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***THE FRAGMENTATION OF DOD:
CHANGING ROLE OF THE SERVICES AND
WHAT IT MEANS FOR SPACE FORCE***

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Summary

The Space Force is the first new military service in 70 years, an historic milestone for the Department of Defense and space. But what a military service is has changed over those decades and the Space Force is being founded at a time when some worry the military services have seen their authority and control fragmented.

Space Force leaders have to create the identity, organization, and culture of a new military service; establish its unique role; and build the relationships to sustain it. Yet the Space Force is itself drawing its people and funding from the older military services, exacerbating concerns the traditional services are losing authority. Only by understanding that trend can Space Force leaders best launch the Space Force.

Many attribute the loss of the military services' authority to the growth in the budget share of the Fourth Estate, those parts of DOD not part of a military department, over the last 25 years. They fear the military services' operational strength is being weakened in favor of inefficient, administrative organizations. The Fourth Estate's share of the defense budget has grown by five percent over the last 25 years. But this growth has not come from inefficient administrative functions. About half the growth comes from operational organizations, like Special Operations Command and intelligence agencies, which were intentionally split from the services. The other half stems from an increased share of the defense budget dedicated to health care, which has also been steadily centralized outside of the military services in that time.

While the concerns over why the Fourth Estate has grown in share are misplaced, the growth is a symptom of a broader trend: the fragmentation of DOD away from the military services' control even if the funding and people technically still belong to the military services. Significant chunks of the military services' budgets have been taken out of their control and placed under the control of organizations relatively independent of the services. Intelligence funding is consolidated under both the Director of National Intelligence and the Under Secretary of Defense for Intelligence and Security. The Reserves, particularly the National Guard, has gained ever greater independence over the last decades. Defense health, special operations, and missile defense have been carved out of the services. Even the Marine Corps, itself a military service, is an example of this trend as it has taken budget share from the other services and become more independent. In the last few decades, authority and responsibility have been taken from the military services—not to centralize them but to fragment them amongst many separate and relatively independent organizations.

This trend highlights there is no single meaning for what a military service is and, therefore, no uniform path for Space Force to follow. The Space Force can look for examples at either side of what constitutes a military service: on one side, the smallest military service that shares a military department, the Marine Corps, and on the other side, the largest non-service organization charged with organizing for operations, the Special Operations Command. The

Space Force has similarities and differences with both and those distinctions can point the way to how the Space Force can become an independent military service within a fragmented DOD.

Introduction

The nation has now emphasized the importance of space by establishing a military service dedicated to it. The military services have long been the core of the Department of Defense (DOD), as Carl Builder observed 30 years ago: “The roots of modern American military strategies lie buried in the country’s three most powerful institutions: the Army, Navy, and Air Force.”² But space forces are being consolidated into a service at a time when the military services seem most pressed upon, their importance and independence most questioned. Some people fear the service chiefs have lost authority to the combatant commands in setting what kind of forces are needed and the chiefs themselves lament their inability to acquire what they want.³ Many also decry the growth of the Fourth Estate, those parts of the Defense Department not included in a military department.⁴ All of these fears reflect concern that authority has been fragmented within the Department of Defense at the expense of the military services.

***“For the first time since
President Harry Truman created
the Air Force over 70 years ago
— think of that — we will create a
brand-new American military
service.”***

—President Donald J. Trump¹

Some of the military services’ authority was intentionally taken away. In 1986, Congress passed the Goldwater-Nichols Reform Act to better coordinate across the services, strengthening the individual military advice of the Chairman of the Joint Chiefs of Staff; the command of operations by the combatant commanders; and the overall authority, direction, and control of the department by the Secretary of Defense.⁵ Few would overturn those changes and yet there is also a sense that the Goldwater-Nichols paradigm is no longer working, exemplified by a series of Senate Armed Services hearings in 2015 investigating what changes should be made.⁶

While no consensus emerged, efforts over the last few years have sought to restore some of the services’ authority without taking away from the Secretary of Defense’s own authority, the Chairman’s independence, or the combatant commanders’ operational control. Blaming an enlarged but inefficient Fourth Estate offers a way to lament that the services have been weakened

without directly attacking the centralization Goldwater-Nichols achieved.

But concerns over the growth of the Fourth Estate misunderstand why non-military department spending has increased in the DOD. The Fourth Estate has not grown because of inefficient administrative bloat. Instead, the Fourth Estate growth is only one example of how more and more missions and control of their attendant funding have been taken from the services. For instance, both the Reserves and national intelligence funding are still formally appropriated to the military departments, yet the services do not have full control over how those funds are spent.

The Space Force itself is an example of this larger trend. The Space Force is chartered independently to focus greater attention on space. But to do so, it necessarily had to take charge of funding and responsibility that used to lie with other military services. From this point of view, even the Marine Corps can be seen as taking responsibility and authority from the big services Carl Builder identified.

Unless this underlying trend is recognized, we cannot empower the services, preserve the Secretary of Defense's authority, and still successfully build the new Space Force. In some ways, these goals are contradictory. We cannot balance these contradictions if we pretend there is some other boogeyman to blame. Instead, we have to recognize the tension inherent amongst these goals. We must acknowledge that over the past few decades the priority has been on strengthening specific missions with dedicated organizations. The Space Force is a powerful way to emphasize the importance of space, but it is a solution that undermines the traditional military services without strengthening the

Secretary of Defense's authority. This situation poses challenges to the Space Force as well. For the Space Force to be successful, its leaders must establish its independence within the context of DOD's fragmentation.

This report seeks to highlight that long-term trend of fragmentation. It does not judge whether the trend is positive or negative, but simply attempts to make clear the trend exists. The report first shows that the growth in defense-wide spending has not come from increases in administrative functions but in operational and health responsibilities that have been taken from the services more recently. This recasts one of the most common diagnoses for why the services' authority has frayed. The report then uses budget data to show how the military services have lost control—not just of those organizations outside of military departments, but even of funding within military departments. This lens highlights that the growth of the Fourth Estate is a symptom of a more basic trend: the fragmentation of DOD. Finally, the report explores what lessons the Space Force can glean from how the Marine Corps and Special Operations Command (SOCOM) have found roles within a fragmented DOD. The Marine Corps, like the Space Force, is a military service sharing a military department with a larger service. SOCOM has greater independence but is not formally a military service. These two models likely flank the Space Force's position within DOD. Together, these sections explicate a long-term trend within DOD and provide the Space Force insights into how to navigate that trend.

The Space Force is now a military service. But being a military service is not what it once was. To succeed, the Space Force must establish its independence—and its role—within a fragmented DOD.

The Fourth Estate Fallacy

The growth of the Fourth Estate is commonly cited as a trend that undermines efficiency and distracts from operational efforts. As one observer said: “That something needs to be done about the fourth estate is widely supported. The first problem is its size. The fourth estate has grown relentlessly.”⁷ Both the Defense Department and Congress have made efforts to stanch and even reverse this growth.⁸

In this view, the Fourth Estate—viewed as excessive administration—is an unintentional weakening of the military services. This critique also typically advocates for restoring the services’ authority without weakening the Secretary of Defense’s authority. But these concerns misunderstand why Fourth Estate spending has grown; growth stems not from the administrative functions of the defense agencies but from those operational and health elements that were intentionally taken out of the services’ responsibility. Rather than as an inexorable expansion of administration, this growth reflects that the removing of authority from the military services was deliberate and has been repeated.

That conclusion is often obscured because the critique of the Fourth Estate blurs two distinct points: a) the share of the DOD budget not managed by the military departments has grown and b) widespread agreement that the Defense Department should be run as efficiently as possible to direct as much of the defense budget as possible to military operations. Both of these points are true. But conflating them ignores where funding has increased in defense-wide accounts. The growth in defense-wide accounts comes not from expansionist or inefficient administrative functions, but from increased operational funding and the increased cost of health care the entire nation is experiencing.

As the critique argues, Fourth Estate funding has grown, as captured in Figure 1. In 1994, the Fourth Estate made up 13.3 percent of the defense budget.⁹ Twenty-five years later, in 2019, it made up 17.1 percent, an almost four-point increase. And the Fourth Estate does include agencies tasked with more administrative and less operational roles, such as the Defense Finance and Administration Services (DFAS), which handles pay and accounting for the military and the Defense Logistics Agency (DLA), which purchases common supplies for the military. The Fourth Estate also includes oversight agencies like the Defense Contract Audit Agency, which checks on whether terms of defense contracts are met; the Office of the Inspector General, which investigates complaints from across DOD; and U.S. Court of Appeals for the Armed Forces, which provides the judicial oversight of disciplinary proceedings. Further, the Fourth Estate includes those management—some would say oversight—roles like the Office of the Secretary of Defense and the Joint Staff.

