Bow wave coming; Four budget options; Make more munitions; Russia's fantasy fight; High Kalibr action

REMOVE FROM CART?

The Air Force's nine biggest airplane acquisition programs represent a bill that will largely come due all at once, in the early-to-mid 2020s. Even with some relief from budget caps, however, this bow wave of demands on USAF's budget will likely compel the service to rearrange the rate or number of aircraft it buys—or drop some programs altogether.

That's the assessment from the Congressional Research Service, outlined in a December report titled, "The Air Force Aviation Investment Challenge," prepared by Jeremiah Gertler. The effort to take on such a large number of all-new aircraft programs "simultaneously" probably isn't going to work without either a budget increase or the Air Force accepting a slower pace of modernization, he asserted. Other options to keep the plan intact are ones the service or the Defense Department leadership have said they must avoid: reducing research and development or pulling funds from readiness or personnel accounts.

The major aircraft in USAF's shopping cart include the F-35A strike fighter; the KC-46 aerial tanker; the Long-Range Strike Bomber; a replacement for the E-8 JSTARS battlefield radar, command and control jet; the T-X trainer; the HH-60H Combat Rescue Helicopter; the MQ-9 Reaper; the C-130J-30 extended-range tactical transport; and a new Air Force One presidential transport.

Gertler noted that the bulk of the new programs seems to be timed so that the big increases—shifting from R&D to production, or from low-rate production to higher rates—come after the expected end of budget caps imposed by the Balanced Budget Act of 2013.

"Whether this is a deliberate strategy on the part of the Air Force or a coincidence of timing is unclear," Gertler said, "but it appears that the Air Force is gambling that the budget caps will not be extended or replaced." Still, with the DOD-wide \$17 billion shortfall in Fiscal 2016 expected to reverberate for years to come, it's unlikely there won't be some puts and takes.

The CRS report offered a series of options by which the Air Force could keep its shopping list intact.

One would be if the defense budget is increased, and the Air Force's with it. This would require, though, that any increase be dedicated to aviation and not spread evenly over competing needs, such as training or compensation.

Another would be to reduce annual buys of the F-35A, which alone accounts for 42 percent of the aviation account over the Future Years Defense Program. Slowing the F-35A, though, would require more investment in upgrading older jets to fill the gap. Reducing the F-35 buy from 60 to 48 a year would free up \$1 billion a year "for other priorities," Gertler wrote.

A third option would be to slow down the various programs in the portfolio collectively, staggering them so that the bow wave is reduced. Again, though, this would mean more investment in and life extension of the systems they're supposed to replace, or acceptance of an even deeper capability gap.

Yet another option would be to delay buying the KC-Y, a follow-on to the KC-46. If the KC-46 is particularly successful, the CRS contends, this might be an option, but the KC-Y doesn't even get started until 2027, several years into the bow wave.

A novel option might be to create a separate funding account for the LRS-B, similar to the Navy's creation of the National Sea-Based Deterrence Fund, to separate nuclear ballistic submarine funding from the rest of Navy shipbuilding. Air Force Secretary Deborah Lee James floated such an idea more than a year ago, but Defense Secretary Ashton B. Carter subsequently remarked that money can't be created magically by "relabeling it."

Gertler suggested that one reason the USAF bow wave doesn't look like a bow wave is because it largely rises up outside the FYDP. He suggested that a 10-year budget plan would "more tangibly illustrate the resource decisions required today to avoid budgetary 'train wrecks' in the future."

BOMBED-OUT SHELL

Seventeen months of bombing ISIS targets in Iraq and Syria have taken a toll on the Air Force's stock of munitions, and the service is now facing weapons shortfalls across the board, USAF officials acknowledged in December. It will take years to reload.

Welsh told reporters in mid-December that USAF is "expending munitions faster than we can replenish them."

A service spokeswoman expanded on Welsh's remarks, saying that while "we are currently able to manage munitions inventories to sustain operations" against ISIS, "we need funding in place and the ability to forecast" future funding in order to better manage weapons levels.

The Fiscal Year 2016 National Defense Authorization Act provided an uptick in munitions spending, but it takes time for dollars to translate into weapons. The spokeswoman noted that replenishment monies in the overseas contingency operations account—which funds the air war against ISIS, among other operations such as in Afghanistan—are subject to rules and a process, "which includes large delays, up to four years, in recovering the munitions inventory expended in combat." The monies from last year "will not replenish our inventories until three years from now," she said.

Due to operational security, the Air Force can't discuss the number of munitions it has on hand. However, the service did say that the shortfalls affect a wide spectrum of munitions, including "smart, gravity, ... [and] small- and large-diameter munitions," and "air-to-air, direct attack, [and] standoff" weapons types.

