

National Nuclear Security Administration
Honeywell Federal Manufacturing and
Technologies, LLC
Performance Evaluation Report
Contract No. DE-NA0002839

NNSA Kansas City Field Office (KCFO) Evaluation Period: October 1, 2023

through September 30, 2024

December 13, 2024

Controlled by: National Nuclear Security Administration, (b)(6) Kansas City Field Office, (b)(6) <a href="https://example.com/red/kenses.doe.gov">(b)(6) @kenses.doe.gov</a>

# **Executive Summary**

This Performance Evaluation Report (PER) provides the National Nuclear Security Administration (NNSA) assessment of the performing entity's, Honeywell Federal Manufacturing and Technologies, LLC (FM&T), performance of the contract requirements for the period of October 1, 2023, through September 30, 2024, 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, *Incentive* Contracts, 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, *Types of Contracts*, 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 considered performance information obtained from NNSA Program and Functional Offices, both at Headquarters and in the field, and from the Contractor Assurance System (CAS).

FM&T earned an overall rating of Excellent and 91 percent of the award fee during this performance period. FM&T earned Excellent ratings for Goals 1, 2, 3, and 5 and a Very Good rating for Goal 4. Specific observations for each Goal are provided in the following pages.

FM&T achieved 99 percent delivery performance across Production, Surveillance, and Limited Life Component requirements through the end of September, which is consistent with the mid-year performance. FM&T successfully completed nearly all fiscal year (FY) 2024 Level 2 milestones, with one unmet milestone. Through the end of FY 2024, overall cost execution for Objectives 1.1, 1.2, and 1.3 programs improved relative to the mid-year assessment, with eight programs ending the FY with cost variance less than five percent of the September 2024 baseline. The W80-4 program was executed within two percent of the cost baseline despite experiencing baseline growth throughout the year. Increased subcomponent lead times and producibility issues impacted the W80-4 production realization milestone; however, FM&T demonstrated a strong sense of urgency by delivering a redesigned assembly on time to support a critical Design Agency (DA) test.

FM&T exceeded almost all of objectives and key outcomes in support of the NNSA Office of Defense Nuclear Nonproliferation (DNN) and the NNSA Office of Counterterrorism and Counterproliferation (CTCP) missions. FM&T provided effective operational and logistical support to the Nuclear Emergency Support Team (NEST).

FM&T advanced national security missions through innovation by expanding the frontiers of Science, Technology, and Engineering (ST&E). Through innovative technology solutions, strategic research and development (R&D) partnerships, and employing the right technologies at the right time, FM&T achieved almost all objectives and key outcomes to advance science and accelerate production.

FM&T developed a multi-year strategic plan to effectively manage environmental permitting requirements to support the Kansas City Non-Nuclear Expansion Transformation (KC NExT) project, multi-site operations, and the change from a Core Site to a HazMat Site. The NNSA Office of Defense Nuclear Security (DNS) selected FM&T and the Kansas City National Security Campus (KCNSC) to serve as the model for OneNNSAccess across the enterprise. FM&T experienced schedule delays and cost increases in the Kansas City Short-Term Expansion Project (KC STEP) but made significant efforts to resolve the schedule disruptions and realign capabilities with the program of record.

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FM&T exceeded almost all of the objectives and effectively led and/or participated in multiple NNSA enterprise initiatives. Digital Transformation (DT) solutions were expanded in additional KCNSC production areas. FM&T maintained momentum as a productive leader of NNSA enterprise economical buying power programs, Supply Chain Management Center (SCMC) and Roof Asset Management Program (RAMP), and delivered assets, services, and tools to enable mission success. FM&T leveraged corporate expertise, initiated benchmarking activities, and collaborated with enterprise partners to reduce risk and enable efficient mission delivery. FM&T initiated strategic actions to drive accountability, ownership, and alignment across and within FM&T business segments and leadership levels with some demonstrated improvements.

Goal 1: Mission Delivery: Nuclear Weapons FM&T Amount of At-Risk Fee Allocation: \$17,276,400

### **Goal 1 Summary**

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 generally met the overall cost, schedule, and technical performance requirements of the contract under this Goal in the aggregate. During the year, accomplishments significantly outweighed issues, and no significant issues in performance existed.

# **Objective 1.1**

FM&T executed rate production for the B61-12 and W88 ALT 370 programs, enabling on-time Pantex Plant (Pantex) shipments to the Department of Defense (DoD), including achieving Last Production Unit (LPU) on several B61-12 and W88 ALT 370 components. FM&T increased schedule margin from a 30-day lead or less to over 90 days on three major B61-12 components and completed LPU for the Magnetically Coupled Stronglink, Launch Accelerometer, and Electrical Contact Stronglink on the W88 ALT 370 program.

In addition to the B61-12 and W88 ALT 370, FM&T worked with the Federal Program Office to expedite authorization and funding for a B61-13 life-of-program buy to increase hardware availability when needed and the Mk21 Arming and Fuzing Assembly First Production Units (FPU) were completed 45 days ahead of schedule. F M&T also aggressively drove improvements to component producibility with design agencies for the W80-4 and W87-1 programs, including completing all War Reserve component Conceptual Design Gates for the W87-1 program and achieving early component FPUs, and worked expeditiously to provide hardware to support a W80-4 program critical test timeline.