However, these functions have been a declining share of the Fourth Estate in the last 25 years. In fact, the largest defense agencies have seen greater relative decline in number of personnel than the services have experienced in the same time frame.¹⁰

Instead, all of the growth in budget share comes from two parts of *defense-wide*: operational spending and health care spending. In other words, while *defense-wide* does include overhead administrative functions, those functions have not been the cause of the growth in defense-wide spending.¹¹ Rather, the growth has come in those areas that were taken out of the services’ control in order to prioritize them differently than the services did.

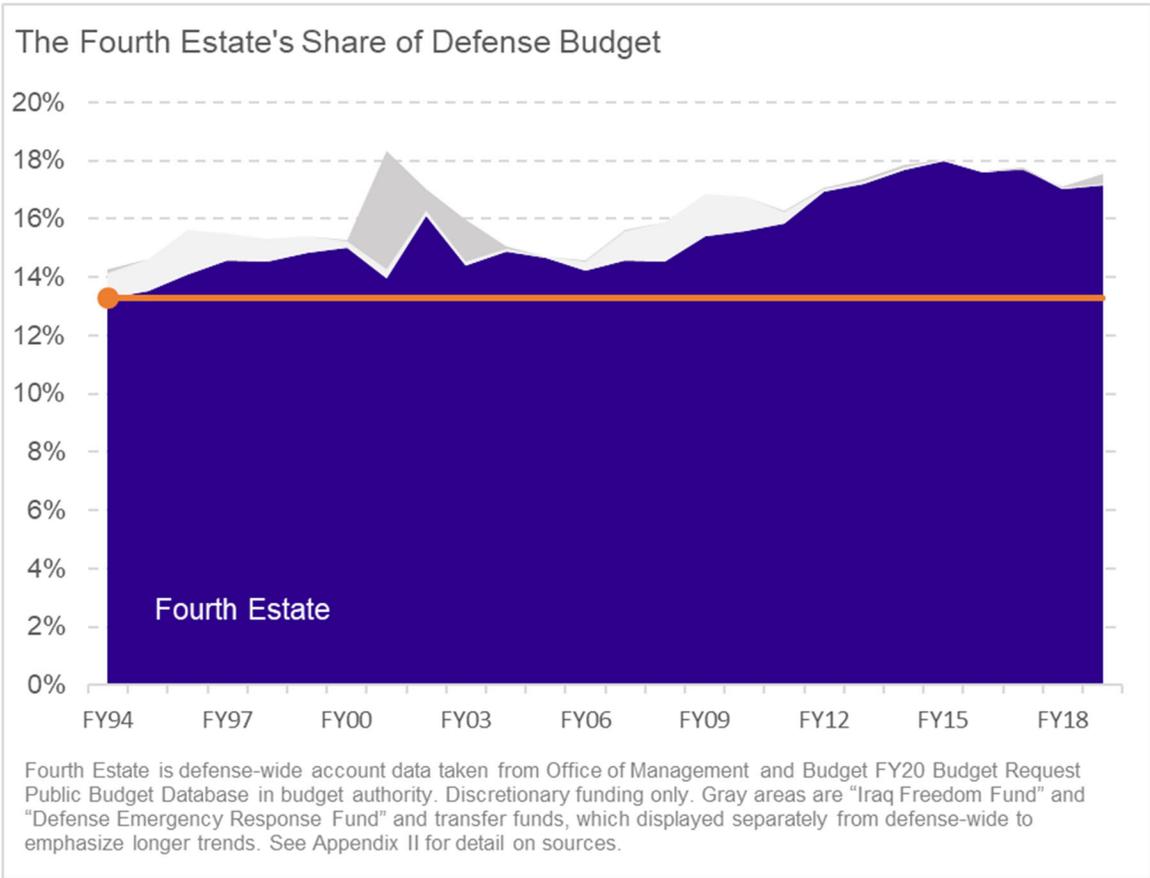


Figure 1: Fourth Estate's share of defense budget over time.

Fourth Estate Operational Spending

More than half of the growth came from three organizations: Special Operations Command (SOCOM), Missile Defense Agency (MDA), and classified programs, as displayed in Figure 2. While none of these organizations belongs to a military department, they execute military activities supporting operations conducted by uniformed personnel.

- ◆ SOCOM makes up a quarter of the total defense-wide growth, increasing steadily over the last 25 years. SOCOM is responsible for organizing, training, and equipping special operations forces and conducting special operations. These forces all wear military uniforms, albeit of the Army, Navy, Air Force and Marine Corps, not of SOCOM. And the operations SOCOM conducts would all be recognized as military operations. Importantly, this growth does not include the costs of the uniformed personnel of SOCOM, which is still accounted for in the military department budgets, not defense-wide. Nor does it include procurement costs provided by the military departments, but only SOF-unique procurement, which would increase the share of the defense budget dedicated to SOCOM as described later.
- ◆ Classified spending makes up another quarter of the total defense-wide growth. Classified spending is, of course, classified but is usually reserved for intelligence activities and certain special acquisition programs. While not

necessarily strictly military operations and not always conducted by uniformed personnel, these activities are also not overhead or administrative functions. Classified spending saw a sharp increase after September 11, as did SOCOM. That growth continued until 2012, but it has since leveled off. This growth is not the same as that growth in the classified “passthrough” spending included in the Department of the Air Force budget, which is considered in the next section.¹²

- ◆ The final account is MDA, which in 2019 was only barely above its 1994 levels. But at its peak during the early Bush administration, its funding had doubled its 1994 levels. With defense-wide funding, MDA develops, fields, and—for some aspects—operates the nation’s missile defenses. MDA is structured as a traditional defense agency, like the more administrative agencies, such as DFAS and DLA. But while missile defense remains a contentious topic, most would not consider it an administrative activity and instead would consider it much closer to an operational activity, including maintaining the interceptors in Alaska.

Half of the defense-wide growth, then, comes not from administrative activities but from operational activities. In the years after September 11, these activities—special operations, intelligence, and missile defense—were regularly cited as more critical to U.S. national security than the military services’ traditional tasks.

