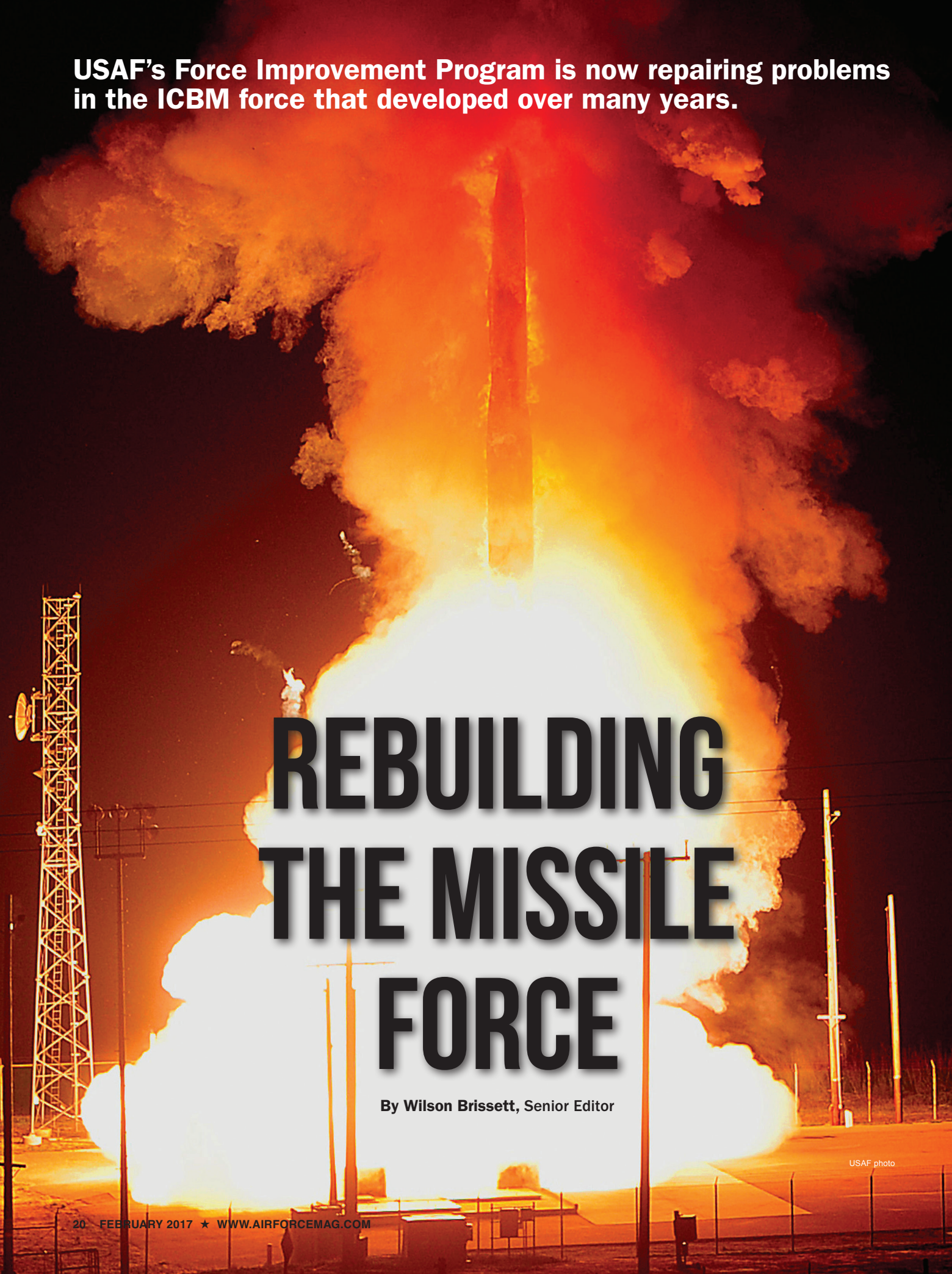
USAF's Force Improvement Program is now repairing problems in the ICBM force that developed over many years.