FM&T successfully engaged early on the W93, including support for programmatic cost and schedule development, advancing component build activities, actively identifying cost opportunities for the U.S. Navy, and partnered with the W93 Sandia National Labs Systems organization to identify an opportunity to avoid program costs by facilitating reallocation of surplus hardware from the B61-12, W88 ALT 370, and Mk21 modernization programs. The W93 team drove the use of Capability Maturity Assessments, a method adopted by other Production Agencies (PA) for the first W93 Program Review. In addition to production programs, FM&T met all Nuclear Enterprise Assurance expectations by conducting assessments, reviews, and other required activities.

FM&T continued to struggle with late identification of quality gaps and/or production issues. These issues were aggressively worked and resolved with the support of design agencies to minimize Pantex production impacts. FM&T identified the incorrect installation of two fasteners within two mechanism components during a postmortem evaluation. The assembly error was not identified during assembly, inspection, or at the next assembly level. FM&T also identified cable product that was damaged during encapsulation rework. The damage was caused by a rework tool. Though FM&T acted quickly to remove the tool, cable shipments were delayed as a screening process was developed and implemented.

#### **Objective 1.2**

FM&T Production Operations team supported production deliveries by completing approximately 75,000 calibrations, 10,792 maintenance orders, and processing over 40,000 samples through the analytical lab. The Plutonium Modernization team achieved non-nuclear component FPU early, lowering risk to achieving Pit FPU by collaboratively working to identify production processes and potential updates to design definitions that enabled cost effective and more reliable production. FM&T submitted a constructive change notice, citing a \$22 million (M) funding shortfall for the Production Operations program. The change notice consequences included unfunded personnel, delayed support services, and critical program delays, if additional funds were not received. However, the identified funding shortfall

was a result of FM&T forecasted cost growth that was not adequately justified. FM&T should strengthen its forecasting review process to ensure adequate justification is developed for future funding requests. FM&T managed the available funds for Production Operations scope through the remainder of FY 2024 with sufficient carryover for FY 2025. Additionally, Production Operations' costs for an Advanced Development Technologies Revitalization project increased by 50 percent from the original estimate, requiring scope changes to realign to available funds.

# **Objective 1.3**

FM&T completed W88 ALT 940 module production on schedule and budget and delivered multiple components to the Integrated Surety Architecture (ISA) Hub. This enabled the ISA Hub to deliver ISA install and removal kits to support FY 2024 Program Control Document deliverables. In addition, FM&T delivered a class 3 cost estimate to support moving long-term production sustainment of ISA to KCNSC. FM&T achieved Last Production Unit (LPU) for the Code Management System (CMS) Controller and CMS Cryptographic Processor.

For stockpile evaluation surveillance programs, FM&T improved disassembly of surveillance component sub-assemblies, streamlining integration with component feedstock. FM&T shipped all required 2P reservoirs two months ahead of schedule, following qualification on a new Electron Beam Welder, eliminating a single point of failure in the manufacturing process.

Early DA/PA collaboration and integration on Tester development and cable manufacturing occurred and was key in meeting Mobile Guardian Transporter Pre- Production Unit and FPU activities. FM&T delivered to an aggressive Product Realization Integrated Digital Enterprise (PRIDE) schedule to establish Nuclear Security Enterprise (NSE)-wide digital thread and related PRIDE program plan outcomes. FM&T also successfully passed the W76-1/2 Mk4B Design Review 2 with minimal conditions. Passing this key milestone keeps the program on track to meet DoD deliverables. FM&T shipped 9R cables that did not meet design requirements. As a result, Pantex work was interrupted until a resolution was reached with the DA.

FM&T continued to have challenges with reporting clear and consistent program financials for the W87 Stockpile Management (SM) program. NNSA program offices and KCFO performed data peer reviews on multiple occasions to ensure funding was adequate to prevent stop work situations and ensure current year scope was not unnecessarily diverted to out-years.

#### **Objective 1.4**

FM&T developed a bench-top setup of Radar Simulator to assist with critical testing, supporting a successful early Sandia-led experimental test flight. This innovative platform will support future radar systems incorporating complex data collection and processing techniques. These investments are enabling FM&T to quickly respond to early program development and reduce production tester acceptance development timelines.

FM&T used signal transmission technology to leverage support for the Sandia flight research and testing project. FM&T also developed a suite of enhanced communication tools to facilitate additive manufacturing development across the NSE. The effort resulted in unprecedented fabrication of over 200 unique parts with some being delivered in as little as 68 days.

FM&T partnered with the Los Alamos National Laboratory (LANL) to accelerate the component demonstration process, focusing on submitting technology maturation components for testing in real-world environments. This partnership resulted in successful rapid development flight tests utilizing Additive Manufacturing (AM) components.

Goal 2: Mission Delivery: Global Nuclear Security FM&T Amount of At-Risk Fee Allocation: \$4,319,100

#### **Goal 2 Summary**

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, accomplishments significantly outweighed issues, and no significant issues in performance existed.

### **Objective 2.1**

FM&T was tasked or funded to support this objective in FY 2024.

# **Objective 2.2**

FM&T continued to execute high-priority DNN R&D activities, innovating technologies that support reduction of global nuclear security threats. During this year, FM&T advanced modeling and simulation methodologies and executed knowledge-transfer activities to support the Modeling, Infrastructure, Science, and Technology support project; focused on expanding the FM&T subject matter expertise in classified capabilities; leveraged nuclear weapons production expertise to help develop executable plans for the (b)(7)(E), (b)(7) scoping study project; and continued to bring unique development process expertise and skillsets to the

### Objective 2.3

FM&T executed multiple procurements and on-time deliveries critical to the Office of Plutonium Disposition Surplus Plutonium Disposition program. FM&T increased output by 38 percent over FY 2023 to meet current program schedules and milestones. FM&T established a contract mechanism for a university enabling critical work for the surplus plutonium mission; provided critical fabrication and manufacturing capabilities supporting Transport Remotely Monitored Sealing Array and Tamper Indicating Device development to assist customers across the NNSA; and supported production efforts for a prototype bracket for the Transuranic Package Transporter Model 2 to be used by the International Atomic Energy Agency as part of their safeguard protocols for surplus plutonium.