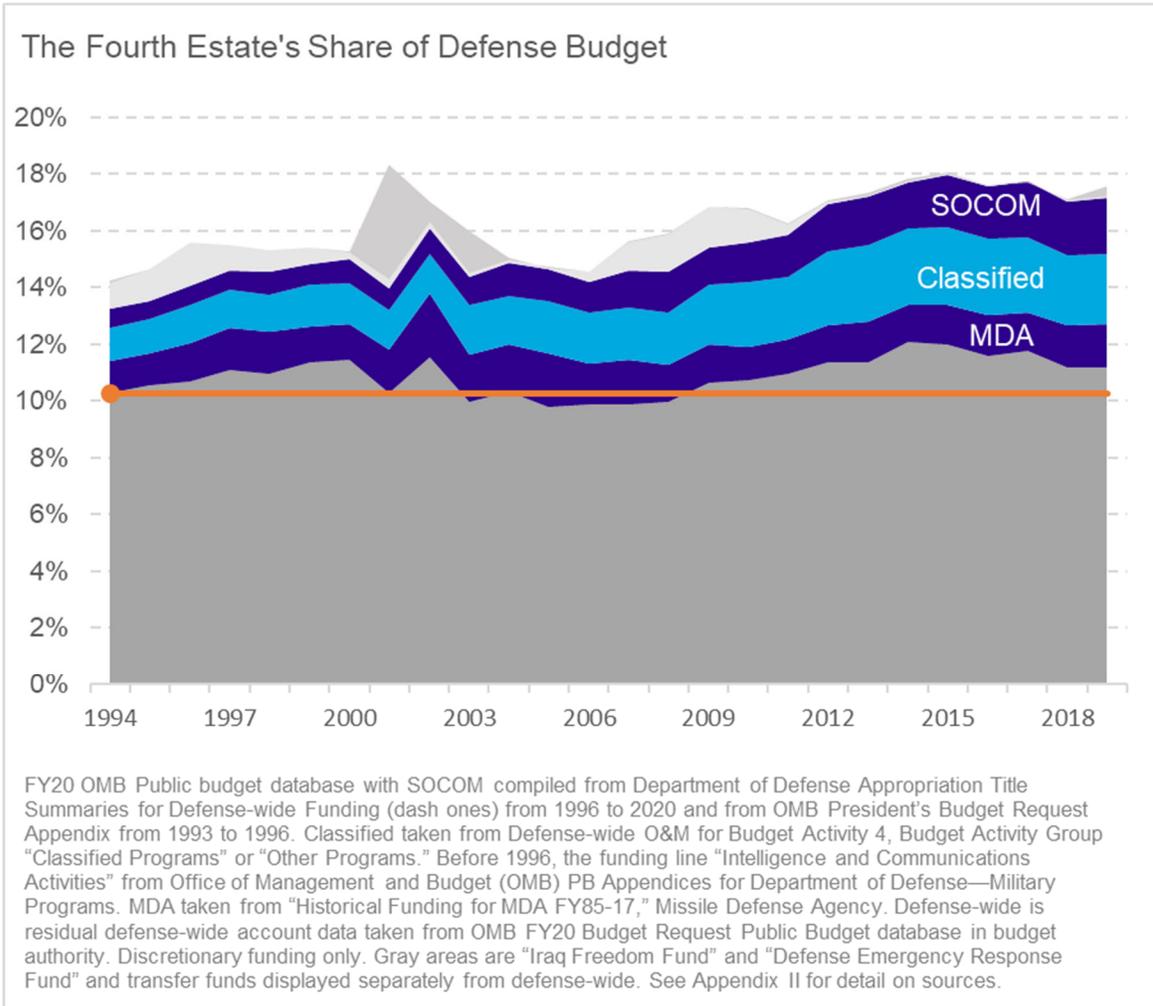


Figure 2: The Fourth Estate's share of the defense budget over time highlighting operational growth.

Fourth Estate Health Care Funding

The other half of defense-wide spending growth comes from the Defense Health Program (DHP), including the funding supporting the TRICARE for Life program for military retirees, categorized as mandatory spending. As with all U.S. health care costs, military health care has become more expensive. In 1994, the Defense Health Program accounted for 3.8 percent of the defense budget. In 2019, it accounted for 6.1 percent.

But this health care is dedicated to current active military, military retirees, and their dependents. So while not part of a military department, this funding directly supports the military services' personnel. Only the military services' active or long-term personnel and their families are cared for by the Defense Health Program.

The growth in the Fourth Estate therefore comes not from an increase in inefficient administration. Instead, it comes in those areas that have been consciously pulled out from the services. The next section highlights when and why those choices were made.

The Space Force avoided being categorized as part of the Fourth Estate when it was created as a military service. It almost was. One of the options considered over the years for improving space acquisition and operations has been creating a Fourth Estate agency dedicated to space. General John Hyten described it as “the often recommended ‘space acquisition agency.’”¹³ In contrast, one of the reasons for making the Space Force a military service instead of a defense agency was to ensure it had “operational elements.”¹⁴ The Space Force as a service is by definition not part of the Fourth Estate. But that simplifying assumption ignores how many operational elements are in the Fourth Estate and, as shown in the next section of the paper, that the Space Force is still an example of how more missions and budget share have been taken out of the military services in the last 40 years. The Space Force, though formally a military service, can still be cast as a fragmentation of the traditional military services. The Space Force is part of a trend within DOD, of which the Fourth Estate is just one example.

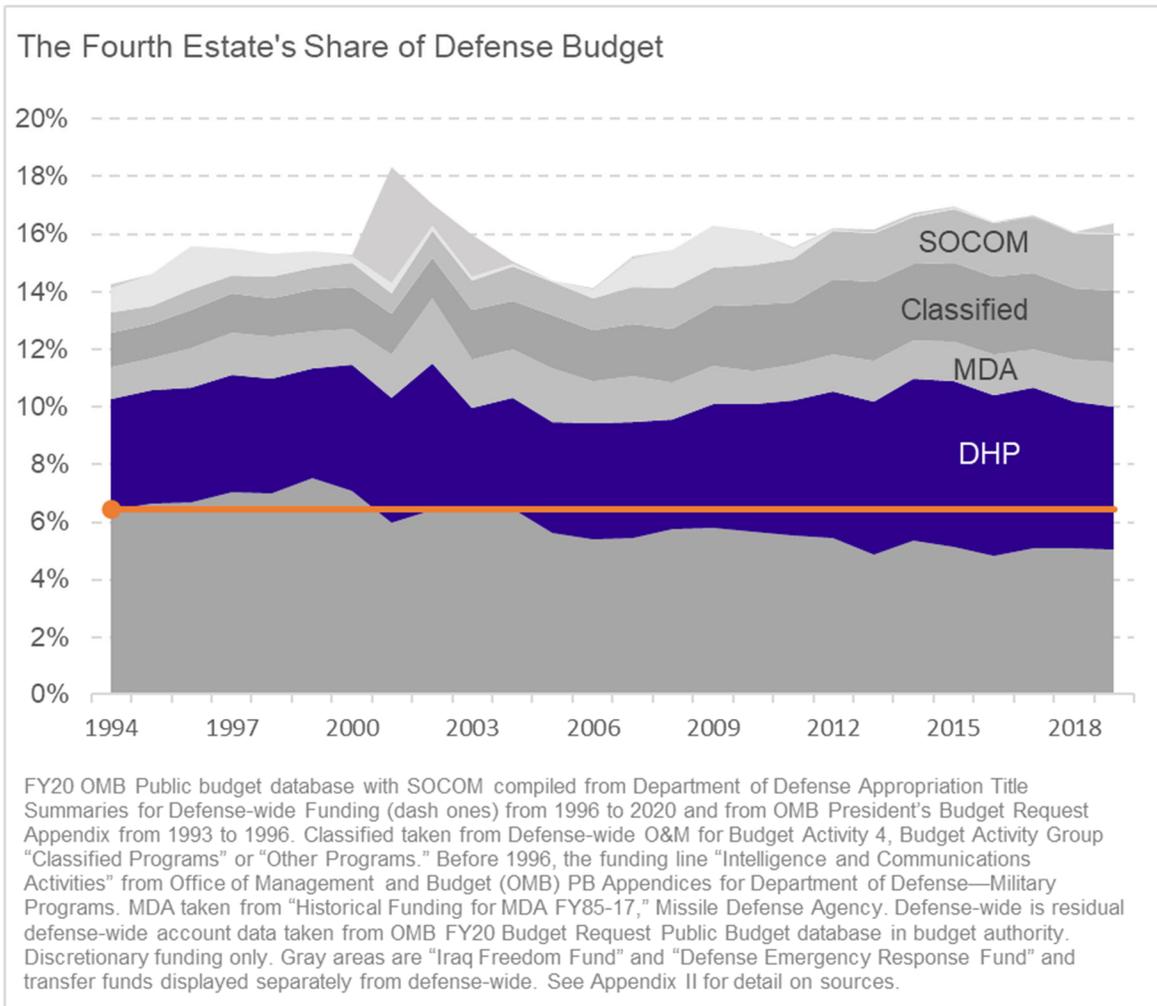


Figure 3: The Fourth Estate's share of the defense budget over time highlighting Defense Health Program growth.

The Fragmentation of DOD

Defense-wide spending is cited as an attack on the military services because it is part of a broader trend. For more than 40 years, when the nation has decided a military function is not being fulfilled, instead of holding the military services accountable, it has created a new organization using new funding and organizational models to focus on that mission. Over time, that has meant the military services have become less central to what the Defense Department does. Yet creating new organizations also burdens the Secretary of Defense. Though the Secretary of Defense has authority, direction and control of the Department of Defense, the number of organizations within the Department of Defense keeps increasing, making the department more unwieldy to manage. This section uses budget data to highlight that fragmentation of DOD. DOD was formed by creating a new military department, the Department of the Air Force, and placing it alongside two other military departments, the Department of War and Department of Navy.¹⁵ The core of DOD was the military services within these military departments, particularly the big three: the Army, Navy and Air Force, each of which by the start of the Korean War had over 380,000 personnel.¹⁶ That legacy remains today. At a high level, the defense budget is still reported as four large pots, as shown in Figure 4: illustrated are the budgets of each of the three military departments and a fourth category called defense-wide. Looked at this way, the military departments still dominated the defense budget in FY19 with shares of 26 percent, 29 percent, and 28 percent, respectively, leaving 17 percent for defense-wide.

But over the last 40 years, more and more organizations, budgets, and missions have been carved out of the military departments. Some of these carve-outs have left people in the uniform of

the traditional services, albeit supporting defense-wide organizations. Some have left the budget nominally under the control of the traditional services. Some of these carve-outs directly support the traditional military services. But all of them still chip away at the idea and the fact that the military services are the core of DOD.

The Goldwater-Nichols Act intentionally took authority from the services but did so to better coordinate the services, centralizing that authority with the Secretary of Defense and, to a lesser extent, the Chairman of the Joint Chiefs of Staff. The trend of fragmentation, in contrast, complicates centralized authority. At the very least, fragmentation increases the span of control the Secretary of Defense must manage.