REBUILDING THE MISSILE FORCE

By **Wilson Brissett,** Senior Editor

USAF photo

AFTER the Cold War, the Air Force's nuclear mission had in many ways been pushed to the back burner by the pressing demands of hot wars in the Balkans, Afghanistan, Iraq, and elsewhere. Airmen assigned to the nation's nuclear missions generally performed with dedication and professionalism, but misguided policies and an overall lack of focus on the mission led to a series of serious failures and shortcomings.

In August 2007, a B-52 landed at Barksdale AFB, La., after a routine transport flight. Ground crews were later stunned to discover that instead of arriving with inert warheads, the bomber had carried six "live" AGM-129 nuclear cruise missiles from Minot AFB, N.D. No one on the bomber's crew or at Minot was aware of that fact.

The spectacular, headline-grabbing mistake was the first of a number of conspicuous signs that the Air Force's nuclear mission—arguably its most important function—had lost direction. The Minot incident eventually forced the resignations of a Secretary of the Air Force and a Chief of Staff, a major Air Force reorganization, and a program to tighten up the standards, but there was more to come.

The sense of a mission in crisis was reinforced in January 2014, when 92 nuclear missile officers at Malmstrom AFB, Mont., were caught cheating on their monthly nuclear proficiency exams. Within a month, then-Lt. Gen. Stephen W. Wilson (now the four-star vice chief of staff), commander of Air Force Global Strike Command at the time, announced a Force Improvement Program (FIP) to get to the bottom of the problem and make necessary changes.

Now—because of these embarrassments and because other nations have created and modernized their own nuclear systems—the Air Force is putting far more attention and money toward improving and strengthening its nuclear program.

BEST PRACTICES

The FIP was launched in 2014 by Lt. Col. Russell S. Williford, commander of the 320th Missile Squadron at F. E. Warren AFB, Wyo. At the time, Williford was a newly minted Ph.D. working at Global Strike Command. Leadership approved his methodology to lead an assessment of ICBM operations and put him in charge of it.

The FIP was driven by surveys and best practices. Airmen working in the ICBM career field were surveyed about their culture, support, demands, working conditions, and what led to the scandals of 2007 and 2014. Williford and his team came away from these surveys convinced of the need for "a cultural change" to place the nuclear mission more "in line" with the rest of the operational Air Force.

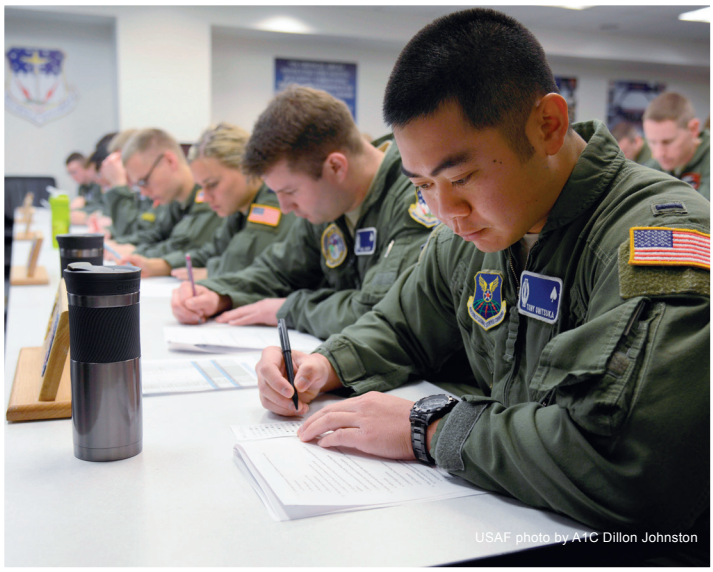
The FIP results made it clear to Williford that the nuclear field had entered a holding pattern. Without the Cold War sense of urgency for the mission, the missile career field had grown isolated. Its leadership had become geared toward mere survival, its infrastructure and equipment had become "outdated" and worn, and its evaluation regime had grown abstract and inflexible. What was needed was alignment with the changes that had taken place over the years elsewhere in the Air Force.

"We took the best practices across the operational Air Force and then adapted those and applied them to the ICBM operations career field," Williford said. The two key areas where the mission was out of sync with the larger service, according to the FIP findings, were mission focus and authority within the chain of command. Both problems have close connections to training.