# **Objective 2.4**

FM&T conducted first signoffs of missile related dual-use licenses, provided technical support to Department of State-led missile interdiction efforts, and contributed subject matter expertise to efforts evaluating potential controls on critical and emerging technologies such as AM. FM&T supported a Commodity Identification Workshop for Turkey; managed logistics and hosted a Data Driven Targeting Workshop for the Taiwan Customs Authority; hosted the Commodity Classification and Enhanced Missile workshops for NNSA and U.S. interagency personnel; as part of the official U.S. delegation, presented studies on proliferation risks associated with AM services to the Missile Technology Control Regime plenary meeting in Rio de Janeiro, Brazil; provided 650 technical and intelligence-based Missile Trade Analysis Group assessments (approximately 68 percent of all assessments delivered by NNSA) in support of NNSA Weapons of Mass Destruction interdiction programs; assisted on more than 150 export license cases submitted to NNSA by the Department of Commerce; and delivered two additional MC-15 Portable Neutron Multiplicity Detector units to meet resource needs for the Office of Nuclear Verification Applied Verification Research and Evaluation project.

FM&T continued to effectively deliver planning, equipment management, new technology integration, maintenance, procurement, and depot operations in support of the CTCP mission including Department of Energy (DOE) Forensics Operations (DFO), Radiological Assistance Program (RAP), Joint Technical

Operations Team (JTOT), NEST, Standards and Training Program, Accident Response Group, partner federal agencies, and international partners.

### Objective 2.5

FM&T successfully maintained operational readiness and provided excellent equipment management, maintenance, depot operations, and communications support for the deployable DFO team. In addition to day-to-day logistics management, FM&T participated in two major DFO training events and one exercise and provided excellent logistics and communications support to a DFO train-the-trainer event to Ukraine Forces for ground debris collections operations.

FM&T provided execution and support to mission critical infrastructure efforts for the RAP HQ/Region 4 on Kirtland Air Force Base (KAFB), the establishment of RAP Depot Operations, and continued quick turn procurement support for Public Health and Safety/RAP.

In support of NEST, FM&T assisted with the execution of the National Security Council-directed Capability Forward initiative; initiated management of the NEST depot facility at Fort Belvoir, Virginia, and assisted in providing logistics for the Operations and Exercises program; completed 19 periodic equipment maintenance cycles; conducted 34 training events across 14 Stabilization city teams; and supported 8 Hazardous Device School Level III courses and 7 weeks of international partner training. FM&T provided exemplary equipment maintenance and readiness support for the U.S. Army 21st Ordnance Company (Explosive Ordnance Disposal) at KAFB, a JTOT mission partner; executed the CTCP prioritized list of FY 2024 equipment purchases using limited funds available during the continuing resolution(s); and led the Regional Render Safe cities in maintaining 100 percent readiness in the Asset Readiness Management System database, which provides visibility to NNSA senior leadership and congressional stakeholders. FM&T achieved this important outcome by providing effective operational support for NEST recapitalization and sensor deployment, monitoring requirements, and response processes and programs.

# **Key Outcome 2.1**

FM&T achieved this key outcome by providing effective operational support for NEST recapitalization and sensor deployment, monitoring requirements, and response processes and programs. FM&T was consistently flexible and timely, meeting \$2.7M equipment procurement requirements of the NNSA CTCP international mission partners for Ukraine support missions.

**Goal 3: Mission Innovation: Advancing Science and Technology** FM&T Amount of At-Risk Fee Allocation: \$2,159,550

### **Goal 3 Summary**

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, accomplishments significantly outweighed issues, and no significant issues in performance existed.

### **Objective 3.1**

FM&T aggressively advanced the Insertion Readiness Process (IRP) effort by incorporating 13 pilot plans. Specifically, these plans accommodated a variety of technology maturation initiatives coupled with scaling adjustments. These enhancements build on the accomplishments of initial FY 2023 pilot plans with the adoption of three IRP levels of engagement crafted to support the speed needed for individual plan success. This success was demonstrated by hosting three Technology Transition to Operations summits to ensure Global Security research was tied directly back to the FM&T IRP, technology, and program needs.

FM&T designed and fabricated a novel test engineering design strategy to drive tester design away from a rack of commercial off-the-shelf measurement equipment and focus on product-specific, interchangeable test adapters reducing the time to market for test system designs. This foundational test strategy will improve tester agility with manufacturing and production operations starting with the W93.

# **Objective 3.2**

In support of the W80-4 program, FM&T fabricated and sold the first diamond-stamped Metal Additive Manufacturing (MAM) part to next assembly to advance the relevant science of MAM and benefit the DOE/NNSA. This accomplishment created an exceptional FM&T cross-functional partnership between the enterprise Design and Production Agencies, and NNSA support for new technology development and insertion. FM&T deployed an enhanced Automated Optical Verification (AOV) process for printed wiring assembly visual verification. The initiative improved accuracy and speed, resulting in labor savings of 28 percent, reduced defects per unit by 14 percent, and produced an overall yield improvement of one percent with an associated cost savings of \$923,000. This endeavor also led to the avoidance of 875 nonconformance reports (NCRs). This enhanced AOV process is deployed on 18 products across the Mk21, W80-4, W88 ALT 370, and B61-12 programs.