The Space Force—though formally a military service—is still an example of this broader trend because it has taken funding and people from the traditional services. Space Force leaders must be aware of this context as they build the new service and situate it within the broader DOD.

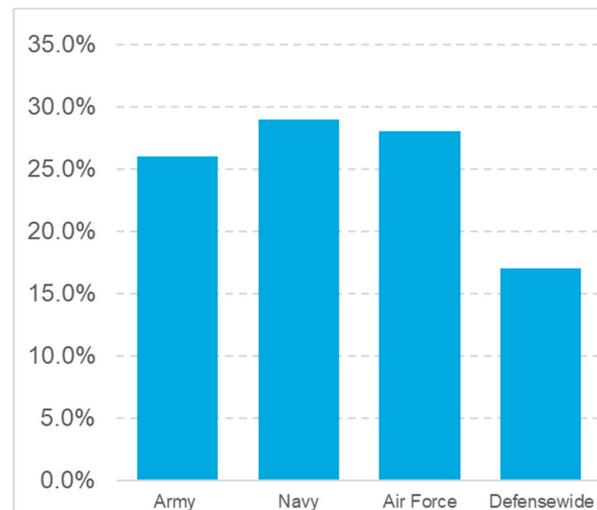


Figure 4: Current shares of the defense budget.

The following section briefly describes various ways mission, organizations, and budgets have been taken from direct control of the military services. Most will be familiar to observers of the DOD. But, individually, they are all idiosyncratic and only in a few cases are total breaks from the traditional military services. Only when they are assembled in one place does the trend become clear and highlight the potential resentment the Space Force may face. A more detailed history of each of the approaches is provided in Appendix I.

Intelligence

One of the earliest and sharpest breaks from the military services was intelligence. At the very creation of DOD, intelligence began breaking free from control by the military services—and the DOD—with the creation of the independent Central Intelligence Agency. This trend continued with the National Security Agency, National Reconnaissance Office, the Defense Intelligence Agency, and eventually the services' mapping and imagery arms in the National Geo-Spatial Intelligence Agency.

All of these agencies, except for the CIA, formally exist within the DOD, but over time developed a national mission besides their military support mission. This national mission was solidified in 2005 with the creation of the Director of National Intelligence, which gave the intelligence agencies a cabinet-level peer of the Secretary of Defense to whom to appeal.

Even the intelligence agencies' military support role has been taken from the direct control of the services. The creation of the Military Intelligence Program, also in 2005, created a central way to designate funding as intelligence funding even if it was formally owned by a military service. The Under Secretary of Defense for Intelligence and Security has also created a process that gives them control over how intelligence funding is allocated with the ability to overrule the services.

Intelligence agencies and budgets are significant. The DOD's budget documents show \$70 billion worth of classified spending. Coupled with the nearly 15,000 uniformed active military personnel assigned to communications or classified activities, this funding constituted 10.2 percent of the FY19 defense budget. Of that funding, \$22.2 billion is within the military departments. These budget figures are not explicitly intelligence funding and may support other activities, but they reflect the rough scale of the intelligence budgets.¹⁷

Advocates of the Air Force, in particular, have called attention to how intelligence community funding passed through the services is not actually under the services' control.¹⁸

The Space Force will have to grapple with many of these same issues because space-based assets are and will continue to be a critical part of both national and military intelligence collection.

Intelligence today enjoys a mission distinct from the military services, a budget formally separated, and a decision authority for that funding outside of the military services.

The Reserve Component

An even earlier break from the military services that has solidified only more recently is the Reserve Component, particularly the National Guard. The National Guard was established as the militia of the United States with the Dick Act of 1903, formalizing the relationship between the militia and the military services. But it also created a dual-reporting chain where the Guard continue to report to the governors of their respective states. Moreover, the Guard is organized regionally, which ties the Guard directly to Congress, who are all elected on the basis of geography, giving the Guard outsized political power compared to the military services. The Reserves are also organized regionally, giving them a weaker version of this political power.

The Guard and Reserves have also gotten more organizationally distinct over the years. The most visible example is the Chief of the National Guard Bureau, who was made a member of the Joint Chiefs of Staff in 2012. This was the culmination of the trend towards independence of the National Guard from the military services, which began in 1920 when Congress mandated the chief come from the Guard and not active duty. A similar, but dampened, version of this independence has occurred with the Reserves as well. By 2001, Congress had mandated separate reserve commands for each of the services with a three-star heading each.

This independent organization is reflected in the budget, where the Guard and Reserves have dedicated military personnel, operations and maintenance, and military construction appropriation titles. In those modernization appropriations that do not have dedicated Guard and Reserve lines, Congress mandates a separate display. These budgets—overseen relatively independently of the military services despite being technically within the military departments—are substantial. In FY19, this was \$50.9 billion or 7.4 percent of the defense budget.

The Space Force will deal directly with this division as well because members of Congress and the National Guard have repeatedly insisted on a Guard component to the Space Force.

The Reserve components may wear the same uniforms as the military services and fulfill similar missions when deployed. But they also have a separate organization and a semi-independent budget. While not wholly distinct from the military services, the Reserve component represents a fragmentation of the military services over time.

Defense Health

Health spending is already a large part of the DOD's spending, as discussed in the earlier section. Moreover, health spending has been taken out of the

military services' control. In the 1950s, the military services began to provide health care not just for servicemembers but also dependents in line with civilian changes that tied health care insurance to people's jobs. By 1998, this care had been centralized with a single pot of funding, the Defense Health Program, overseen by a single agency.

In the last decade, the agency was transformed into the Defense Health Agency and given direct responsibility not just for care but for the military medical professionals and facilities that provide aspects of that care.

This budget and responsibility is substantial. In FY19, the defense health program was \$50.3 billion or 7.3 percent of the defense budget.¹⁹

Somewhat ironically, the Space Force will benefit from the severing of health from the military services. The Space Force is expected to depend on the larger Air Force for many support functions, but healthcare will not be one. Instead, both the Space Force and the Air Force will depend on the Defense Health Agency.

Defense Health has a distinct mission, organization, and budget. It is a clear example of how the military services have lost both responsibility and control over the years.

The Marine Corps

In some ways, the Marines are most representative of the DOD's fragmentation despite being a military service. The Marines are also the most obvious model for the Space Force—an independent service housed in a military department dominated by a larger service—as will be discussed in the next section.

The Marines have always been a military service, but they have only achieved the full institutional role of a service over the last few decades and achieved control over their budget only in the last few years.

This recent ascent of the Marines is exemplified in Carl Builder's quote at the start of this paper that did not even list the Marines with the other services. The Marines feared in 1947 they would be eliminated. The leader of the Marines, the Commandant, did not become a full member of the Joint Chiefs of Staff until 1979. A Marine did not lead a combatant command until 1986. Most damning, the Marines did not fully control their budget until the FY19 budget submission.

While each of these institutional prerogatives strengthened the Marines, they necessarily came at the expense of the three largest military services. The Navy has lost control over the budget it used to own. The other services miss opportunities to have one of their own serve as combatant commanders. In this way, the Marines gaining of authority reflects the fragmentation of the DOD from the once dominant three large services. This change is reflected in the Marines' budget position. In the mid-1950s, the Marines made up less than 7 percent of the DOD's uniformed personnel and was less than a third the size of the Navy.²⁰ Today, the Marines are now half as big as either the Navy or Air Force, and make up 14 percent of the DOD's uniformed personnel. The Marines lay claim to \$41.2 billion or 6.0 percent of the defense budget.

The Space Force's closest analog among the military services is the Marines. The Space Force will endeavor to be treated as the Marines are today and enjoy the material rewards of that treatment.

The Marines only recently gained control of their budget but have long developed a unique mission and enjoy a strong culturally distinct identity from other organizations in the DOD.

Special Operations

SOCOM may be the archetypal example of the services losing authority and responsibility. SOCOM has a distinct budget and a distinct

organization, yet it pulls its people from the military services and applies them to a mission—the use of force overseas—that is very similar to that of the services. Moreover, SOCOM's mission and budget was intentionally and consciously taken from the services and has been favored almost ever since it was. In such a way, it too is a good analog for the Space Force, as will be discussed in the next section.

Congress forced the DOD to create a new combatant command dedicated to special operations in 1987. And Congress gave it unique authority by giving it a distinct budget, called Major Force Program-11, and the authority to procure equipment itself. This combination has created a powerful organization that has grown dramatically. In the last 20 years, SOCOM has grown from a budget of \$3.2 billion to one of \$18.9 billion, or 2.7 percent of the defense budget, and it has been granted new missions and responsibility.