Welsh told the reporters USAF has released more than 20,000 weapons of all types since Operation Inherent Resolve

began in 2014. The spokeswoman said that Hellfire missile deliveries have been reprioritized from the Army, which uses them on attack helicopters, to the Air Force, which launches them from Predator and Reaper killer-scout drones. The Air Force has also economized on aircrew training to come up with more money for weapons and is "working on a procurement plan to increase production to reconstitute munitions stocks as quickly as possible," she said.

US Central Command spokesman Col. Steve Warren said in mid-December that there's no reason to worry about running out of bombs.

"We have no concern whatsoever about the stockpile of munitions. We have enough munitions to conduct all the [operations] we need to conduct," with enough left over for "a contingency."

THE BIG CHILL

The Cold War is apparently on again, based on two strategy reports—one from Russia and one from the US Navy—released in December.

The Russian document, published on Dec. 31 and carrying the signature of President Vladimir Putin, named both the US and NATO as "threats" to Russia's security, something that the previous version of the annual posture statement, published in 2009, did not do. With chicken-and-egg logic, Putin said Russia's "independent" foreign policy and strengthening military have prompted the US and NATO to build up new forces in Europe and expand NATO to include new members, thus making the alliance more dangerous to Russia, thereby causing Russia to modernize and expand its military forces.

NATO's military "buildup" as well as its involvement in conflicts technically outside its treaty region—what Putin called "global functions"—constitutes a breach of the "norms" of international law, he said. The nudging of NATO boundaries ever closer to the Russian heartland creates "a threat to national security," he added. Without directly referencing Russia's invasions of Georgia or Ukraine, or its air campaign in Syria outside of the US-led coalition, Putin said NATO and the US seek to "maintain [their] domination in world affairs."

It would be hard to make a convincing case that NATO is embarked on a military buildup. The last few NATO ministerial meetings have seen the US urging its partners to meet the alliance minimum goal of spending two percent of their individual gross domestic products on defense—a goal against which most members chronically fall short. NATO countries are still struggling to restock their munitions inventories four years after the



Is Russia planning to build a "doomsday" torpedo?

2011 operations in Libya that toppled Muammar Qaddafi from power. As for the US, the Obama Administration has in recent years steadily diminished its European footprint.

Only after Russia's annexation of eastern Ukraine, its shootdown of a civilian airliner, and the mounting of a proxy war in western Ukraine did NATO react with additional rotational deployments to its eastern frontier states, such as Poland and the Baltic nations of Estonia, Latvia and Lithuania.

Russian lawmakers in recent months have questioned whether the Baltic states' independence from Russia is "legal," and Putin has framed his actions in Ukraine as a "rescue" of ethnic Russians unfairly estranged from their native land by the chaotic breakup of the Soviet Union.

Reacting to the Russian posture statement, a Pentagon spokesman told reporters in early January, "We are not looking for a conflict with Russia," and "they have no reason to consider us a threat."

However, Marine Corps Gen. Joseph F. Dunford Jr., head of the Joint Chiefs of Staff, said last year that Russia poses an "existential threat" to the US, by virtue of its large—and modernizing—nuclear forces. He also called Russia's actions in Ukraine "alarming" and worthy of continuing reassessment of US forces in the region.

US military and policy leaders have resolutely declined to label the developing situation as a renewed Cold War, although USAF Chief of Staff Gen. Mark A. Welsh III has said that Russia's aggressive actions make the situation "look like" one.

BEAR ARMS

The Office of Naval Intelligence chimed in on the Cold War theme with its own December report about Russia's strengthening strategic capabilities. Titled, "The Russian Navy: A Historic Transition," it's the first such assessment cleared for public consumption since 1991, when the Cold War ended.

The ONI described a long list of Russian naval enhancements in the last decade-and-a-half, to include new strategic submarines, new sea-launched ballistic missiles, and especially new cruise missiles and air defense systems, along with plans for new aircraft carriers (up to six by 2030) with air wings of 80 to 90 aircraft, potentially having fifth generation stealth capabilities. There is in place an aggressive Russian warship-building program, even as Russia updates its existing vessels with new weapons, such as the Kalibr cruise missiles demonstrated recently in strikes on Syria.

The Kalibrs, which are being mounted on nearly all types of Russian surface vessels, have demonstrated a range in excess of 900 miles. They can be fired from shallow or bluewater vessels, and present a "complex" defense problem for any targeted area, the ONI observed.

Russia "is giving priority of effort and funding to recapitalizing its navy, which is going through a major transition from the legacy Soviet navy to a Russian navy that should reflect the latest achievements of Russian advances in science and technology," the ONI reported. The new Russian navy won't necessarily be more numerous than the existing fleet of about 187 vessels, but will be more capable "on a unit-by-unit basis" and will offer a credible, though "limited," power projection capability.

Russian carriers will be equipped with navalized MiG-29K Fulcrum multirole fighters and may also boast a contingent of navalized T-50 "PAK FA" stealth fighters.