Washington Watch

By John A. Tirpak, Executive Editor

Looking backward; Money for nothing; Here comes fifth gen; Hypersonics on the horizon; Cyber unleashed ....

BACK TO THE '90S

As the war in Afghanistan winds down, the Air Force will likely go back to a force rotation very much like it had in the 1990s, answering about the same level of demand for its capabilities as it did then, Chief of Staff Gen. Mark A. Welsh III said in a June interview.

The Air and Space Expeditionary Force (AEF) model developed in the mid-'90s to cope with a rising series of back-to-back deployments—mostly to conduct the Northern and Southern Watch no-fly zones in Iraq. It had to be "modified" when the magnitude of the Afghanistan and second Iraq wars became apparent, Welsh said.

"The AEF construct was never going to be able to maintain itself and support that contingency over a 12- or 13-year period," he explained. The AEF consequently had to be restructured multiple times, developing different time-deployed tracks for combat and mobility forces, and still other tracks for what were then called high-demand, low-density capabilities, such as combat search and rescue and AWACS.

However, now that the American military involvement in Iraq is over—leaving practically no residual US forces there—and the Afghanistan drawdown is underway, Welsh said USAF can revisit the old rotational style of doing business.

"Our intent now is, as we get back to, hopefully, a more stable rotational pattern and demand signal," is to "go back to some of the precepts of that initial AEF construct," Welsh said. Speaking in his Pentagon office, Welsh noted the original AEF scheme was "nothing more than a way to provide predictability and consistency" in the way airmen were deployed to "known contingency" operations.

The original scheme deployed "larger groups of people from the same units, instead of 'rainbowing' multiple organizations into a single organization at a deployed location." It gave people warning of when they were vulnerable for deployment, "when they can expect to go, when they can be training to prepare to go," with minimal disruptions at other times.

"It makes eminent sense to go back to that," Welsh said. However, "what it doesn't do is give you more people," and those career fields still in very high demand will stay that way until the "demand signal starts to slow down ... after 2014, maybe 2015 in Afghanistan."

Welsh doesn't think the demand for USAF overseas rotations will abate much.

"There are lots of other combatant commands that want the things that we offer who haven't gotten them for a while," he asserted. Regional commanders have constrained their wish for more robust airlift, intelligence, surveillance, and reconnaissance, and "partnership-building capability engagements" with other countries, so the demand for Air Force capabilities "is not going to go away, it's just going to shift. There was a reason we had an AEF process before the big war started," Welsh pointed out.

The end of 2014 won't be a hard stop on USAF deployments in Afghanistan, either, he said. There will still need to be USAF presence "with some of the key enablers to support whatever ... force remains." Those capabilities will be in ISR, "some level of rapid response capability on the strike side," and "of course, ... building the Afghan air force."

USAF photo by Jim Varhegyi

USAF won't be out of Afghanistan in 2014.

As to the latter, "they know how to fly airplanes," Welsh noted, but lack the ability "or people who are trained to maintain an air force over time: logistical support, infrastructure, those kinds of things."

He said he thinks USAF "can help them with that. But it's going to be a few more years before they're there, in our estimation."

THE SKYROCKETING COST OF PEOPLE

If sequestration lasts the 10 years called for by the Budget Control Act, Welsh sees the Air Force getting smaller. A 10 percent budget cut would mean, grossly, about 33,000 airmen and about 700 airplanes fewer, he said.

It's a question of "capability versus capacity," he said. A smaller budget can depress either one.

"But we have choices," he said. "If we want more capacity, we can modernize less ... or we can put more in the Reserve Component. If we want more capability, we can modernize more."

The service has been hamstrung for some time by two huge cost drivers. One is the "incredible inflation in the cost of people"—their pay and benefits—which has skyrocketed over the last 12 years.

"It's significant, it has an impact, and we can't ignore it," Welsh said. "If our topline budgets come down and we don't control people costs, we have to lose people."

The other big driver is Congress' continuing refusal to let the Air Force close bases. Welsh has said USAF has about 20 percent more facilities and bases than it needs.

The service has thus had to choose between readiness and modernization "for about the last 10 years," and that is "a horrible trade space for a military service," Welsh asserted.

USAF photo by MSgt. Jeremy T. Lock

Dump the 20-year equipment replacement cycle, stat.

"I don't believe modernization is optional," he insisted. "We can't quit recapitalizing aging fleets and modernizing systems that make them viable against the future threat. We have to have a capable, credible, ready force."

He dismissed the idea of simply upgrading the existing fleet of fighters and bombers indefinitely. "I do not believe that we can take a fourth [generation] fighter and have it be viable against a fifth generation threat, ... and I think we can prove it," he said.