Yet SOCOM is not totally independent of the services. It does not directly recruit its personnel and its members still wear the uniforms of their parent services. It relies on the large services to buy the basic vehicles and equipment it uses, and then modifies them for special operations purposes. It is not formally a military service and remains a one-off example.

Despite being a formal military service, the Space Force will share many of these same dynamics. The Space Force's budget is roughly the size of SOCOM's. The Space Force has a relationship to its relevant combatant command similar to the relationship SOCOM's organize, train, and equip function has to its operations function. These dynamics will be discussed more in the next section.

SOCOM may not be a service, but it has a budget, mission, and organization outside the control of the services, all of which were intentionally taken from the services.

Missile Defense Agency

The Missile Defense Agency (MDA) also represents an intentional decision to take responsibility away from the services. When MDA's predecessor was created in 1984, the intent was to create a unique organization dedicated to a unique mission. MDA has averaged over \$8 billion a year for 35 years in constant dollars funded outside the services' control and in FY19 received \$12.9 billion, or just under 2 percent of the defense budget. However, this funding has mostly been for research and development, which has meant MDA has not been an operational rival to the services. The services have at times benefited from MDA-funded developments but have kept most of these platforms within their control, like Terminal High-Altitude Air Defense for the Army.

MDA would have been the closest analog for the Space Force if the recent reorganizations had taken the shape of a defense agency. Since the Space Force has been established as a service, the main relation is how the Space Force will relate to MDA's space-based needs to achieve missile defense. Nevertheless, these needs are considerable, suggesting an ongoing tension between the two organizations.

MDA has been organizationally and budgetarily distinct from the services for 35 years. In many ways it is the precursor for later efforts to move missions away from the services.

Other Defense Agencies

As discussed in the first section, defense agencies are often seen as the epitome of the Fourth Estate and a key example of undermining service independence. Defense agencies have been an organizational alternative to the services since they were initially authorized in 1958. From then to now, they have been used to try and gain efficiencies and savings at the expense of military service control. Totaled up, they account for \$25.2 billion (or 3.7 percent of the defense budget).

However, there are 19 defense agencies today, with the largest non-MDA agency having a budget of only \$3.4 billion or less than half a percent of the defense budget. And for most, their mission is only independent in an administrative sense as they support the broader purpose of the services. Appendix I provides significantly greater detail on the agencies and their history.

The Space Force will relate to the defense agencies much as the other services, though since much of the Space Force's support will come through the Air Force, the Air Force may engage with most defense agencies on the Space Force's behalf.

The defense agencies all conduct tasks the services at one point did themselves, but they still mainly support the services rather than rival them as organizational peers.

External Funds

Several funds are appropriated to the Army, who oversees their execution, but for purposes outside the service. These include \$4.9 billion for the Afghanistan Security Forces Fund (ASFF), \$1.4 billion for the Counter ISIS Train and Equip Fund (CTEF), and \$1.0 billion for chemical agents and munitions destruction (CMD). ASFF provides equipment and training for Afghan forces. CTEF provides the same for non-U.S. forces supporting the counter-ISIS mission. CMD destroys the U.S. inventory of lethal chemical agents and munitions in accordance with the Chemical Weapons Convention. While all are important, the funding passes through the Army to outside militaries and groups. Together, they make up \$7.3 billion, about 1 percent of the defense budget.

The Space Force is unlikely to have similar external funds.

COCOMs and Oversight

Finally, there are the command and governance organizations that lie outside of the military departments.

Combatant Commands (COCOMs) have taken more responsibility within the U.S. government for foreign policy and military operations since Goldwater-Nichols with ever greater independence from the military services. Some see this influence extending into decisions affecting the services, though many others do not.²¹ Budgetarily, the COCOMs do not compare to the services with each one averaging a budget of \$260 million in operations and maintenance funding each year and about 2,300 people, including both military and civilian. In total, the COCOMs control about \$4.5 billion, which is 0.7 percent of the defense budget. COCOMs may play key roles, but they directly control very little of defense funding.

The Space Force has a unique relationship with U.S. Space Command (SPACECOM). SPACECOM is responsible for all operations 100 kilometers and more above the earth, including those terrestrial assets that support that domain. This is the domain for which the Space Force organizes, trains, and equips forces. No other service has such a direct relationship to a single combatant command. The relationship between these two organizations will be an important development for many years.

The Department of Defense is governed as a whole by distinct organizations outside of the services as well: principally the Office of the Secretary of Defense, the Joint Staff, and the Office of the Inspector General. Moreover, these organizations have significant resources themselves. Together they make up about \$3.3 billion a year and 6,500 people.²²

These oversight functions are organized and funded outside the services with the task of managing and directing the services through the Secretary's

authority. While a very real limit on service independence, they are not, however, a very large part of the Fourth Estate or defense budget. Table 1 puts the size of these organizations in comparison to the services' major headquarters activities. All three oversight organizations together do not have as many people as any service's major headquarters, except for the Marines.²³ And Headquarters, U.S. Marine Corps is larger than any one of the oversight offices. Altogether, the services' staffs are seven times the size of the staff managing them.

The Space Force, too, will need to interact with these overseers as do the other services. Because the Space Force is smaller than the other services, it may need to devote a greater share of its people to engage with (Defense) Department-wide processes.

These oversight functions are not all of the story, however. Another \$10.2 billion remains in defense-wide accounts, often managed at least nominally by OSD or Joint Staff principals. These include science and technology research as well as consolidated training and exercise accounts. These budget accounts have grown over the years, likely

OSD	2,092
TJS	2,076
OIG	1,678
Oversight Total	5,846
Army	11,679
Navy	6,742
Marine Corps	2,331
Air Force	14,948
Service Total	35,700

Source: FY20 Defense Manpower Requirements Report

*The oversight organizations include all defense-level manpower for those organizations, not just that designated major headquarters activities

reflecting the dynamic already described. When consolidation seems efficient, the services often prefer the funding and tasks managed by someone other than another service. But these accounts do not reflect the oversight functions of either OSD or the Joint Staff. By conflating the two, oversight can seem more onerous than it actually is.

Implications of Fragmentation

The preceding examples highlight how much of the Department of Defense has moved out of the services organizationally and budgetarily, with some moving outside of the services’ missions as well. It substantiates concerns that the services and their chiefs do not have the same power they used to have. Figure 5 displays this perspective visually. When only viewed at the military department level, the military services dominate defense. When the organizations described above are broken out, the

shares of the military services drop and the number of separate entities proliferates.

Much of this trend was driven by the services themselves. When it became clear some activity could be done with greater efficiency and less duplication if it was consolidated, the services preferred centralized solutions outside of the military departments, often under civilian control, than empowering one of the services over the others.²⁴ This is not always the case. For instance, executive agents provide a way to centralize and consolidate, but keep responsibility within a military department.²⁵ But for the first 40 years of the Department of Defense, reforms tended to empower the Secretary of Defense over the services: the creation of the Secretary in 1947, the formal creation of the DOD itself in 1949, replacing the many coordinating boards with the Secretary in