Over the years, training and evaluation had taken on an out-of-proportion importance in the nuclear mission. There was too much training, the requirements were unrealistic and out of line with reality, and this drove an impractical pace and structure of operations.

While Air Force pilots are evaluated every 12 to 15 months, Williford found that missile crew members were being evaluated multiple times per year. This pace gave rise to widespread anxiety about performance on nuclear knowledge tests—what many in the nuclear missile community now talk about as an impossible-to-meet "culture of perfection."

Eventually, "mission drift" set in, Williford said.


USAF photo by A1C Dillon Johnston


USAF photo by Josh Aycock

First page: An unarmed Minuteman III ICBM blasts out of a silo during an operational test launch Feb. 25, 2012, at Vandenberg AFB, Calif. One change brought by the FIP is that nuclear mission officers now travel to Vandenberg to watch test launches. Above left: 1st Lt. Tony Onitsuka takes a test in 2015 at Malmstrom AFB, Mont. Missile crew members were being tested several times a year, unlike pilots who are evaluated every year-plus. Above: 2nd Lt. Wesley Griffith (l) and 1st Lt. Katie Grimley work in the launch control center in a missile alert facility at Malmstrom.

The ICBM work had "started to focus more on operations within the gate of the base," where training happens, "instead of where the mission is, which is in the field."

Airmen told Williford training was too rigid. Experience in a simulator was limited to a "singular, four-hour event," while evaluators relied too much on paper-based tests. This "standardized, one-size-fits-all" approach artificially separated the responsibility for safeguarding nuclear weapons systems from the authority of team leaders to tailor training to the needs of their crew.

To create a more realistic and sustainable training and evaluation culture, two of the most important FIP reforms are incentives to "reward the mission" in the field and a move to "align authority with responsibility," Williford explained. In terms of training and evaluation, this has meant closely pairing classroom instruction with the simulator and more complex and frequent simulator time. The new training standard for nuclear officers is a 12-hour simulator mission with six different crews. This model allows crew members to "bolster realism" by practicing the handoff of alert status from one crew to another.

There's more flexibility in training since the FIP. Because missile crews have different levels of knowledge and experience, Williford said simulator work "allows us to tailor the training to the needs of a crew" in a way that a standardized, paper-based test can't match. Williford sees an important point about empowerment here.

"Giving the squadrons back that authority to modify their training," he said, has produced "little pockets of innovation, and we start spreading them across the group."

The goal of the training and evaluation reforms is to shift the emphasis from knowledge to proficiency, Williford said. When the FIP team looked at the rest of the Air Force, they found a concentration on proficiency and currency in leadership development" that was lacking in the nuclear field. Using the simulator more and fostering flexibility and innovation in training would "reward the proficiency aspects of things."

The new approach is supposed to create well-rounded professionals in the nuclear mission instead of skilled test-takers.

GET OUT OF THE SILOS

In the hunt for nuclear proficiency, the FIP discovered that officers need to get out of the silos and off the northern tier bases more often. This involves "professional development opportunities," Williford said, in the form of continuing education, cross-service visits elsewhere within the US nuclear forces, or a trip to observe live ICBM test launches at Vandenberg AFB, Calif.

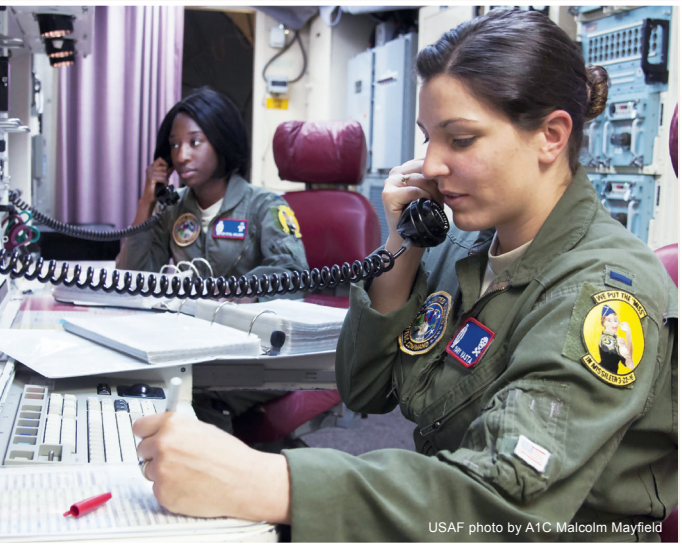
As important as training, evaluation, and education are to the nuclear mission, however, the FIP also took aim at patterns of leadership, career field structure, and funding levels.

