

THE Air Force is working to ensure its nuclear forces maintain their high state of readiness.

Perhaps no Air Force mission has received more scrutiny in the past six years than the operation and maintenance of the nation's nuclear-capable bombers and intercontinental ballistic missiles.

Big changes began in June 2008 when the Air Force Chief of Staff and Secretary were fired by then-Defense Secretary Robert M. Gates for high-profile nuclear security lapses.

The Air Force placed considerable new attention on its nuclear mission. This included activating Air Force Global Strike Command to oversee the service's B-2A and B-52H bombers and its Minuteman III ICBMs. The Air Force also established an office on the Air Staff for overseeing nuclear matters, the A10.

The challenges did not end there, however. Late in 2013 came a series of reports on new mishaps and morale problems within the ICBM force, which is being reduced (as is the nuclear-capable bomber fleet) to meet the ceilings imposed by the New START agreement with Russia.

In light of all this, Air Force and DOD leaders are working to improve the service's nuclear force. Defense Secretary Chuck Hagel said the nuclear triad of land-, air-, and sea-based delivery systems will be preserved, and the mission will not be neglected. DOD

will "make important investments to preserve a safe, secure, reliable, and effective nuclear force," Hagel said in a February briefing to preview the 2015 defense budget request.

On the Air Force's side, upholding its nuclear standards will mean the service is paying close attention to airmen's professional development and investments in equipment—to ensure nuclear readiness rates do not suffer.

Define Readiness

This effort comes at a time when the Air Force's nuclear deterrence operations, or NDO, are undergoing a transition. Maj. Gen. Garrett Harencak, who oversees the A10 said USAF is working to protect its nuclear readiness accounts from the effects of budget volatility.

"Everybody took some cuts.... There was some underfunding, some underinvestments," he said in a January interview. The concern is "these bills are going to come back due again."

The Pentagon's guidance to the services on readiness reflects this view. "Readiness of an individual unit is the result of a series of time-intensive programs that train qualified people and prepare working equipment to be deployed, operated, and ultimately recovered," states a 2013 fact sheet on readiness impacts. For example, it takes three to six months for a given unit to regain lapsed proficiency qualifications in a flying mission, according to the fact sheet.

Nuclear readiness has some similarities to the flying mission, but is unique and entails practicing for the mission without being employed in combat. "In NDO, we are pretty clear as to how we do that: If you are a unit, you are evaluated for traditional readiness, ... with [operational readiness inspections], ... then compliance with nuclear surety inspections," Harencak said.

A nuclear operational readiness inspection, or NORI, provides the metrics to measure performance and is the standard the Air Force should hold its nuclear units to, Harencak believes. "Fundamentally, that's how I would define readiness," he said. "Can you do your wartime mission now, right now? How we determine [that] is through inspections."

One hard-to-balance issue is the nuclear mission's need for expertise and specialization versus the need to expose NDO airmen to the wider Air Force. The missile and bomber units are located at just a few bases, and both internal Defense Department studies and RAND reports indicate that career advancement is a concern of airmen in the nuclear mission.

Since standing up AFGSC, the Air Force has placed a "laser focus" on nuclear operations. "That meant that there are parts of the Air Force that don't have exposure to the nuclear enterprise," said Harencak. "When you just centralize into a few places, that has an advantage. But one of the disadvantages



is that the pride and professionalism [of the NDO community] is not always exposed to the general population of the Air Force and the DOD."

This balance is one the Air Force is working on, together with its partners in the Navy's nuclear community, as it seeks to retain a skilled and specialized workforce but also give it exposure and opportunity for advancement across the US military.

The dual-capable bomber force also provides conventional capabilities, and the Air Force routinely rotates heavy bombers to Guam as part of the continuous bomber presence in the Asia-Pacific region to provide stability there. In 2012, AFGSC moved to six-month rotations instead of four-month rotations for its B-52 deployments to Guam. This change cut logistical costs and added greater mission stability, while allowing crews to practice tasks related to both conventional and nuclear deterrence operations.

The Air Force is now well-versed in how to manage pilots, weapon systems officers, and other aircrew members, said Harenak, and in how to oversee the "seeds and weeds" tasks that airmen must accomplish before the service can declare a unit combat-ready. "Many of the skill sets are reasonably transferable," he said. But "one of the things we have to juggle is how do we measure readiness to do both those missions simultaneously?"

For nuclear units, the answer is

twofold: first evaluating for traditional readiness via NORIs, then measuring compliance via nuclear surety inspections, or NSIs. Every 36 months, each ICBM and nuclear-capable bomber unit undergoes a NORI, with inspectors scrutinizing operations from top to bottom. They grade a unit in four areas: force generation, employment, reconstitution, and surety. They rate a unit as being outstanding, excellent, satisfactory, marginal, or unsatisfactory.

The Toughest Inspection

The Air Force has conducted nine NORIs since 2010, resulting in two outstanding ratings, four excellent scores, and three satisfactory marks, according to Harenak. This set of results is historically higher than the average operational readiness inspection rate, he said. But they go the extra step with NDO; they also evaluate the unit's ability to comply.