# **Objective 3.3**

FM&T researched and deployed a newer and transformative ability to weld with faster blue laser technology. This newer welding equipment and technology, replacing the current green laser, reduced the production time of W87-1 development from 14 hours to 14 minutes. The blue laser welding also increases weldability, reduces maintenance, and allows for precision alignment capability that advances the frontiers of science and engineering. FM&T demonstrated the ability to mold Ball Grid Array exemplar devices in rapid prototyping fashion, furthering advancements in packaging, assembly, and testing of microelectronics. FM&T deployed the transformative use of state-of-the-industry ultra-high throughput 3D printing Vat Photopolymerization (VP). VP is an AM technology that encompasses all light-based vat printing processes and is characterized by its vast material selection, precision, and fast-printing speeds. The new system is up to 100 times faster per layer than traditional stereolithography technologies and can print 80 test connectors in 15 minutes, which is an increase in throughput of 250 times for rapid AM connectors.

# **Objective 3.4**

FM&T continued promotion of its partnership and collaboration with academia. FM&T maintained a vibrant research environment by hosting the first Minority Serving Institution Partnership Program (MSIPP) Historically Black Colleges and Universities Day at the KCNSC. Participants included professors from Alabama A&M, Florida A&M University, Morgan State University, and the University of the District of Columbia. Center of Excellence leaders and subject matter experts shared technology interests and gained knowledge about the universities' technical capabilities and areas of interests. The MSIPP collaboration helped FM&T develop novel and sustainable projects to improve safety with product storage units while meeting the storage requirements for oxygen, electrostatic discharge (ESD), and relative humidity. The transformative technology uses desiccant or hybrid drying to significantly reduce the amount of liquid nitrogen needed, thus improving the operational safety of storage units while meeting the product storage requirements.

# **Objective 3.5**

The FM&T Center of Excellence Council continued to promote publications and intellectual property that contribute to scientific advancement. Through the end of August, FM&T personnel submitted 92 invention disclosures; filed 26 patent applications; received a record 43 patents; and submitted 70 Office of Scientific and Technical Information products. The FM&T External Research and Development (ERD)/Personnel Security, Counterintelligence, Classification, Export Control and External R&D

(PeSCCEE) teams continued momentum by sharing best practices across the NSE regarding its innovative ERD and PeSCCEE processes. This effort is part of an NSE five-site ERD/PeSCCEE collaboration started in 2023. FM&T led monthly teleconferences with the NSE community and bi-annual all-hands meetings with the NSE community. PeSCCEE is an established FM&T process with collaboration between the ERD program and Counterintelligence (CI) and incorporated critical CI disciplines into vulnerable steps of ERD procedures and mitigated compromise of FM&T technology and personnel.

# **Objective 3.6**

FM&T deployed a process to efficiently inspect incoming Isopropyl Alcohol that significantly reduced flow time and eliminated opportunities for contamination and chemical exposure; a FY 2024 \$1.1M cost avoidance was reported for this initiative. The equipment uses spatially offset Raman spectrometry scans through the chemical bottle to identify the contents eliminating the need to open each bottle or consume any chemical for testing. This also strengthened the FM&T Health, Safety, and Environment (HS&E) program and sustainability, while eliminating transportation and facility operations. FM&T created unique next generation and disruptive ESD protection solutions that strengthen NNSA engineering capabilities, facilities, and essential skills. These achievements include the creation of a dissipative air cap for spray booth ionization reduction to reduce ESD impacts when using spray ionization on products. Three ESD pilot workstations were deployed to mistake proof operator use of ESD equipment resulting in reduced ESD events and NCRs.

# **Goal 4: Mission Enablement**

FM&T Amount of At-Risk Fee Allocation: \$12,957,300

# **Goal 4 Summary**

FM&T earned a rating of Very Good, and 87 percent of the award fee allocated to this goal. FM&T exceeded many 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, accomplishments greatly outweighed issues, and no significant issues in performance existed.

### **Objective 4.1**

FM&T developed a multi-year strategic plan to manage environmental permitting requirements and effectively support KC NExT, multi-site operations, and the change from Core to HazMat Site.

Additionally, FM&T removed equipment and material storage from Building 2 corridors to increase employee safety and reduce property risks. FM&T initiated a new process to engage division management in the development and execution of high-risk action plans and instituted inter-division risk management benchmarking sessions. FM&T promoted a culture of self-reporting quality issues and executed expansive containments to capture issues beyond point of discovery. FM&T achieved two of three Operational Performance Scorecard goals for both quality escapes and supplier performance while narrowly missing their Nonconformance Report target.

Quality issues included a round wire cable rework process that resulted in damaged assemblies, an extensive recall, and evaluation of product; reverse leakage current values of diode testing results were identified as suspect during a data review, which led to the discovery that testing was incorrectly performed and fasteners were assembled incorrectly into the mechanism product.

#### **Objective 4.2**

FM&T deployed new Predictive Maintenance tools to analyze critical assets, which provided early awareness of potential failures and identified issues that would have previously gone undetected. The contractor also voluntarily and successfully hosted the FY 2024 Spring BUILDER Team Meeting, which

greatly benefitted the entire NSE. As a result of proactive and timely communication from FM&T, the RAMP team maintained situational awareness and provided stakeholders with information to make decisions.