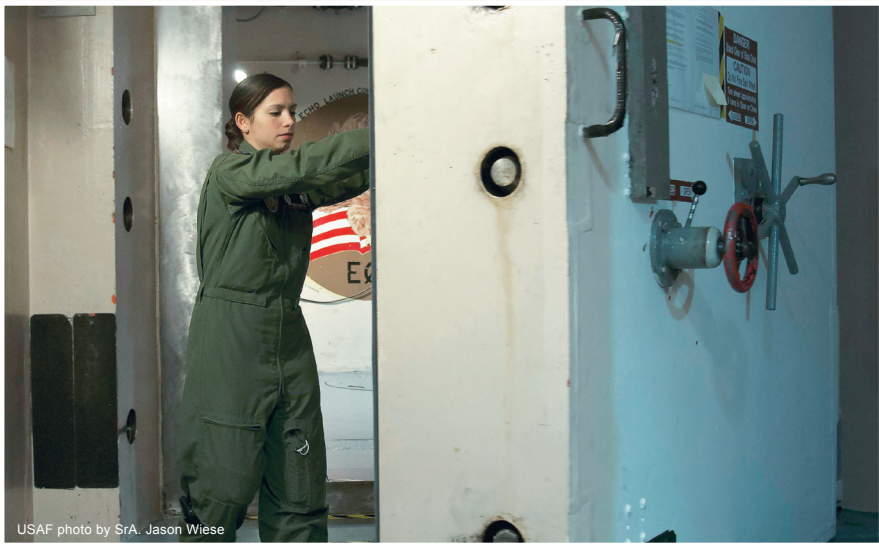
For Capt. Kristin Selvidge, a flight commander in the 490th Missile Squadron at Malmstrom, the changes in leadership were the most noticeable outcomes of the FIP. Before the cheating scandal, said Selvidge—who has served at Malmstrom since 2011—senior leadership was "intimidating" to many junior officers. They often found themselves "afraid to ask a question." After the investigation, "they just completely changed all the leadership," to find leaders who were "more approachable."

Leadership changes weren't just about intangibles, according to Col. Stacy Jo Huser, commander of the 91st Operations Group at Minot AFB, N.D. The FIP determined that "everybody who is a 13N"—the Air Force specialty code for nuclear and missile operations—"will pull alert," Huser said.

"Prior to FIP, your squadron commanders didn't pull alert," and neither did wing commanders. "Now all those folks are pulling alert again with the crew members, and they're legitimate alerts. It's not a modified alert where they have a babysitter out there."

Pulling alert is the heart of the ICBM mission. It requires 24 hours of uninterrupted duty shared with a crew partner in a launch control center that can be a three-hour drive from the base. One of the two officers on alert has to be awake, monitoring the system, at all times.


USAF photo by A1C Malcolm Mayfield


USAF photo by SrA. Jason Wiese

Above left: 1st Lt. Krystal Wilder (l) and 1st Lt. Mary Vasta work in a launch control center during an alert in March. Above: 1st Lt. Pamela Blanco-Coca closes the blast door at a missile alert facility.

For Selvidge, seeing commanders pulling alert has been crucial for morale.

"Seeing your leadership out in the field doing the work with the regular line crew members, I think [creates] more appreciation and respect."

Having more people pulling alerts spreads the duty around, creating a more sustainable operating tempo. A new requirement gives missile officers a day

USAF photo by SrA. Jason Wiese

The remote conditions are made clear by this picture of an F. E. Warren AFB, Wyo., alert facility. The topside buildings house support and security forces, while missileers work underground in the launch control center.

off immediately after every 24-hour alert period. That's not bad for morale, either.

The FIP reforms are starting to pay off. More officers are staying in the nuclear missile career field. Previously, there simply weren't enough billets to retain officers in the middle of their careers. It was typical to do a three- or four-year tour at a nuclear base, then be forced to cross-train into another career altogether. A handful of high performers would stick around and eventually win staff positions, but "filling those middle gaps" created serious problems for mentoring and career-field continuity, Huser said.

