

What to Look for in the FY 2021 Defense Budget Request

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The Trump administration is expected to release its FY 2021 defense budget request on February 10, 2020. The request marks the final budget submitted under the era of the discretionary spending limits imposed by the Budget Control Act, although the caps for FY 2021 were already raised by the Bipartisan Budget Act of 2019. Following last year's request, questions remain over the budget's alignment with the National Defense Strategy. Below, experts from the CSIS International Security Program outline major issues to watch in the FY 2021 defense budget.

MOVING PAST A MASTERPIECE IN THE FY 2021 DEFENSE BUDGET

BY SEAMUS P. DANIELS

While the lead-up to last year's release of the Trump administration's FY 2020 defense budget was filled with anticipation for the coming "[masterpiece](#)" and controversy over a topline that was seemingly [in flux](#), the FY 2021 request is set to arrive in February 2020 under much quieter circumstances.

In part, this is because the topline figure for national defense has been known since last August when the [Bipartisan Budget Act of 2019](#) was signed into law. The budget deal raised the spending caps for FY 2020 and FY 2021, the final two years of the limits on discretionary funding imposed by the Budget Control Act. The new caps place the base national defense budget for FY 2021 [including the Department of Defense (DoD), atomic energy programs, and other defense-related activities]

at \$671.5 billion and mandate \$69 billion in Overseas Contingency Operations (OCO) funds. In total, it allocates \$740.5 billion in discretionary funding for national defense in FY 2021, although the administration could request additional OCO or emergency funds without triggering sequestration. The topline represents a 3 percent decrease in real terms from the \$746 billion that was appropriated for national defense in FY 2020 (2 percent if the \$8 billion in FY 2020 emergency funds is excluded). It is also \$5.5 billion less than the funding the administration projected for FY 2021 in its FY 2020 request.

The real questions over this year's request will center on the substance of the proposed budget. The FY 2020 budget arguably fell well short of its lofty expectations and goal of aligning with the National Defense Strategy (NDS). In particular, it failed to prioritize the modernization effort that is central to the NDS. While one would expect acquisition spending [including

procurement and Research, Development, Test & Evaluation (RDT&E) funds] to rise over the long term as investments in new capabilities are made, DoD projected that funding for modernization would decrease over the course of the five-year Future Years Defense Program (FYDP). Notably, RDT&E spending was expected to fall by 18 percent in real terms between FY 2020 and FY 2024.

If DoD intends to fully commit to implementing the NDS, one would expect that it would prioritize the development and acquisition of new capabilities not just in FY 2021 but over the course of the next FYDP. Doing so in the current fiscal environment where the defense topline is expected to decline in real terms means that DoD cannot simply grow the budget to pay for modernization. The Department must make difficult decisions and trade-offs to generate the funding for a [modernization bow wave](#) long in the making. Secretary of Defense Mark Esper previously demonstrated his willingness for reform in the Army's "Night Court" and [defense-wide review](#), and he has announced [further reviews](#) of the combatant commands and military departments. While positive steps, these reviews must aim for more than simply trimming fat and look to arrest the rising personnel and operation and sustainment costs that consume an ever-larger share of the defense budget each year.

The FY 2021 budget will demonstrate the services' commitment to align with the NDS through their willingness to make trade-offs between force structure, readiness, and modernization. Specifically, the services' plans to divest legacy platforms in this request will prove whether DoD can generate the funds necessary for a sustained modernization effort. The Air Force has already announced its plans to reinvest \$30 billion over the next five years through the retirement of legacy programs. But as Todd Harrison has [pointed out](#), savings from divested force structure will not be realized overnight. Moreover, cuts must be made shrewdly; in the case of the Air Force, it makes more sense to retire entire fleets of aircraft to eliminate the significant [fixed costs](#) of platform-specific maintenance and training.

Notably, Congress also has a say in whether the services can make these cuts.

After the disappointment of last year's "masterpiece," the FY 2021 defense budget request will show whether the Department is truly capable of mastering the art of aligning strategy and resources.

TO CUT OR NOT TO CUT: BALANCING FORCE STRUCTURE DIVESTMENT WITH OPERATIONAL DEMANDS

BY MARK F. CANSIAN

Force structure will be at the center of debates about the FY 2021 budget as topline reductions and the NDS push the services to cut forces. Yet, force structure cuts will make meeting the demands of day-to-day deployments more challenging. Cuts will also engender criticism that the nation is spending more but getting less, and that perception will be a political problem for the administration.