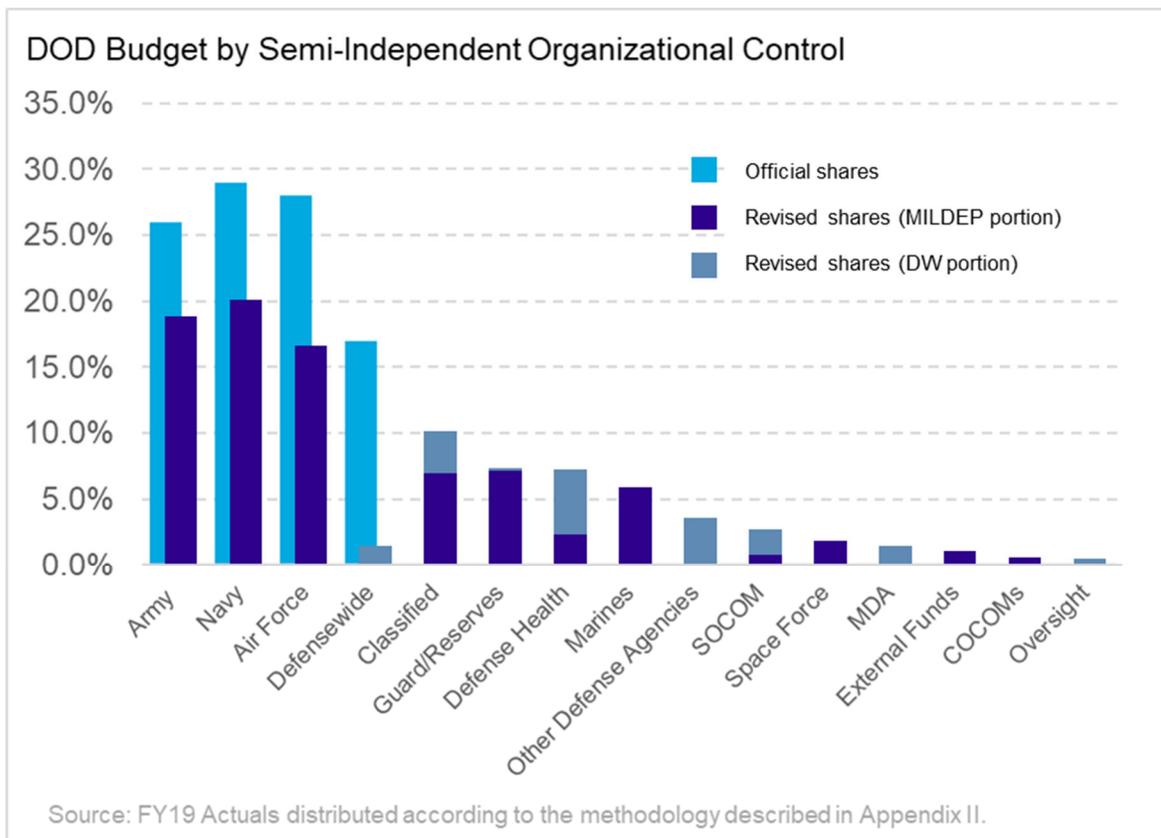


Figure 5: Shares of the Defense budget broken out by separated organizational control.

1953, the reliance on the OSD in 1958, and finally, effectively vesting operational control in the Secretary in 1986.²⁶ Since Goldwater-Nichols, no one has seriously contested the idea that the Secretary of Defense has authority, direction, and control of the Department of Defense.

But in the last 35 years, the Secretary of Defense has not gained institutional control despite that uncontested authority. Instead, the Secretary is left using personal, idiosyncratic approaches to manage the department.²⁷ Some of that likely comes from the same multiplication of organizations that have taken responsibility from the services. When an organization is created outside of the military services, it remains under the Secretary of Defense. When budget responsibility is taken from the services, it still belongs to the Secretary. But every time that has been done, the Secretary adds another direct report to an already very broad span of control. The Secretary directly oversees three service secretaries, 11 combatant commands, 15 OSD principal staff assistants, and maintains some relationship with the Chairman and Joint Staff. While the examples described here are supposed to report to someone short of the Secretary, their greater autonomy and independence means if the Secretary seeks to change their action or behavior, the Secretary likely has to give the organization personal attention.

Additionally, while some of the new organizations, like the defense agencies, were meant to enhance the Secretary of Defense's authority, others were created to strengthen interests and external relations at the expense of the Secretary's central authority, as in the case of the National Guard. Others have done both: the Missile Defense Agency and its predecessors were intended to advance a particular presidential goal but have also provided an internal advocate for Congress to support even when the Secretary does not want to favor missile defense. In such a way, fragmentation can dilute the authority

of the services without improving coordination across the DOD.

The fragmentation into many organizations within the DOD has eroded the centrality of the services, likely driving the concern that the services do not hold the power they once did within the DOD. While specific complaints about the Fourth Estate misunderstand the nature of the Fourth Estate's growth, these complaints do capture a very real dynamic within the DOD: the military services share responsibility with other organizations to a greater extent than ever before and have lost independence and budget share.

Still, as the chart shows, the services remain by far the largest organizations in the Defense Department. While this multiplying of organizations demonstrates that the services have been losing influence, the services still remain the most central players in U.S. national defense.

The Space Force will take its role as a military service under the conditions of fragmentation while simultaneously being an example of it.

Defining A Service

The fragmentation of the traditional services raises the question: what is a military service? As the first new military service since 1947, the creation of the Space Force is a major historical event. By calling it a service, the Space Force, by definition, is not part of the Fourth Estate. But being a military service does not, by itself, come with well-defined responsibilities and authorities. As the Space Force leaders stand up the new service, they will have to grapple with not only creating the new service, but also putting it effectively within the 21st century defense organization.

To help the Space Force leaders think through those challenges, this section emphasizes there is no

formal definition of a military service. And yet it means something to most people to call something a military service. To examine the differences, the section compares the Space Force with the two organizational models that exist just on either side of a military service. First, the section compares the Space Force to the Marine Corps, formally a military service but—as discussed in this paper—one that has taken on some of the privileges and authorities of the big services only recently and which even today still does not have all the characteristics of the big services. Second, the section compares the Space Force to SOCOM, formally not a military service, but with many characteristics like a service. SOCOM also provides insight as an example of a military capability that was taken away from the traditional services, just as the Space Force was.²⁸ By doing so, the section grapples with what it means to be a service.

Defined As Itself

The definition of a military service is just a list of the services. The statute governing the Department of Defense, Title 10 U.S. Code, uses the collective term “armed forces,” which was defined as the Army, Navy, Air Force, Marine Corps, and Coast Guard.²⁹ The Space Force was added to this list in the FY20 National Defense Authorization Act. The “armed forces” become the “military services” only through the DOD’s writing style guide, which directs using Military Services instead of U.S. Armed Forces or Armed Forces of the United States. As the guide describes, “All three terms denote collectively all components of the Army, the Navy, the Air Force, the Marine Corps, the Coast Guard, and the Space Force.”³⁰ The DOD Dictionary of Military and Associated Terms also only uses “armed forces,” again defining it by listing the services and does not define what is a military service.³¹

Put simply, a military service is an organization literally listed as “a military service.” That definition does not provide much help for what

being a service means for the Space Force. Space Force leaders will have to define what the Space Force is and does themselves. One way for the Space Force to investigate how to establish itself and its role in the DOD is to look at these questions through how the Marine Corps and SOCOM do so.

Marine Corps

The Marine Corps is a military service because it has been listed as such in Title 10 since 1956. Yet, as this report has shown, it has gained some of the formal privileges usually associated with a military service only recently and still retains some characteristics that make it very different from the Army, Navy or Air Force. As noted, the Marine Corps also may be the most obvious analog to the Space Force. It is a military service, but within a military department that also oversees a much larger service. But the Marine Corps also has 10 times as many people as the Space Force, straining the analogy.

Similarities

The Marine Corps is the only service other than the Space Force that shares a military department named for another service, the Navy. And that matters practically, too. The Marines have no internal civilian oversight, relying on the Navy Secretariat for those tasks that have been reserved for civilian control, like acquisition oversight and formal budget authority. The Marines have no service academy, but instead rely for commissioned officers on graduates from the U.S. Naval Academy and officer candidate schools. The Marines have no internal medical system, civil engineering, or aviation training, instead relying on the Navy. The Marines have only two four-star generals, relying at the next level of command on three-stars, unlike the Navy (which has four four-stars reporting to the top two officers who are both four-stars) and the Air Force (which has six). Moreover, the staff at the Marines’ headquarters is only a third the size of that

of the Navy and a fifth the size of that of the Army or Air Force.

Yet the Marines have a distinct formal identity, with their own uniforms, ranks, heraldry, and band. They conduct their own recruiting and training. They manage their own promotions and installations. They design and procure unique equipment. And since 2018, they control their budget to the same degree the other services do.

Moreover, as more and more responsibility has moved to defense-wide systems, the Marines' reliance on the Navy has lessened. For example, in medical care, when the Navy owned the people, facilities, and funding for that care, the separate uniforms were a reminder of the Marines' dependence. Now that DHA controls the facilities and funding in addition to helping manage the personnel, the Marines' dependence on DHA is little different than the Navy's.

Differences

The most significant difference between the Marines and the Space Force is size. The Marines have an active endstrength of 186,000, including an officer corps of 21,000. The Space Force, in contrast, is projected to start with an endstrength of only 16,000. While the Marines' small staff size can be seen as an advantage, it can also be seen as a disadvantage forcing the Marines to coordinate even when outranked. While the Marines can rely on the Navy for many things, the Marines are large enough they can also choose not to, such as maintaining their own recruiting and training pipelines. The Space Force may not be able to choose to in many situations.

The second difference is the Marines' long existence, which relieves the need to worry that some sharing arrangements might limit its independence. The Marines had those fights for independence when Teddy Roosevelt tried to take Marines off Navy ships and when Harry Truman

sought to simplify the armed forces by merging the Marines with the Army. As detailed here, the Marines have had to fight for their organizational equities even in recent decades. But their long existence prevents minor considerations from seeming like existential threats, a luxury the Space Force, as a fledgling organization, may not have.