This involves a separate inspection, the NSI, carried out by inspectors every 14 months. The inspections cover safety, security, and storage issues pertaining to how a unit handles its portion of the nuclear deterrence mission.

The NSI is an exhaustive inspection and there are only two results possible: pass or fail. Last summer, the 341st Missile Wing at Malmstrom AFB, Mont., garnered attention for failing an NSI. Inspectors later retested the unit. It redeemed itself by earning a

passing score the second time around.

Harenak said the setup with NORIs and NSIs is, by and large, working. "I have not met anyone who has ever had to experience an NSI [who] does not believe it is the toughest inspection the US military gives to itself," he said. "It is very intrusive, it is very detail-oriented, and it uncovers every rock and opens every door."

While there are different metrics for missile wings than for bomber units, the underlying principles are the same.

Missile operations are "fundamentally different" from flying operations, and so the Air Force maintains a set of metrics to measure performance in the NORIs and NSIs. Most are classified, and commanders rarely discuss specifics of NSI failures. But failure is part of the system, said Harenak.

It is the human capital aspect of readiness that attracts as much time and attention as sorties and missile tests. "Our people will make mistakes," said Harenak. "We don't make excuses for it."

"If everyone were passing all the time, there would be something to worry about," he said. "Some people will fall short."

The Air Force has made progress in the last 10 years in managing the human capital side of the nuclear enterprise, but work remains. Reports emerged detailing morale problems inside the ICBM cadre, along with a perceived lack of career advancement

Despite the recent distractions, USAF's nuclear bomber and ICBM forces must keep focused.



By Marc V. Schanz, Senior Editor



USAF photos by SSgt. Jonathan Snyder



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Left: USAF personnel transport a re-entry system to be installed at an ICBM facility near Malmstrom AFB, Mont. **Above:** Capt. Arthur Jones (l) and Capt. Jared Bishop during missile launch procedures training at Vandenberg AFB, Calif.

opportunities, staffing shortages, and burnout, according to a preliminary RAND study briefed to AFGSC leadership in 2013.

How we educate and motivate warriors “matters as much today, and probably matters more, simply because we are smaller than we once were,” said Harencak. The nuclear mission comprises five percent of the Air Force’s force structure and takes up less than one percent of the budget for operations.

As a result, USAF is tweaking professional military education within nuclear deterrence operations to give airmen the training and tools to perform the mission. This includes classes ranging from Nuclear 100 to Nuclear 400 to placing funding priority on what are deemed “key nuclear billets.”

The Air Force develops key personnel who have nuclear expertise and now fills the billets to 100 percent in a given unit before others. “That [billet] becomes a force multiplier,” said Harencak.

The Air Force’s nuclear readiness has a much tighter relationship with modernization and sustainment than some other missions. USAF really can’t write any sustainment and modernization off, said Harencak of investment cutbacks in O&M accounts. “We are supposed to fly a certain number of sorties and do a certain number of continuous training events.”

Equipment investments, from B-52 upgrades to missile alert facilities, are intertwined with how the Air Force measures its nuclear readiness.

A 2013 RAND study on nuclear sustainment reflects Harencak’s perspective. “Foremost among these unique aspects [of NDO] is the nature of the mission itself: deterrence and extended deterrence, which are as much about political effects as military effects,” states the report. “These objectives are relevant to sustainment because sustainment is ultimately the long-term maintenance of a capability, and the degree to which that effort is successful depends on whether these mission objectives are met.”

Honest Debate

The mission, the report notes, is only as effective as its credibility. Testing ICBMs at Vandenberg AFB, Calif., is an example of highly visible sustainment efforts that could also be classified as a mission-readiness activity.

The reverse is true as well. “If an entire fleet of dual-capable aircraft were grounded, ... it would be a visible indication of a lack of a credible deterrent in one portion of the nuclear triad,” states RAND. This is why sustainment and readiness factor into resource decisions together in a manner “that differs from most conventional capabilities.”

The Air Force and DOD will have to make some “tough choices” about nuclear force structure in the coming years, said Harencak. “DOD and our Air Force [are] going to have to come to grips with the fact we are living in 2014, not 1974,” he said. “How we operate may need to change: how we acquire, how we train, how we procure.”

In November, USAF Chief of Staff Gen. Mark A. Welsh III said nuclear deterrence strategy is something “we should be thinking and talking about all the time.” The daily cost of operating the ICBM fleet, for example, “is not that significant compared to the cost of running other things; in fact, it’s actually fairly small.”

The possible modernization bill, however, is not small and will get close examination. This will lead to “a very honest debate about where we can afford to invest, where we must invest, and how does that relate to a strategy going forward for the nation,” said Welsh. “I think it’s a fair debate and the Air Force needs to be in the middle of it.”

Harencak, for his part, believes discussions about the mission’s future should be separated from cost debates. “The numbers are not what matter. What matters is what we can control, is the mission at hand,” he said. “Doing things the right way, and doing that thing right, that is what we should focus on,” he said. ■