The budget projections shrink. As previously mentioned, the administration forecast \$746 billion for the national defense budget in FY 2021, while the most recent budget deal provides \$740.5 billion, so there is a \$5.5 billion gap between what DoD had been planning on and what it will receive. DoD had wanted to get back to the higher budget levels for FY 2022 and beyond, but the Office of Management and Budget (OMB) has apparently directed that future budgets be limited to inflation off of the FY 2021 number. The effect is that a gap continues every year into the future, requiring the services to make cuts to their previous budget plans.

The NDS prioritizes readiness and modernization. When the administration took office, Secretary Mattis cited "[immediate and serious readiness challenges](#)." Thus, the administration focused its early budget increases on improving readiness. The NDS's major focus, however, is on great power competition, and that requires a major modernization effort. Weapons need longer ranges and platforms need more survivability. Thus, the NDS repeatedly cites the need for "a more lethal force" but only "sufficient" force structure.

The problem for the services is that day-to-day commitments for deployments—ongoing conflicts in the Middle East, deterrence activities in Eastern Europe, measures to counter Chinese assertiveness in the Western Pacific, humanitarian assistance, and allied and partner engagement—have not declined. This is the central tension inside the strategy: a focus on great power conflict requires modernization, but a high level of day-to-day deployments requires force structure. Rising budgets have allowed DoD to mitigate this tension, but that will no longer be possible.

Here's how the services will likely shape their forces to deal with the conflicting demands of budget reductions, ongoing force deployments, and the dictates of strategy:

Army: The Army has sought to expand but has been frustrated by its inability to recruit and retain enough soldiers. Plans to grow the regular force to 500,000 or more have collapsed, with current plans showing increases of only 2,000 per year, reaching 488,000 by FY 2024. Its reserve components, usually anxious to parallel regular force expansion, have struggled just to maintain their existing size. Strategists often argue for cuts to Army end-strength because the Pacific is primarily an air/maritime theater and because large wartime deployments to Eastern Europe would be difficult. The Army, however, argues that it will still be a major player in a great power conflict and is stretched by deployments in peacetime. Thus, it will likely try to hang on to its modest force expansion plans.

Navy: When faced with budget cuts in the past, the Navy has retired older ships early and shrank the fleet to fund the building of new ships. It was planning to do that again [until the White House became aware of it and directed otherwise](#). The president has personally called for a 350-ship Navy, and the Navy embraced that goal publicly and repeatedly. Thus, the administration could not walk away from this very public goal. Further, high deployment levels put a floor on Navy size.

The Navy will release a new Force Structure Assessment in the spring that will reportedly retain the 355-ship goal but possibly add some less expensive ships and

embrace unmanned vessels (though these will not be included in the ship count). The budget will likely include these new kinds of ships. The budget may also propose cutting some older ships in the near term but retaining other ships longer in the future to meet the 355-ship goal, at least in theory. Above all, the Navy will [ask for more money](#), arguing that it should get a larger share of the DoD budget.

Marine Corps: General Burger, the Marine Corps Commandant, has signaled that he is willing to [trade force structure for modernization](#). Unlike the other services, the Marine Corps came out of the conflicts in Iraq and Afghanistan at a higher end strength (186,000) than it went in (173,000), so it has some trade space, at least in theory. The Marine Corps' problem, like the Navy's, is that the high level of day-to-day deployments puts a floor on its size.

Air Force: Traditionally, the Air Force has been most comfortable trading force structure for modernization. Thus, to keep its large portfolio of modernization programs on track, it will likely propose [eliminating many legacy aircraft](#). This may include: F-15s and F-16s that have not been upgraded; KC-10 refuelers and perhaps some KC-135s, both of which are old and slated for eventual replacement by the KC-46; some UAVs/RPVs, on the theory that they are vulnerable in a great power conflict; and perhaps the A-10s, which the Air Force has tried to retire in the past but failed in the face of congressional opposition. The problem is that many of these legacy aircraft are in the reserve components, which are politically powerful and reluctant to shrink.

ALIGNING THE DEFENSE ACQUISITION SYSTEM WITH NDS PRIORITIES IN FY 2021

BY ANDREW P. HUNTER

The delivery of the FY 2021 budget provides the latest opportunity to examine the state of the defense acquisition system in the Trump administration and to understand the impact of a flat defense budget request that declines in real terms. In the first three years of the

Trump administration, as defense budgets grew robustly, the DoD had been able to pursue increases in force structure, readiness, and modernization simultaneously. Even though modernization was not necessarily the Department's top priority, it nonetheless saw benefits during the budget rebound. The acquisition system, traditionally seen as driven by modernization spending, also plays an important role in improving readiness and growing force structure, which has meant that the recovery in the acquisition system over the last three years has been quite robust.