SOCOM

In contrast, SOCOM is not a military service. Instead, it is codified in Title 10 as a combatant command. And yet SOCOM is the closest predominantly military DOD organization in scale to the Space Force. SOCOM shares with its operational arm a relationship similar to the one the Space Force has with U.S. Space Command. SOCOM also provides an example of stripping a military capability from the traditional services and giving it its own organization while still relying on the traditional services for much support.

Similarities

Budgetarily, the Space Force has a \$14.4 billion budget for FY20 while SOCOM controls \$19.6 billion of MFP-11.³² SOCOM has a larger endstrength at 60,000, four times larger than the Space Force. But some of that is offset by the Space Force's role in a highly engineered domain, which drives a significantly higher RDT&E budget. Moreover, SOCOM was not much bigger in endstrength when it was first created.

Like the Marines and the Space Force, SOCOM is not totally independent. It does not manage its installations but remains a tenant on the services' bases. It relies on the services to procure its service-common items. And it does not conduct the initial recruiting or training of any of its people.

Even more interesting, SOCOM shares with the Space Force a unique relationship with operations, unlike other parts of the DOD. The Goldwater-Nichols Act of 1986 practically split the chain of command within the DOD into two: (1) an

administrative chain from the Secretary of Defense to the military departments and services responsible for organizing, training, and equipping forces and (2) an operational chain from the Secretary of Defense to the combatant commanders for conducting operations worldwide. This split allows the use of the same Marine Expeditionary Forces, Navy ships or Air Force fighters by multiple combatant commanders while also ensuring there is a single commander of operations and not a committee composed of each service's representative. The split has been effective for more than 30 years now.

SOCOM represents one of the exceptions to this paradigm. All special operations forces, whether they belong to the Army, Navy, Air Force or Marines are organized, trained, and equipped by SOCOM and SOCOM is also the combatant command directing those forces in operations. Though special operations forces wear different uniforms, SOCOM fills both roles: training and equipping their forces and conducting their operations.

Space forces, too, will soon enjoy this direct relationship between training and equipping forces and conducting operations. The relevant combatant commander, U.S. Space Command (SPACECOM) has already been charged by the 2019 Unified Command Plan with all operations in the geographic area 100 kilometers above the earth and higher with specific exceptions for those key ground capabilities that affect events in space. When the transitions are complete, the Space Force is expected to control all dedicated space capabilities from across the Department of Defense, including the Army's 53rd Signal Battalion's Wideband Gapfiller Satellite, the Navy's Mobile User Objective System ultra-high frequency satellite program, and the Space Development Agency's programs by 2023.

Though all combatant commanders rely on space assets to conduct operations and all services rely on

space assets to make their units most effective, operations in space will be conducted by SPACECOM and capabilities will be organized, trained, and equipped by the Space Force. That also means there will remain an organizational split between the administrative and operational chain, unlike SOCOM. Nevertheless, SOCOM represents the closest parallel in the DOD among non-military service organizations.

Differences

The obvious difference is SOCOM is not a service. It is not listed as one in Title 10. SOCOM's servicemembers wear the uniform of their parent service. If the Space Force is to be a service, it will almost certainly develop unique uniforms, though the Coast Guard and Public Health Services rely at least in part on Navy-based uniforms. Moreover, that SOCOM is not a service is also a bit of a pretense. Colloquially, SOCOM is often referred to as the fifth service and has a larger endstrength than the U.S. Coast Guard, which formally is a military service despite reporting to the Department of Homeland Security. Nevertheless, SOCOM has never sought to clarify its unique role in the DOD, remaining unique and never formally being considered a service, which the Space Force was born as.

Also, unlike the Marines, SOCOM does have its own civilian control, albeit without a formal Secretary of SOCOM. The original legislation creating SOCOM also mandated an Assistant Secretary of Defense for Special Operations and Low-Intensity Conflict (ASD(SO/LIC)). ASD(SO/LIC) was supposed to protect special operations within Pentagon processes. In practice, SOCOM successfully built a Washington office that allowed SOCOM to fare well in Pentagon processes directly. In recent years, Congress has sought to reenergize this independent civilian control.³³

The Marine Corps is a military service and SOCOM is not. Yet both also represent the fragmentation of

authority from the traditional big three services. Both organizations have flourished relative to the three large services. Where the Army, Navy, and Air Force have lost personnel and budget share within the Department, the Marines and SOCOM have gained in both. Because the Space Force is formally designated a military service, it cannot be lumped into the Fourth Estate, as can SOCOM. Yet critiques of the Fourth Estate rarely take direct aim at SOCOM.

The Space Force joins the Marines as a military service that must share a military department. But the Space Force also joins SOCOM as an

organization created because the traditional military services were not trusted to develop a particular military capability.

Implications

The Space Force must negotiate the fragmented DOD while establishing the Space Force’s foundation. As a military service, the Space Force has a clear claim to operational responsibility and funding. Yet it will have to draw on services and support that are scattered throughout DOD. It will also have to be wary of the large military services’ concerns over their own loss of authority,

			
	Marine Corps	Space Force	SOCOM
Designated a service	Yes	Yes	No
OT&E responsibilities	Yes	Yes	Yes
Operational responsibilities	No	No	Yes
Dedicated civilian control	No	No ^a	Yes
Owns bases	Yes	No	No
Unique uniforms	Yes	Yes ^b	No
Service academy	No	No	No
Organic health care	No	No	No
Uniformed personnel strength	186,000	16,000	60,000
Budget	\$41.2B	\$15.4B	\$14.4B
Four-star flag officers	2	2 ^c	1
Staff size	2,331	800 ^d	1,755
Founded	1775	2019	1987

^a The FY20 creates a new Assistant Secretary of the Air Force for Space Acquisition and Integration but the Space Force reports through the same civilian chain as the Air Force.

^b The Space Force has said it will have unique uniforms but has not yet announced them.

^c The Space Force has proposed a four-star Vice Chief of Space Operations but it has not yet been authorized in law.

^d Initial staff projection though the Chief of Space Operations has expressed an intent to shrink the staff.

Figure 6: Similarities and differences of the Space Force, Marine Corps, and SOCOM.

responsibility, and resources. As a part of the Department of the Air Force, the Space Force particularly will have to navigate its relationship with the Air Force, both for support and for independence. In some ways, the fragmentation of the DOD helps the Space Force. The Space Force will draw on these common resources just as the big services do.

The Space Force and its leaders must establish the Space Force's unique role at a time when just being a military service does not provide the influence and autonomy it once did. The Space Force must navigate this fragmented DOD to get the support it needs, from both the Air Force and the rest of the DOD, while also maintaining its independence.

No extant model perfectly addresses the challenges and opportunities the Space Force faces. The Space Force will be a unique type of organization just like every other organization within the DOD. The Space Force will be more successful if it understands the long-term trend of fragmentation within the DOD and considers its implications when creating the relationships, processes, and traditions that will constitute the Space Force in the decades to come. Space Force leaders can capitalize on what has gone before by gleaning lessons from the similarities and differences the Space Force shares with other organizations.

Conclusion

The nation has now endorsed the importance of space to the U.S. military by creating a military

service dedicated to it. But the Space Force is being created at a time when being a military service means less than it ever has before. Largely to prevent any one service from dominating, the DOD has been fractured into many different organizations, all pursuing slightly different models of marrying their mission with the budget to carry the mission out. This fragmentation of the DOD has helped to underpin concerns that the military services are not powerful enough. Ironically, the loss of power the services feel has not been converted into power for the Secretary of Defense. Instead, the services have lost responsibility to an ever-proliferating number of organizations, which also complicates the Secretary of Defense's efforts to direct a cohesive approach to achieving our nation's security. Nevertheless, the military services remain important parts—likely still the central parts—of U.S. national defense.

Space Force leaders must then carve out a service even as the Space Force itself is an example of responsibilities taken away from the traditional services. While Space Force leaders can take some lessons from some existing models, the Space Force will likely be yet another unique organization. By understanding the broader trends occurring within the Defense Department, Space Force leaders can best design the first service of the 21st century. Ideally, the version of the Space Force they create will make all aspects of our national defense stronger.

Appendix I: Historical Development of a Fragmented DOD

This appendix provides greater detail on the developments that have carved mission areas, budgets, and organizations out of the military services for each group described in the section titled “The Fragmentation of DOD.” Each step at the time it was taken seemed reasonable and isolated. Only when considered all at one time does it become clear the DOD has fragmented over the past couple of decades despite there being no explicit or intentional goal of doing so.