# **Objective 4.3**

DNS and the Office of Information Management selected FM&T to serve as the model for OneNNSAccess, which is the visitor processing benchmark for the NSE, and FM&T successfully hosted the OneNNSAccess Workshop. FM&T supported KC NExT site modernization activities. Led by FM&T security, the Enhanced Classified Capabilities project was created and a plan for both enhanced classified systems and cross-domain capabilities to support increased volume of classified product and expansion of classified factory space was developed.

FM&T did not properly categorize incidents, submit final closure reports for Category A incidents within 90 days, or report closure of incidents to the Cognizant Personnel Security Offices as required. FM&T failed to meet several security requirements at classified possessing vendor locations.

# **Objective 4.4**

FM&T completed a continuous improvement process, which significantly increased the number of internal financial management assessments that can be completed, thereby reducing risk and giving NNSA a higher level of confidence for compliance. Additionally, FM&T delivered efficient, effective, responsible, and transparent financial management operations and systems during FY 2024 and received a "Pass" on all the NNSA Office of Management and Budget's performance measures.

### **Objective 4.5**

FM&T Legal was instrumental in recovering erroneously paid Missouri state income taxes in the initial amount of \$700,610 for the period between May 2016 to May 2019, and then proactively identified Missouri state law and U.S. Supreme Court precedent allowing the Federal Government to recoup erroneously paid tax beyond any state-imposed statute of limitations. Without the discernment of this special legal provision to reach back even further than the original three-year period, NNSA would not have recovered an additional \$436,690.

### **Objective 4.6**

FM&T Information Technology developed an Application Currency tool, which tracks software components for supported versions and drives proactive software management before elevation of risk. FM&T exceeded expectations for its implementation of Raise the Bar compliant Cross Domain Solution equipment and processes and leads the enterprise in this national security initiative. FM&T made significant advancements in reducing vulnerabilities across all networks and systems, which effectively reduced risk.

Multiple KCFO Information Technology Combined Execution Guidance deliverables were not executed such as the Management Assurance System and the Plan and Implementation for Requirements Management system. FM&T's implementation of the ServiceNow application did not account for all business processes, which impacted its ability to deliver timely risk assessments and vulnerability exemption requests for review to the KCFO.

### **Objective 4.7**

FM&T effectively activated the newly created multi-disciplinary Incident Management Team to respond to a suspicious package at Building 21 and coordinated with local emergency response agencies in a timely manner.

# **Objective 4.8**

FM&T played a key leadership role in Enhanced Mission Delivery Initiative (EMDI)-9, defining contract lifecycle metrics for a common enterprise framework to reduce and track consent processing time. FM&T improved communication, updated procurement work instructions, revised tools, and modified Procurement Planning Review and Contract Review Board requirements to save approval times by up to 40 percent.

Of the six small business goals, FM&T exceeded expectations in five categories and met expectations in the sixth category. FM&T hired more students from the MSIPP than any other NNSA field site. Lastly, FM&T developed strategic partnerships with two vendors using long-term Indefinite Delivery Indefinite Quantity contracts to support critical occupancy efforts for KC NExT and KC STEP reducing procurement timelines and controlling costs.

### **Key Outcome 4.1**

FM&T did not fully meet the KC STEP key outcome due to schedule delays and cost increases for Building 23 North projects but made significant efforts to resolve schedule disruptions and realign capabilities with the program of record. In Building 23 South, FM&T completed move activities with no impacts to Joint Test Assembly production and successfully completed and shipped the first W80 SM telemetry unit.

# **Key Outcome 4.2**

FM&T successfully completed the KC NExT Planning document, Phase 2, and Phase 3 planning reports and reviews of the 30 percent, 70 percent, and 100 percent design drawings for Phase 1 scope. FM&T also effectively resourced and hosted the KC NExT tabletop exercise held at the Botts campus.

# **Goal 5: Mission Leadership**

FM&T Amount of At-Risk Fee Allocation: \$6,478,650

### **Goal 5 Summary**

FM&T earned a rating of Excellent, and 92 percent of the award fee allocated to this goal. FM&T exceeded almost all of the Objectives, and generally met overall cost, schedule, and technical performance requirements of the contract under this Goal in the aggregate. During the year, accomplishments significantly outweighed issues, and no significant issues in performance existed.

### **Objective 5.1**

FM&T maintained a strong leadership presence on multiple EMDI teams. As an active member of the NNSA EMDI Product Realization Process (PRP) working group, FM&T contributed toward enterprise agreements and actions to include raising thresholds for NNSA engagement in baseline change management, driving increased accountability for lab, plant, and site leadership, and making progress towards removing modernization program Earned Value Management System reporting requirements, after FPU, to enable efficiency and expediency. As a result of this collaboration, a multi-site change control process commenced, including FM&T led training and standardization across W80-4, W87-1, and W93 programs.

As an active EMDI-18 ST&E Integrated Project Team member, FM&T expeditiously delivered integrated KCNSC production application focused capability and facility investment opportunities to support recapitalization, capability, and investment strategic planning. Collaboratively with other NNSA sites, FM&T supported multiple enterprise-wide ST&E engagements enabling NNSA Office of Defense Programs to formally release an integrated plan to revitalize NNSA ST&E.

In support of NNSA Office of Policy Strategic Planning Strategic Outlook Initiative over-the-horizon study, FM&T analyzed supply chain vulnerabilities and identified resiliency strategies in co-leadership with Pacific Northwest National Laboratory. In October 2024, FM&T held an annual Leadership Summit, connecting more than 500 participants to KCNSC FY 2024 strategic themes and objectives.