Two [trends](#) have dominated the acquisition world during the Trump administration. First, the system has seen greatly expanded purchases of systems from existing production lines (many of distinguished vintage). The growth in buying gear, which has been dominated by aircraft purchases, has meant a strong revenue recovery for the biggest aerospace companies but a decline in the share of acquisition spending going to R&D. Now that the budget request is declining in real terms, increasing resources for R&D becomes even more challenging. There have been [signals](#) in the lead up to this year's budget that the services have attempted to make internal trade-offs to boost R&D spending. However, the political imperatives limiting force structure reductions and aircraft retirements remain strong, likely constraining how aggressive the administration will be in pursuing such trade-offs and how likely Congress is to accept them. Secretary of Defense Mark Esper's defense review effort seeks to end the need for these trade-offs to some extent by making reductions in what may be less politically popular defense-wide accounts.

Second, there has been an explosion of [Other Transaction Authority](#) (OTA) agreements and other alternative technology development mechanisms used for prototyping, which have largely taken the place of tradition weapon systems development. Funding to industry obligated through OTAs now exceeds funding to industry obligated through the traditional weapon system development pipeline. In addition to changing the process for developing technology, this trend has

changed where R&D is coming from. About two-thirds of OTA expenditures goes to non-traditional R&D firms, while the traditional weapon systems development pipeline is dominated by traditional defense companies. A key development in FY 2021 will be whether systems developed through alternative prototyping pathways head toward production, either by transitioning to the traditional acquisition process or moving to procurement through alternative means. Some of these rapid prototyping efforts, such as the Army's development of future vertical lift, face key contract and acquisition strategy decisions in 2021. Key issues will be (1) whether and how systems in development transition into production; (2) whether to sustain competition in the delivery of these new systems and for how long; and (3) how ambitious the requirements will be for the initial fielding of these systems.

What has been curiously lacking in the development of the acquisition system over the last three years is a clear and sustained commitment to investment in the key technologies identified in the [NDS](#) as critical to future peer competition, including artificial intelligence (AI), advanced computing (i.e., quantum technology), directed energy, hypersonic systems, and biotechnology. To be clear, these efforts exist, but they have not had the scope and scale that the NDS seems to imply is required. In the area of quantum technology and directed energy, R&D efforts in place before the NDS was issued continue with little evidence of any significant acceleration. Biotechnology remains an area of investment with respect to countering weapons of mass destruction but otherwise does not seem to be a significant priority in the defense budget. The largest NDS-focused tech investments have come in hypersonic systems and AI. Funding for the latter is robust, as demonstrated by DARPA's [AI Next Campaign](#) and the establishment of the Joint AI Center ([JAIC](#)). However, concerns remain that the United States may be outspent by China on AI research.

Similarly, investments in hypersonic systems have grown robustly in the last several years, effectively [doubling](#) according to Under Secretary for Research and

Engineering Mike Griffin, but concerns remain that China may have established a lead on the United States in hypersonic technology. Congress has reinforced concerns about funding for [hypersonic systems](#) by adding funding in the final 2020 budget.

Secretary of Defense Mark Esper has again [touted](#) the presence of NDS-related tech investments in the forthcoming FY 2021 budget request. The level of this investment push, what trade-offs were made to enable such a push in the current budget environment, and how technology is transitioned into fielded capabilities are top issues for the acquisition system going into FY 2021.

SETTING A NEW COURSE FOR MISSILE DEFENSE IN FY 2021

BY THOMAS KARAKO & WES RUMBAUGH

The FY 2021 budget represents the Trump administration's last opportunity in this term to set a new course for the future of missile defense programs. As noted by last year's [Missile Defense Review](#), the air and missile threat environment has never been more complex. The past focus on ballistic missiles is now expanding to the broader challenge of integrated air and missile attack, including new missions, such as hypersonic defense and homeland cruise missile defense. Bringing all these new missions together will require significant effort to connect diverse efforts across the Pentagon. Whether the FY 2021 budget does so remains to be seen.

