Excellence Culture that encompasses all aspects of operations and continues to emphasize safety and security, improving the responsiveness of Honeywell FM&T's leadership team to issues and opportunities for continuous improvement internally and across the Enterprise, and parent company involvement/commitment to the overall success of the Kansas City National Security Campus and the Enterprise.

Honeywell FM&T Amount At-Risk Fee Allocation: \$9.0M Available Award Fee

Under this Goal, FM&T earned a rating of Very Good and 90 percent of the award fee allocated to this Goal. FM&T exceeded many of the Objectives, and generally met the overall cost, schedule, and technical performance requirements of the contract under this Goal in the aggregate. During the year, the accomplishments greatly outweighed issues and no significant issues in performance exist. FM&T is meeting performance expectations within expected cost.

FM&T leadership proactively initiated strategic plan development efforts to align with the May 2022 NNSA Strategic Vision and released an updated KCNSC 25-year Strategic Plan ahead of schedule. FM&T integrated the KCNSC's FY 2022 strategic objectives into its Management Operating System (MOS) and engaged NNSA senior leadership regarding execution against objectives. FM&T leadership drove awareness and garnered support of KCNSC's digital transformation strategy which includes modernizing KCNSC's digital infrastructure.

FM&T continued playing a critical role in enterprise-wide supply chain activities, including actively engaging in the Commercial Supply Chain Sustainment (CSCS) working group to develop an NSE-wide tool to assess supplier capabilities, processes, and equipment, collaborating with Sandia National Laboratories (SNL) to outline requirements for commodity multi-site agreements, and engaging NNSA senior decision makers on KCNSC's supply base strategy and actions.

FM&T leadership used its MOS reviews to drive improvements in critical functional areas. As FM&T continues to finetune its Contractor Assurance System (CAS), it is important to establish metrics and success targets that drive appropriate behaviors and measure true performance improvements. In April 2022, FM&T established a Factory Execution Team to identify and correct factory floor issues preventing on-time delivery to Pantex. The team's efforts resulted in a need to reduce KCNSC's FY 2022 delivery quantities for some components. FM&T met or exceeded the renegotiated requirements. Although the FY 2022 renegotiated requirements were achieved, from a strategic execution perspective, shifting FY 2022 requirements into FY 2023 generated additional, unplanned carryover and increased FY 2023 execution requirements. More rigor is needed in factory assessments to ensure initial commitments are achievable. Additionally,

it is imperative that follow-on KCNSC budget requests accurately delineate linkage to deferred scope and new current year scope.

FM&T leadership has done a great job leveraging corporate parent business processes and tools to enhance KCNSC's execution. FM&T adopted Honeywell Corporate's Leadership Edge and Program Management Academy, both enhanced leadership, talent development, business acumen, innovation, and customer communication.

FM&T led and/or participated in collaborative activities with other NNSA sites that benefitted Defense Programs' Goal 1 requirements. Some collaborative activities included:

- Maintained pace as key leader on NNSA enterprise Operating System Working Group (OSWG)
- Engaged on W87-1 model-based design definition to drive early consideration of Design-For-Manufacturing (DFM) improvements
- Jointly with National Technology & Engineering Solutions of Sandia (NTESS), developed a DA/PA W87-1 digital engineering implementation strategy
- Facilitated technology demonstrations supporting the W93
- Engaged with Los Alamos National Laboratory (LANL) to digitize aperture card collections
- Actively participated in NA-115 initiative to accelerate qualification time frames

FM&T continued momentum in developing program and project management expertise and trained additional employees under its Program Management Academy curriculum. The Program Management Academy focuses on program/project management fundamentals, financial acumen, and customer communication. To date, FM&T has trained over 800 employees. FM&T business and human resource leaders deployed a 14-month leadership development program. To date, over 600 FM&T leaders have participated in the program.

FM&T's attrition rate is 11.3 percent and has remained relatively steady since April 2022. FM&T reported a record high of 1,430 external hires and 103 interns. FM&T continued proactively working with NNSA and other NSE sites on approaches to attract, hire and retain quality employees to support the mission.

FM&T reported total savings of \$388M year to date against a \$288M Supply Chain Management Center (SCMC) goal. This strategic acquisition agreement program, led and managed by FM&T, provides economic benefit to the DOE/NNSA enterprise. From an operational perspective, FM&T reported a realized cost savings and avoidance of ~\$102M against its target of \$100M. The Roof Asset Management Program (RAMP) completed \$44.9M in FY 2022 execution, lower than \$51M executed in FY 2021 and primarily impacted by supply chain challenges and contributing site support funding.

FM&T leadership continued to drive an effective preventive, corrective, and predictive maintenance program. As noted in Goal 5, DOE Enterprise Assessments identified a worker

safety issue. Inadequate training, work instructions, and hazard analyses led to safety incidences; proactive versus reactive leadership is needed.