FM&T Senior Leadership continued serving on the Workforce Steering Committee, Digital Transformation Senior Steering Group, and the EMDI Steering Committee, contributing elements of the FM&T operating system to manage an enterprise-scale EMDI program and contributed as Chair of the National Security Executive Council, which brought together all NSE M&O leaders and NNSA, to address strategic nuclear deterrence mission growth and align M&O leadership to enable the various NNSA initiatives.

# Objective 5.2

FM&T leveraged its corporate parent's expertise in multiple operational areas, revamped KCNSC Management Operating System (MOS) reviews, and aligned CAS expectations across functional areas to drive consistency in approach. FM&T initiated steps to systemically transform leadership culture relative to transparency, ownership, and resolution of challenges. FM&T increased the use of MOS information during NNSA engagements and resolved misaligned customer communication on some issues. Continued leadership focus is needed to transform and sustain a culture of ownership, accountability, and transparency at leadership levels when addressing technical issues affecting multiple sites or the ultimate user (e.g. wire-bonding, cables, and an anomaly resolution team), focusing on the issue(s), resolution, prevention, and delivering acceptable quality product on time, the first time.

FM&T proactively led internal cross-functional planning and responded quickly to NNSA continuing resolution and potential government shutdown requests. Continued progress is needed to better align CAS financial execution and projections to funding needs and impacts submitted to NNSA.

FM&T leveraged Honeywell corporate expertise to provide CAS process feedback, integrate corporate supply chain commercial best practices, and support training frameworks for monthly management Leadership Empower workshops. Approximately 80 percent of FM&T managers attended at least one optional Empower workshop designed to develop management skills for employee retention and operational efficiency.

# Objective 5.3

FM&T partnered with the Lawrence Livermore National Laboratory (LLNL), LANL, and the Sandia National Laboratories (Sandia) Senior Leadership to drive mission success behaviors on modernization programs. Through effective collaboration with LANL and expedited planning and responsiveness, FM&T delivered 100 percent Process Prove In hardware to support a design change on a specific component and enabled NNSA to maintain continuity in stakeholder commitments. Jointly with SNL, FM&T launched an Inter-Facility Collaboration Initiative for New Mexico Additive Manufacturing to accelerate delivery, mitigate supply chain risk, maximize technology transfer, and develop future next generation stockpile stewards.

FM&T supported a NNSA senior level KC NExT tabletop exercise resulting in project alignment on procurement, change management, risks, Future-Years Nuclear Security Program cost planning, and initial capability sequencing. FM&T hosted the NNSA enterprise Production Integration Collaboration Working Group and enabled identification and prioritization of critical production issues and resolution teams.

FM&T continued active collaboration with multiple NNSA sites to maintain momentum toward an integrated, enterprise digital ecosystem. FM&T actively participated in the enterprise DT Senior Steering Group with representatives on all four enterprise DT sub-groups, co-led the DT Policy sub-group and hosted the NNSA enterprise DT Summit.

FM&T expanded its DT strategy in additional production areas. FM&T made substantial progress evaluating and planning for NSE Digital Thread and DT production outcomes and adhered to an aggressive PRIDE program schedule. FM&T exceptionally orchestrated KCNSC Digital Thread Transformation planning and rapidly identified, transitioned, and supported the new PRIDE NSE Digital Thread Chief Architect. FM&T continued to lead the complex in improving product realization processes (PRP pilots) that enable on-time rate production requirements.

As the RAMP program leader, FM&T continued to accelerate infrastructure repair across the enterprise. FM&T completed 16 RAMP projects, benefitting LLNL, the Nevada National Security Site, Sandia-Tonopah Test Range, Pantex, and LANL.

FM&T launched benchmarking activities to enable mission success. Some notable engagements included HS&E benchmarking with other NNSA sites, supporting NNSA enterprise Safety, Analytics, Forecasting, Evaluation and Reporting tool development to monitor the health and risk of NNSA enterprise safety systems, and holding supply-chain engagements with Newport News Shipbuilding and LANL. Crossfunctional FM&T teams implemented continuous improvement projects across various functional areas to enhance operational efficiency.

### **Objective 5.4**

Through effective SCMC program management, FM&T continued to produce economical buying power for the DOE/NNSA enterprise and reported more than \$400M total FY 2024 cost savings. Some notable FY 2024 SCMC actions include demonstrating an industry-leading spend management software platform to enterprise partners, awarding an enterprise-wide commodity agreement slated to attract underutilized workforce, and delivering high-quality mission essential products and services. FM&T hosted the first NNSA Supply Chain Risk Summit enabling NNSA to benchmark supply chain risk assessment, mitigation maturity, and to identify enterprise best practices at each site.

FM&T Global Security leaders hosted the first NSE classified machining workshop, driving collaborative partnerships, and efforts to develop a responsive enterprise.

#### **Objective 5.5**

Overall, FM&T executed critical safety activities to minimize adverse mission impacts. Some included completing a KC NExT Environmental Assessment, New Mexico Operations National Environmental Policy Act assessment, and improving Lockout/Tagout safety documentation quality and detail. FM&T initiated a new safety assessment tool, Safe Standard, to aid employees during operational walkdowns in their perspective work areas.

FM&T was acknowledged by the DOE Office of Enterprise Assessment for two enterprise best practices related to integration of innovative technologies and implementation of Pro-Force business processes. KCNSC was lauded as the only DOE site to achieve Personal Identity Verification Implementation Maturity Model Level 5 for access controls and is being used as a model to mature systems at other NNSA sites.