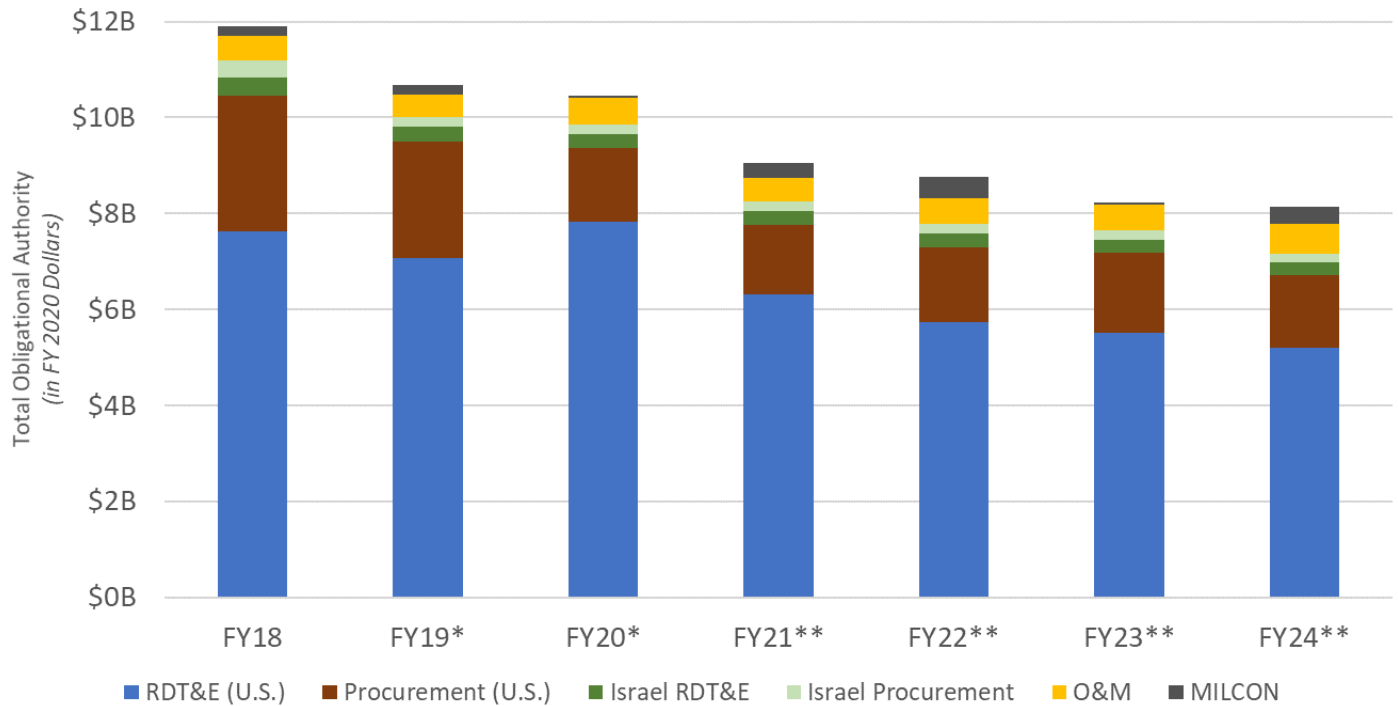
The Missile Defense Agency (MDA) has recently enjoyed several years of increased top-line funding, even if specific [activities](#) fell [short of expectations](#) for aligning missile defense programs with the return of great power competition outlined in the NDS. Congress appropriated \$10.5 billion for the MDA in FY 2020, but this level seems unlikely to continue into the 2021 submission. The MDA's FY 2021 budget was previously projected to decline from \$9.4 billion last year to \$9.2 billion in 2021 funding.

Within its top line, MDA [watchers](#) have focused on the relative decline of RDT&E funding, especially for advanced technology, and the relative increase of procurement and sustainment. While the proportions of procurement and RDT&E funding project relative stability (Figure 1), focus on procurement and operations could intensify if the MDA's advanced technology work is moved to other defense-wide organizations.

The single most important FY 2021 budget issue will be the plan for a new Next Generation Interceptor (NGI). Intended to replace the cancelled Redesignated Kill Vehicle (RKV), NGI is likely to be MDA's largest new start. NGI received some initial funding in the FY 2020 conference appropriations, but major questions remain about its future. [Congressional leaders](#) and [OMB](#) have expressed skepticism about initial plans relating to cost, requirements, and a decade-long development period. Significant [uncertainty](#) about NGI carries over to the homeland ballistic missile defense mission more broadly. In the short term, MDA's projected Ground-based Midcourse Defense (GMD) procurement spending seems likely to decline, with funds redirected either toward improving or refurbishing current interceptors, research and development for NGI, or some other interim solution.

