First, they are seeking game-changing technologies that will overcome the very same kinds of systems that have given the US its edge for decades.

Second, Pentagon leaders are trying to accelerate weapons development and the buying process, by removing obstacles that slow it down. At the same time, they are making the system more efficient to squeeze every bit of capability possible from the dwindling dollars available.

The Air Force will play a big part in this transitional period. When defense leaders talk about “leap ahead” technologies, they usually mention hypersonics, extreme stealth, directed energy, automated intelligence analysis, remotely operated or robotic systems, additive or 3-D manufacturing processes, and better interfaces between weapons and the people who operate them. The Air Force’s last two technology roadmaps emphasized all of these areas of research, and they are central to its new “Strategic Agility” vision for the future.

The service has also embarked on its own acquisition acceleration initiative, seeking greater industry partnerships and streamlined, fast-tracked work-arounds to rapidly acquire and field technologies to become more efficient or effective.
The Pentagon and the Air Force must revolutionize what they buy and how they buy it.

It’s essential to accelerate the acquisition process and eliminate as much no value-added effort—and cost—as possible. To that end, Pentagon acquisition, technology, and logistics chief Frank Kendall was expected to issue the final version of his Better Buying Power 3.0 initiative in early 2015. Kendall had briefed industry and the press in November on earlier drafts and spoke about what would be in the acquisition overhaul.

**FIGHTING ON CAPITOL HILL**

At a Navy League breakfast in Arlington, Va., Kendall said he has grown concerned about the pace that challengers are advancing their military strength. The US can’t be complacent, Kendall said. “I think we’ve gotten so accustomed to our technological superiority, militarily, that it’s just a given, and it’s one of the things I kind of fight against when I … try to have these conversations” with lawmakers on Capitol Hill.

Kendall said that when he came back to the Pentagon in 2010, after studying intelligence reports, “I realized that the United States had a problem. The problem was the modernization rate of other powers—in particular, … China has been investing for a long time in a number of systems which are essentially focused on keeping the United States out of the part of the world closest to China.”

The Chinese benefit “from their ability to acquire technology commercially. They’re certainly building up their own organic capability to develop technology. And they’re benefitting from the technology that they can obtain through the Internet without other people’s permission.” While he said, “I do not envision war with China,” Kendall does expect “confrontations with China” and that military power will be “an important part” of influencing that country. He expects China to sell the hardware it’s developing, and it “may very well show up in other places that we might be more likely to be engaged [with] in a conflict.”

Kendall decried the “lack of appreciation of this problem.” When he briefs members of Congress and their staffs about the advances being made by China, Russia, and other countries, “I get a reaction that is sort of surprise … and just disbelief, perhaps, as well.” The situation, he said, “continues to deteriorate.”
Kendall pleads with Congress to repeal sequestration at every speaking opportunity, but he also acknowledges that the Pentagon can’t wait and see if that will happen. It must act swiftly to get greater value out of the dollars it has and speed up the rate that it can insert new technology into the force.

Better Buying Power 1.0 was started when Ashton B. Carter—now Defense Secretary—was in Kendall’s job. It emphasized best practices and cost consciousness, Kendall said. Version 2.0 was about building professionalism in the acquisition corps. Version 3.0 covers all of those things, plus technical excellence and innovation, he said.

“It’s about what we deliver” to fighting forces, he said. “It’s about keeping the US dominant in the world.”

A keystone of the reforms in 3.0 is that “any program we start, we ought to be able to anticipate having an adequate budget to field it in adequate numbers for the force.” Kendall said he’s seen “far too many programs” where billions were spent in development and then there was “none or a little bit of production and then we stopped.” To be affordable, realistic goals must be set, and realistic costs assumed. Programs not deemed affordable will simply not get launched; the capability will have to be obtained through other means.

“We behave differently when budgets are tight,” Kendall observed.

Program managers “talk themselves” into believing things will go much better than they likely will. For example, the idea that testing can be eliminated “because modeling is so good.” Or that “we’re going to do things differently this time, so it won’t cost as much.” And then you … budget according to that assumption.”

These kidding-ourselves behaviors are specifically targeted by BBP 3.0, he said, in that unrealistic schedules and cost profiles won’t be allowed. Managers will be encouraged to be honest with their bosses if something can’t be done with the money or time available.

“Instead of … saying, ‘No, you can’t do that,’ people saluted and they awarded contracts to do it.” This leads to “gambling. You start assuming how long it’s going to take you to do things. You do things concurrently that you should not. … You make decisions before you’ve really done the analysis to support them. And you make it much worse.” The result is contracting “disasters.”

However, programs will not be started unless there is sufficient maturity in the technologies to be developed in order to hold down risk and cost. At the same time, Kendall said it’s essential that there be technology demonstrations and rapid prototyping. This will keep company design teams together during periods when there is no major program in that area, and so that when the time comes to actually build a new system, much of the risk reduction has already been done and a new technology can be smoothly transitioned into production.

Other BBP 3.0 elements involve providing the right incentives to industry and increasing competition. To this end, the Pentagon will give rankings of how well companies are doing compared to other companies. Those that do.
consistently well will get preference in future competitions. Those that don’t will have to explain it to their stockholders. There will be incentives for innovative approaches that save money and provide more value. There will be more communication between the Pentagon and its vendors, involving them in setting requirements and explaining exactly how much more the Pentagon might be willing to pay for additional capability. The minimum technically acceptable solution will not necessarily be the right one.

At an Atlantic Council event in January, Air Force acquisition executive William A. LaPlante was asked about involving industry in setting requirements. Is it risky, and won’t industry be prone to litigate if someone else gets the work a particular company helped define?