FM&T enhanced communication and transparency in Information Technology, enhancing governance and preventing adverse impacts to mission.

FM&T did not notify the appropriate Field Office Safety Functional Area Lead of events within a timely manner or perform out of sequence notification to the appropriate field element resulting in missed opportunities for the field level to report and oversee appropriate response and action to events.

#### **Objective 5.6**

FM&T continued to proactively work internally, with NNSA and other sites, on approaches to attract, hire, and retain quality employees to support the mission. FM&T implemented numerous employee benefits and reported an increased salaried employee benefits score, BenVal, from 90.9 to 103.6. In

#### <del>-CUI</del>

partnership with NNSA, FM&T developed a manufacturing shop at a local high school, building a pipeline of manufacturing talent in the Kansas City metropolitan area. FM&T deployed numerous diversity and inclusion events and reported over 15,000 engagement hours, an approximate 10 percent increase over last year. In response to FY 2023 feedback, FM&T communicated multiple reporting avenues for employees to submit concerns, highlighted a new reporting tool that allows employees to anonymously report a concern and receive feedback, and trained Human Resource professionals to reinforce leadership openness to workforce engagement and trust building. FM&T proactively planned for union negotiations, developed contingency plans, and provided an initial notification report to Defense Programs regarding ability to meet critical customer deliverables at the site. Through continued employee benefits enhancements and collaborative efforts with NNSA, FM&T maintained a favorable FY 2024 total attrition trend from 8.31 percent in September 2023 to 7.15 percent in September 2024.

# ATTACHMENT 1 – FY 2024 Performance Evaluation and Measurement Plan (PEMP)

#### Goal 1

Successfully execute the cost, scope, and schedule of the Nuclear Stockpile mission work for Defense Programs work in a safe and secure manner in accordance with DOE/NNSA priorities, Work Authorizations, and Execution/Implementation Plans.

# **Objective 1.1**

Work as a team across the Nuclear Enterprise on stockpile program scope to 1) achieve and maintain program delivery schedules; 2) lower risk to achieving First Production Unit (FPU), Initial Operational Capability (IOC), and Final Operational Capability (FOC); 3) improve manufacturability and supply chain execution; and 4) control costs.

# **Objective 1.2**

Execute production modernization processes and activities per expectations defined in Implementation Plans to sustain and improve production capabilities, equipment, and infrastructure for 1) War Reserve production; 2) component modernization and production; 3) strategic materials capabilities and production; and 4) improve safety margins, technology maturation strategies, and qualification, and logistics plans collaboratively across the NSE, and 5) improve modeling and analysis capabilities to accurately measure production.

# **Objective 1.3**

Execute stockpile system maintenance, production, limited-life component exchanges, weapon containers, surveillance, assessment, development studies/capability improvements, weapon program planning/support and dismantlement and disposition activities to meet DoD commitments and deliver the annual stockpile assessment.

# **Objective 1.4**

Provide the knowledge and expertise to maintain confidence in the nuclear stockpile without additional nuclear explosive testing by developing, maturing, and applying innovative strategies and technologies to sustain a robust stockpile and improve science and engineering capabilities, facilities, and essential skills to support existing and future nuclear security enterprise requirements.

#### Goal 2

Successfully execute the cost, scope, and schedule of the authorized global nuclear security mission work in a safe and secure manner to include the Defense Nuclear Nonproliferation, Nuclear Counterterrorism and Counterproliferation, and Incident Response missions in accordance with DOE/NNSA priorities, Work Authorizations, and Execution/Implementation Plans.

# **Objective 2.1**

Support efforts to secure, account for, and interdict the illicit movement of nuclear weapons, weapons-useable nuclear materials, and radioactive materials.

#### ATTACHMENT 1 - FY 2024 PEMP

# **Objective 2.2**

Support U.S. national and nuclear security objectives in reducing global nuclear security threats through the innovation of technical capabilities to detect, identify, and characterize: 1) foreign nuclear weapons programs, 2) illicit diversion of special nuclear materials, and 3) global nuclear detonations.

# **Objective 2.3**

Support efforts to achieve permanent threat reduction by managing and minimizing excess weaponsuseable nuclear materials and providing nuclear materials for peaceful uses.

# **Objective 2.4**

Support efforts to prevent proliferation, ensure peaceful nuclear uses, and enable verifiable nuclear reductions to strengthen the nonproliferation and arms control regimes.

### Objective 2.5

Sustain and improve nuclear counterterrorism, counterproliferation, and forensic science, technology, expertise and associated Nuclear Emergency Support Team (NEST) capabilities; execute response missions, implement policies and procedures in support of response and forensics missions, and assist international partners/ organizations.

#### K.O. 2.1

Execute timely procurement actions to enable Nuclear Emergency Support Team (NEST) equipment recapitalization and sensor deployments for NEST monitoring requirements pursuant to Russia's further invasion of Ukraine.

#### Goal 3

Successfully advance national security missions through innovation by expanding the frontiers of Science, Technology, and Engineering (ST&E). Execute transformative and leading-edge Research and Development (R&D) by creating a vibrant, creative, environment that leverages effective partnerships (including SPP) and technology transfer endeavors. Effectively manage high-impact DOE Work and Laboratory Directed Research and Development (LDRD or PDRD) and Technology Transfer, etc. in a safe and secure manner consistent with DOE/NNSA priorities, Work Authorizations, and Execution/Implementation Plans.