"Starting with the FY17 accessions," Huser said, "13Ns are 13Ns for the rest of their careers." Additional billets have been created to make room for these midlevel leaders, and from now on there will be "two assistant directors of operations in each squadron," she said.

Supporting the manpower increase is a new "3+3" career-field structure, with young officers getting an initial crew tour to learn the mission, followed by a tour concentrating on leadership development.

The goal of many of these changes is to align the ICBM mission with standard practices across the rest of the Air Force. Because senior leadership also wants 13N airmen to understand the uniqueness of their mission, more money has been directed toward the career field since the early stages of the FIP.

In a speech at Minot on Sept. 26, 2016, Defense Secretary Ashton B. Carter said $10 billion has been invested in the nuclear career field over the last two years. The administration's budget also requests $108 billion more over the next five years to "sustain and recapitalize" the nuclear force.

How is the money making a difference? First, in January 2014, Air Force Secretary Deborah Lee James announced a new system of incentive pay for nuclear missile officers.

"Incentive pay is definitely a reality now," said 1st Lt. Yasmine Garcia-Smith. Crew members receive between $75 and $300 per month, depending on how many alerts they pull beyond the standard seven, she said. "It helps to show that our time is valuable," Garcia-Smith said, "and that the Air Force recognizes that."

New money for the nuclear mission has gone toward better gear for the security forces that protect the nuclear bases. They've gotten new uniforms, protective vests, and Advanced Combat Optical Gunsights for their weapons. The Air Force is also making progress on replacing the Vietnam-era UH-1N Huey helicopters used to patrol the vastly separated ICBM installations. A draft request for proposals for a new helicopter was released in December with a goal of fielding the system in 2021.

CHANGES OVERDUE

Improvements have come to facilities and to quality-of-life initiatives. Carter said Minot had received "a newly repaired runway, expanded childcare options, and fitness centers open 24/7." Nuclear officers said the changes were overdue. Selvidge was delighted when new amenities such as shelves, workout equipment, microwave ovens, and refrigerators began appearing in the underground capsules where crews sit alert at Malmstrom.

Huser said Minot now has an annual contract for "deep cleaning of our launch control centers." Despite the reality that "our elevators are decades old," though, the base has only recently moved "to get them refurbed and repaired."

Some of these quality-of-life changes, especially the infrastructure upgrades, go a long way toward catching the nuclear bases up to rest of the Air Force. "A lot of the stuff was outdated," Selvidge said. But others, like the pay raises, are to incentivize the mission and repair the professional culture to prevent future scandals.

So while funding has brought a number of positive changes, it's still a work in progress. Lt. Col. Jared Nelson, commander of the 742nd Missile Squadron at Minot, said that the chairs in the capsules where he and his crew pull alert are 50 years old.

Nonetheless, nuclear missile officers are genuinely proud of their work and even fiercely loyal to the remote bases where they are assigned.

"People who say, 'You don't want to go to Minot' have never been stationed at Minot," Huser said. She said a new indoor playground and splash pad was built to help parents endure the North Dakota cold with young children. Garcia-Smith said, "There's always something for you to get involved in" at the base. Williford, who began his career as a missileer there, agreed that "the sense of community" is foundational to life at Minot.

"I had never expected to have such a large group of peers in a similar operational environment with the same daily stressors that the ops tempo provides. And what happens is, you make friends for life," he said.

Williford described this attachment to the mission as a "culture of pride," in contrast to the unhealthy "culture of perfection" that produced the 2014 testing scandal at Malmstrom. Where the missile career field is healthiest, the culture connects the communities at each base to the strategic mission of nuclear deterrence.

"You have to understand why you do what you do," Williford said. "To have the Chief and the Secretary and our strategic documents state that this is the No. 1 mission area of the Air Force, that was … huge."

Carter reminded his audience at Minot that "America's nuclear deterrence is the bedrock of our security." But he also admitted, "I realize it feels at times that most people don't often think about your mission, which I know can be frustrating." He said that in a way, "it's a good thing. Because it means you're doing your job. … Whether they recognize it or not, our entire country and more depends on you." ✪