UNINTENDED CONSEQUENCES

In remarks at an Air Force Association-sponsored event just a few days later, Welsh said the premature termination of the F-22 left USAF "with a force that can't provide air superiority in more than one area at a time." That means the F-35, he said, "is going to be part of the air superiority equation whether it was intended to be originally or not."

Fifth generation aircraft in competing air forces will soon be appearing in service, not "15 to 20 years from now" but "five to 10 years from now." Without a sufficient number of fifth gen fighters, "you're in trouble ... in a high-end fight," Welsh argued, saying flatly that a fourth gen fighter against a fifth gen fighter is "dead."

"We've got all the analysis in the world to back that up," Welsh asserted. "We've got to keep pushing for this, even if it means a smaller Air Force somewhere else."

The idea of boosting the proportion of people in the Air National Guard and Air Force Reserve is one of the myriad options on the table, Welsh said in the interview. He said the service is trying to come up with an apples-to-apples cost comparison of Active Duty, Guard, and Reserve to find the optimum mix.

"Could there be a higher percentage [of forces] in the Reserve Component? Absolutely," Welsh said.

If the analysis shows that "it is cheaper to have force structure in the Guard and Reserve—and we can still do the operational missions that are required to support the combatant commanders—we've got to look at that option." Right now, he said, "everybody believes" that a person in the Reserve Component, priced "over a lifetime," is cheaper.

NEED FOR SPEED

"Real speed really compresses kill chains." Huge advantages result when "everything happens faster," Welsh said.

"Hypersonics, or something approaching it" is a critical technology for USAF to pursue, and if the Air Force could achieve it operationally, "then you could change the game." The recent "huge success" of the last X-51 mission produced "a treasure trove of data," Welsh said, "which will allow us to look much more realistically" at hypersonics. The new mindset should be, "'Hey, we can do this, and not in a 100 years but in a much shorter timeline.'"

There will be big challenges in materials, however, and he's not sure that hypersonic engines will be available in time to power the new Long-Range Standoff missile, a replacement for the aging Air Launched Cruise Missile. A hypersonic weapon, though, would "absolutely" help maintain the relevance of the B-52 and B-1 bombers now relegated to a standoff role against the toughest air defenses.

In the meantime, Welsh said USAF will aggressively pursue new engine technology that could be fitted to the whole fleet.

"We're trying to accelerate the ability of aircraft and weapons to reach a decisive point quicker," he said. The ADVENT engine program—which seeks to provide maximum fuel efficiency at loiter all the way up to supersonic dash—could "save us huge amounts of money ... over time. We just have to invest in [it]; there're not options for this kind of development, I don't think."

NO LIMIT TO CYBER

Cyber should be thought of as a "domain" and not a mission, Welsh said. The domain offers its own opportunities to strike with unprecedented speed. "If you can get to a target through cyber, to strike it, that's just like getting to it through air or space," he asserted, "and the more we think of cyber that way, ... the better we'll be able to do our core missions in that particular domain."

Fundamentally, however, cyber "provides access that's limited only by your imagination, in some cases, to a target set that we had no access to before."

Asked about the future of stealth—Welsh has openly wondered what "stealth" will mean in 30 years—he said the battle is now in every part of the electromagnetic spectrum.

"Every spectrum matters," he said. In electro-optical, infrared, radio frequency, "you can exploit it and you can be exploited in it," he observed. "We've got to realize that integration ... of the spectra we operate in is kind of going to be the coin of the realm, going forward."

Welsh acknowledged that, by traditional benchmarks, the Air Force is already within the replacement cycle for the F-22. It has about 20 years more service life, and it took 20 years to take from concept to operational service.

"I'm more of a practical guy than a visionary," he said. "What is the enemy going to look like in 2035? ... I think we can predict that. And we have to ensure that we have the ability to outperform the threat."

Welsh said the 20-year equipment replacement cycle must become a thing of the past.

"The way technology is advancing, that doesn't make any logical sense at all. We've got to fix this."

The time is coming when USAF will have to assert space superiority, as well, Welsh said.

"We're going to have to exercise some degree of control in space," he said, though he declined to offer specifics. However, it's "the same thing as air superiority. It's the ability to operate in a time and place of our choosing to create whatever effect we're trying to create."

It will include preserving access to orbit and "not [allowing] someone to take away your option of putting something" into geosynchronous orbit. "I think you also have to have the ability to control a signal. You have to provide enough superiority in that spectrum that your signal will get through."

While he specifically said satellites doing kinetic battle will "probably not" happen in his lifetime, "space is now a contested domain. It will remain contested and it will get more contested over the decades." ■