### **Objective 3.1**

Execute a research strategy that is clear and aligns discretionary investments (e.g., LDRD) with Laboratory strategy and supports DOE/NNSA priorities.

# **Objective 3.2**

Ensure that research is relevant, enables the national security missions, and benefits DOE/NNSA and the nation.

# **Objective 3.3**

Ensure that research is transformative, innovative, leading edge, high quality, and advances the frontiers of science and engineering.

#### ATTACHMENT 1 - FY 2024 PEMP

# **Objective 3.4**

Maintain a healthy and vibrant research environment that enhances technical workforce competencies and research capabilities.

### **Objective 3.5**

Research and develop high-impact technologies through effective partnerships, and technology transfer mechanisms that support the Laboratory's strategy, DOE/NNSA priorities and impact the public good; and ensure that reporting, publishing, and information management requirements of federally funded scientific research and development are implemented (via DOE's Public Access Plan) and per DOE's Scientific and Technical Information Management directive (DOE O 241.1B).

# **Objective 3.6**

Pursue and perform high-impact work for DOE that strategically integrates with the DOE/NNSA mission, and leverages, sustains and strengthens unique science and engineering capabilities, facilities, and essential skills.

#### Goal 4

Effectively and efficiently manage the safe and secure operations of the Laboratory in accordance with cost, scope and schedule while maintaining an NNSA enterprise-wide focus; demonstrating accountability for mission performance and management controls; successfully executing cyber, technical, informational, 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, etc., with a focus on mission enablement.

### **Objective 4.1**

Deliver effective, efficient, and responsive Environment, Safety, Health (ES&H), Quality (including weapon quality), and radioactive waste management. Advance DOE/NNSA's climate resiliency and sustainability goals with a focus on maximizing energy efficiency and supporting Carbon Pollution-Free Electricity (CFE) objectives.

### **Objective 4.2**

Deliver mission capabilities through the planning, design, acquisition, operation, maintenance, recapitalization, and disposition of facilities and infrastructure. Execute design and construction projects to achieve the scope on schedule, on budget, and in alignment with the 30 pits-per-year mission.

### **Objective 4.3**

Deliver effective, efficient, and responsive safeguards and security, including assigned enterprise initiatives.

### **Objective 4.4**

Deliver efficient, effective, responsible, and transparent financial management operations and systems including financial integration reporting; budget formulation and execution; programmatic cost estimates; and internal controls.

#### ATTACHMENT 1 – FY 2024 PEMP

# **Objective 4.5**

Deliver efficient and effective management of legal risk and incorporation of best legal practices. Deliver timely and actionable recommendations and analysis to Freedom of Information Act and Privacy Act requests.

### **Objective 4.6**

Deliver effective, efficient, and responsive information technology systems and cybersecurity that provides for a comprehensive mission and functional area delivery through the execution of the implementation factors established in the NA-IM IT and Cybersecurity Program Execution Guidance, and adaptive day-to-day IT and cybersecurity operations to support, protect, and defend mission/business systems and networks.

# **Objective 4.7**

Deliver effective, efficient, and responsive site emergency management programs in support of the DOE/NNSA Emergency Management Enterprise.

# **Objective 4.8**

Deliver efficient, effective, and compliant business operations including, but not limited to, procurement, human resources, and property systems, in support of NNSA missions. Focus areas to include achievement of small business and socioeconomic goals; timely and high-quality subcontract actions; support provided to the NSE Workforce Recruitment Strategy; and strategic management of integrated recruiting, retention, and diversity programs.

#### K.O. 4.1

Meet cost, scope, and schedule commitments for activities in the approved phases of the Kansas City Short-Term Expansion Program (KCSTEP).

#### K.O. 4.2

Support development of cost, scope, and schedule for activities in the approved phases of the Kansas City Non-Nuclear Expansion Transformation (KCNExT) Program as described in the NNSA KCNExT Letter of Intent.

### Goal 5

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 Triad'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 Laboratory and the Enterprise.

### **Objective 5.1**

Define and implement a realistic strategic vision for the Laboratory, in alignment with the NNSA Strategic Vision, which demonstrates enterprise leadership and effective collaborations across the NNSA enterprise to ensure DOE/NNSA success.

#### ATTACHMENT 1 – FY 2024 PEMP

# **Objective 5.2**

Demonstrate performance results through the institutional utilization of a Contractor Assurance System and promoting a culture of critical self-assessment, transparency, and accountability through the entire organization, while also leveraging parent company resources and expertise.

# Objective 5.3

Develop and implement a National Security Enterprise-wide partnership model that enhances collaboration, reinforces shared fate, and enables mission success including transformation of the stockpile and the enterprise.

# **Objective 5.4**

Exhibit professional excellence in performing roles/responsibilities while pursuing collaborative opportunities for continuous organizational and enterprise learning and demonstrated improvements that will improve productivity, grow the capacity to execute mission, and manage, rather than avoid, risk. Pursue innovations to increase agility and resilience while controlling costs. Advance the operational capabilities of the National Security Enterprise (NSE) by identifying and employing latent capacity existing in the NSE.

# **Objective 5.5**

Demonstrate leadership in driving enhanced and sustainable formality and rigor of operations through proactive implementation of effective and efficient measures to minimize operational upsets that have potential to impact mission.

### **Objective 5.6**

Leadership takes decisive action, as a cooperative partner of NNSA, to attract and retain the workforce needed to achieve the nuclear security enterprise missions, with particular emphasis on critical and underresourced skill sets, reaching back to parent company resources as necessary.