Increased NGI spending seems likely to adversely affect plans for other missile defense programs and missions. One program to watch will be the [Hypersonic and Ballistic Tracking and Space System](#) (HBTSS). Between FY 2019 and FY 2020, Congress added a combined \$181 million to presidential budgets to develop the space-based sensor layer and directly assigned MDA responsibility for sensor package development. In 2020, the administration seemed intent on [moving the program](#) to the nascent Space Development Agency (SDA), beginning with a renewed round of studies. At a recent CSIS event, Vice Chairman of the Joint Chiefs of Staff General John Hyten [urged their prioritization](#), saying that the Pentagon needs to stop "studying the heck out of" space sensors and move to testing. Important questions for the FY 2021 budget submission

Figure 1: Missile Defense Agency (MDA) Budget Categories, FY 2018-FY 2024



*Appropriated dollars **Projections from FY 2020 FYDP

will be if the administration heeds General Hyten’s counsel, whether it follows the legislative requirement to keep HBTSS development within MDA, and whether HBTSS retains its multi-mission purpose for tracking both hypersonic gliders and ballistic missiles.

The coming year will also be an important one for work on interceptors and command and control elements relating to hypersonic defense. MDA [issued](#) a Request for Proposal (RFP) for defeating regional hypersonic glide vehicles, but initial studies will need to be followed by metal being bent.

Within the Aegis program, MDA plans to conduct a test of its Standard Missile-3 Block IIA (SM-3 IIA) interceptor against an intercontinental ballistic missile in early 2020. A successful test could demonstrate the potential of the SM-3 IIA as an underlay interceptor for Hawaii, Guam, or the continental United States. Implementing such an underlay would not be automatic, however. MDA’s 2021 budget could, for instance, increase procurement of SM-3 IIA interceptors but that would also require planning for ground infrastructure and

supporting sensors and command and control mechanisms.

Other important questions will include whether MDA revives efforts to develop an extended-range upgrade to the Terminal High Altitude Area Defense (THAAD) interceptor and whether services sustain their recent [attention](#) to Patriot, Maneuver Short-Range Air Defense (M-SHORAD), and other lower-tier air and missile defense programs.

FUNDING FOR SPACE PROGRAMS AMID ORGANIZATIONAL RESTRUCTURING *BY TODD HARRISON*

The FY 2020 budget proposed three major organizational reforms in military space: (1) the recreation of U.S. Space Command as a geographic combatant command in charge of space operations; (2) the stand-up of the U.S. Space Force as the newest branch of the armed services, responsible for the organization, training, and equipping of space forces; and (3) the stand-up of the Space Development Agency (SDA) to lead the development of new space

architectures. In the FY 2021 budget cycle, Congress will be looking for updates on the progress of each of these organizations and the important tasks they are charged with executing. In particular, Congress mandated in the [FY 2020 NDAA](#) that it be briefed every 60 days on the transition plans and status of the Space Force.

Three key things to look for in the military space budget for FY 2021 are: (1) updated cost projections for the stand-up of the Space Force; (2) whether the SDA requests funding in the FYDP to begin development of proliferated low Earth orbit (LEO) constellations; and (3) the overall level of unclassified space funding.

In the [FY 2020 request](#), DoD projected that the additional cost of standing-up the new service would be \$72.4 million in FY 2020, ramping up to \$500 million annually by FY 2024. In approving the Space Force, Congress cut its FY 2020 funding to [\\$40 million](#) and emphasized the need to limit the creation of additional bureaucracy and headquarters costs. The FY 2020 NDAA specifically bars the addition of [new military positions](#) (but not civilian or contractor positions). The FY 2021 request will provide a revised estimate of the additional costs needed for the Space Force, the total Air Force budget that will transfer to the Space Force, and a more detailed timeline for the transition of forces to the new service, including when the Space Force will develop and submit its first independent budget request.

The SDA has talked about deploying a space transport layer for communications and a space sensing layer for missile defense, but it did not include funding in the FY 2020 request to begin such programs. The [SDA budget request](#) projected it would need \$80 million in FY 2021, ramping up to \$140 million in FY 2024. This funding was designated to continue studying—but not begin development—of proliferated constellations of satellites in LEO and new space technologies. The FY 2021 request provides an opportunity for the SDA (or the MDA) to put its money where its mouth is by including a funding wedge over the FYDP (FY 2021-FY 2025) to begin real acquisition programs for the ideas it has proposed. If this funding wedge is not included in the request, it will

call into doubt the commitment of senior leaders to the SDA and the new space missions it has proposed.

Despite the bold organizational changes proposed last year and the increased emphasis placed on space, the FY 2020 request projected that funding for the unclassified space programs and activities captured in the Major Force Program for space (MFP-12) would decline from \$15.13 billion in FY 2020 to \$14.75 billion in FY 2021. This was in part because many of the new space systems and follow-on programs that have been publicly discussed were not yet reflected in the FY 2020 request. A continued decline in overall funding for military space in the FY 2021 request, however, would be inconsistent with the Defense Department's organizational reforms and the greater emphasis placed on space (and defensive space operations) in the NDS.

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