“Industry is going to do that regardless of what we do,” LaPlante answered. Better to be “transparent about it” and take that risk in order to get the valuable input up front. Industry has consistently complained that requirements are kept under wraps for too long and the government isn’t clear about how much it’s willing to pay for “objective” capabilities versus those that simply meet the “threshold.” They’ve asked USAF to “just tell us what the darn thing is and give us a couple of years to prep for it,” LaPlante said.

There will not be a one-size-fits-all contracting method anymore. Kendall, in a January memo, laid out new 5000-series rules for his managers, giving examples of different kinds of contracts ranging from fixed price to incentive type, but giving managers flexibility to invent types to suit the products being acquired.

**IMPROVING THE DIALOGUE**

The Air Force’s take on BBP 3.0 is what service Secretary Deborah Lee James calls “bending the cost curve,” a reference to graphs of program cost that consistently go “up, up, up.” At the Atlantic Council in January, James said, “What we have to do is … bring those costs down, down, down.” James noted that it takes the Air Force, on average, about 17 months to award a sole-source contract. “That’s simply too long,” she said, and applying BBP 3.0 practices should bring that figure down to the single digits.

However, “unlike Better Buying Power, which is a broader set of practices and techniques for the workforce to employ, bending the cost curve is a targeted initiative designed to encourage innovation and active industry partnerships to improve the way we procure our systems and drive down cost,” James said.

To do it, she’s pushing for an “improved dialogue with industry” so USAF can better understand how its buying practices and choices “can inadvertently contribute to rising costs, the stifling of innovation, and slowing down of processes.”

Talking with companies at meetings organized by the Air Force Association, Aerospace Industries Association, and others, James said she’s been asking industry for its ideas on speeding acquisition up, the barriers to innovation, and improved transparency.

There will be more data collection to discover knee-in-the-curve points where asking for a bit more capability adds greatly to cost.

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**THE THIRD OFFSET**

Deputy Defense Secretary Robert O. Work, speaking in November, said the Defense Department must maintain its competitive edge, and may be able to, with new systems and operating concepts, employing what he’s dubbed a “third offset” strategy. In the 1950s, he pointed out, the US overcame the conventional advantage of the Soviet Union with nuclear weapons. In the 1970s, the second offset was an investment in revolutionary technology such as stealth, miniaturized electronics, precision navigation, and precision weapons. “It turned out to be a wonderful strategy,” he said. “We’ve ridden it now for about 40 years.”

Today, however, “everyone is duplicating our second offset strategy,” with the result that all the tools that gave the US such a lopsided victory in the 1991 Gulf War and military dominance since are widely available.

What’s different now, Work said, is “we have competitors who can not only steal” US weapons technology using cyber intrusion, “but they can duplicate things very fast” and match US advances before the Pentagon’s development process can match. The key will be for the acquisition system to discard time-consuming make-work efforts—often driven by well-intended but counterproductive legislation—and adopt flexible, best practices that speed putting new gear in the hands of the military while still being fair and efficient, Work said.

There’s no time to lose. The down-payoff from Iraq and Afghanistan has been “chaotic,” he said, afflicted not only by the funding uncertainties caused by incessant continuing resolutions and sequester, but by Congress answering Pentagon offers to cut overhead and force structure with a litany of “no, no, no, no.”

The Pentagon faces a $31 billion liability because proposed force structure cuts like the A-10, U-2, and Navy cruiser retirements were rejected by Congress, Work said. Congress won’t touch compensation reform or base closings, so “that’s another $11 billion to $39 billion” of “nos” over the Future Years Defense Program, adding up to $70 billion in cuts the Defense Department will have to find elsewhere. It has wanted to improve readiness—or at least not degrade it further—but with no opportunity to reduce bases, force structure, or compensation, that leaves only readiness and modernization accounts to pay the bill.

“This is fundamentally different from all the other [postwar] drawdowns,” Work said. “The range of uncertainty is enormous.” Work promised more insight into the game-changing strategy with release of the Fiscal 2016 budget.
“nontraditional contractors” and thus expand the knowledge base it can draw from while also increasing competition.

**Tackle Head-On**

Other initiatives include creating an information technology business analytics capability for the Air Force—something James said it’s never had—and the Matchmaker Project, where the Air Force will share its success stories with other divisions of the same company, hoping to apply lessons learned on pending projects.

“We don’t always collaborate across our companies as well as we should,” James said. She reported good results pairing Lockheed Martin’s C-130J team and its SBIRS team in this fashion.

China has gone to school on American military prowess, Kendall noted in his Navy League address, and has been “building systems since then designed to counteract some of the things that we have.” He cautioned that the US has developed fine technology, like the F-22, but always in “very small numbers,” and that this lack of depth “makes us vulnerable. … We have to ... address that vulnerability.” The US is cutting defense spending while China’s defense budget is growing by 12 percent a year. Though it’s not as large as that of the US, “at the rate that it’s going, it will be before too many years go by,” Kendall noted. Moreover, China’s defense budget is far, far less tilted toward personnel than that of the US, so it gets more hardware for the same outlay of funds.

“We have a very expensive cost structure on the personnel side—moreso than they do,” he stated.

Kendall said there’s little option but to tackle these strategic and financial challenges head-on.

“I do not want to try living in a world where we are not the dominant military power on the planet, to see what it’s like. I do not want to do that experiment. And I don’t want our warfighters to ever be in a situation where they’re in a fair fight. I want them to always have an advantage over anybody they go up against. So that’s what I’m going to be doing.”