Classified Spending

The largest pot of funding not controlled by the services is classified spending. This pot divides into three major categories: national intelligence funding, military intelligence funding, and some special access programs.

The DOD budget documents show \$68 billion worth of classified spending throughout the department, including within the military departments. Coupled with the nearly 15,000 uniformed active military personnel assigned to communications or classified activities, this funding constitutes 10.2 percent of the FY19 defense budget. Of that funding, \$22.2 billion is within the military departments. The different types of classified spending, though, have differing levels of service control. The services have little say over national intelligence funding, some say over military intelligence funding, and as much say as anything else in their portfolio over special access programs.

National Intelligence

National intelligence spending began to slip out of the control of the military services with the very creation of the Defense Department. The 1947 National Security Act, which created the DOD’s predecessor, also created the Central Intelligence Agency (CIA). The CIA was created outside of the military services but was supposed to be weak and

still subservient to the military services’ interests. But as it began covert action, it quickly became bureaucratically independent of the military services.³⁴

More independent agencies followed. In 1952, the National Security Agency was created to “be freed from the crippling line of subordination...to the [Joint Chiefs of Staff].”³⁵ In 1960, President Eisenhower created the National Reconnaissance Office to take intelligence satellites away from the Air Force.³⁶ In 1961, Secretary of Defense Robert McNamara consolidated military intelligence analysis in a defense agency outside of the military services.³⁷ The military services held on to their mapping and imagery organizations the longest. These were consolidated in 1972 but remained under collective service control. But in 1996, this consolidated organization was merged with other parts of the non-military intelligence community to create what eventually became the National Geospatial-Intelligence Agency.³⁸

The split between national intelligence and military intelligence became even sharper with the creation of the Director of National Intelligence (DNI) in 2005 as a response to September 11. Prior to the DNI, the head of the CIA had been called the Director of Central Intelligence, a position with responsibility for the broader intelligence community. While the CIA could serve as a counterweight to the Defense Department, the DNI provided a formal head, with the same cabinet rank as the Secretary of Defense, and authority over what was renamed the National Intelligence Program, the budget for national intelligence.

National intelligence is focused on providing information to the senior-most policymakers, not least the President. This mission is being conducted at all times, untied from preparing for the operational aspects of war.

The uniformed military remains one of the intelligence community's largest—or at least most numerous—customers and still contributes a significant share of the community's manpower. Moreover, the Secretary of Defense kept formal authority—if shared with the DNI—over the defense intelligence agencies.

But the military services have very little say in how the national intelligence budget is allocated with decisions produced by independent agencies and overseen by the DNI and their staff. OMB serves as the eventual enforcer keeping the military services from tapping NIP resources.

With the creation of independent organizations, distinct mission and a budget process outside the control of the services, national intelligence represents the first and largest fracturing of the preeminence of the military services.

Military Intelligence

The uniformed military remains a large consumer of intelligence and has a significant organic capability to collect, process, and disseminate it. But the military services have lost control over military intelligence as well.

Military intelligence has not had the formally independent organizations national intelligence has. But it has seen a split between the uniformed operator and the military services. The Goldwater-Nichols Act of 1986 created, in practice, two separate chains of command within the Department of Defense that had been in place since 1958. One chain was the traditional chain with the military services at its heart running to the Secretary of Defense. The other chain was an operational chain running from the Secretary of Defense to the combatant commanders, with the military services having no official role. The military services would

organize, train, and equip the forces, but the combatant commanders would use them. Military operations—the purpose of military forces—would not be the responsibility of the military services.

Intelligence plays a role in the military services' organize, train, and equip mission. It helps lay out how technology might develop and what adversaries might do in the future. Its most critical military role is supporting operations. The principal consumers of military intelligence became not the military services but the combatant commanders.

Still, the military services produce the personnel, units, and equipment that produced that intelligence. Even this, however, changed in the 2000s with the creation of the Under Secretary of Defense for Intelligence (USD(I)) and the role of that position in overseeing the Military Intelligence Program (MIP).

Secretary of Defense Donald Rumsfeld came to office in 2001 with a strong desire to create a counterweight within the Defense Department to the national intelligence agencies and a belief the military services were not focused on the right capabilities.³⁹ These beliefs combined in Rumsfeld's proposal for a senior, civilian point person for defense intelligence. He floated the idea to Senate Armed Services Committee leaders in 2001 and it was passed into law by the end of 2002.⁴⁰

After the DNI was created and given formal authority over the National Intelligence Program, Rumsfeld and his first USD(I) moved to consolidate, in 2005, the defense official's control of defense intelligence by combining two accounts: Tactical Intelligence and Related Accounts for programs solely within one military service and the Joint Military intelligence Program for programs "that crossed services."⁴¹ The MIP ended the

distinction between service intelligence assets and joint intelligence assets, both within the services and within DOD military intelligence agencies.

The budget decisions on these assets, however, were still made within the military services. But over the next few years, USD(I) developed a way to leverage the Defense Department's broader resourcing processes. All MIP accounts are tagged and USD(I) provides guidance to the military services and defense agencies on what levels these accounts should receive. When the services submit their proposed budgets to the Office of the Secretary of Defense for review, USD(I) scrubs the submissions for compliance. If the services have moved funds between MIP accounts, USD(I) submits an issue paper, the mechanism for questioning service proposals, that restores the funding in the accounts to their directed level. Because this issue paper is budget neutral—any increases in funding are offset with decreases in funding elsewhere—the resourcing process, using the Secretary of Defense's authority, can direct the services to heed the USD(I) direction. If the services have shorted MIP accounts and transferred the funds to other non-MIP accounts the services prioritize more, USD(I) can draw up an issue paper highlighting the discrepancy and relying on the broader resourcing process to force the services to restore the cuts. While the review portion of the DOD's budget process allows any organization in the DOD to comment on the services' proposed budget, USD(I) has coupled their management of the MIP to the Secretary of Defense's budget authority in a way few others have.

While the military services own the people, equipment, and funding within the MIP, they have lost the discretion to use those assets as they like. While not organized separately, the military intelligence program has a mission separate from the services and the budget decisions are made outside the services' control.

Special Access Programs

Another type of classified spending is special access programs. Some programs are classified and their budgets hidden in the single line rolling up classified funding.

The Reserve Component

The services have also lost a great deal of control over that funding that supports the National Guard and the military Reserves. In FY19, this was \$50.9 billion or 7.4 percent of the defense budget.

The National Guard

The National Guard was formalized as the militia of the United States with the Dick Act of 1903. The Dick Act provided the regular military services the advantage of codifying both what state militias were and their relationship to the regular military. It ensured the regular military was the final tool for military action by the United States. But the Act did so by enshrining a separate organization for the Guard and providing a federal subsidy for its costs. In a 1916 amendment, the subsidy became an annual budget and a central office was established overseeing the Guard. In 1933, this bureau was statutorily renamed the National Guard Bureau (NGB).⁴² Today, this basic deal still holds. In wartime and for certain ongoing operations, guardsmen are federalized and serve under active military commanders. However, the Guard enjoys a separate organization and budget the military services only partially control. The Guard makes up more than 60 percent of the \$50.9 billion reserve component budget.

The separate organization is reflected first and foremost in Guard units falling under the jurisdiction of U.S. states with the ranking member of each state being an adjutant general appointed by the governor (or, in one case, the state legislature) rather than being selected for promotion by the regular military services. Because of the Guard's

state-based organization, the leadership in the units becomes a political actor within the states as well, creating loyalties outside of the regular military.

But the state Guard units have sought to parallel the active military structure, organization, and mission.⁴³ As the Army has tank units, so does the Guard. As the Air Force has fighter units, so does the Guard. Moreover, no state Guard can afford the development and purchase of equipment or even training. That has left the military services as the developer of equipment and training for themselves and the Guard.

The Guard, however, also has a centralized voice in protecting its allocated resources. To first establish this voice, a 1920 statute mandated that the Chief of the NGB's precursor must come from the Guard and not from the regular Army.⁴⁴ The Chief of the NGB was given greater standing in 1979 with legislation granting them three-star rank.⁴⁵ And finally, in 2012 the Chief of the NGB was made a four-star general and member of the Joint Chiefs of Staff, and thus a peer of the military service chiefs.⁴⁶ The NGB Chief is not formally in charge of any of the state adjutant generals but he does provide a single actor who can advocate for the Guard and coordinate tensions between the state Guards rather than leave each of the 50 state Guards to interact with a service chief and his staff directly.

Moreover, the Guard enjoys the support of Congress. While the Secretary of Defense is likely to side with the active services chiefs against the Guard, Congress is not. Because Congress is elected on a geographic basis, Congress has a greater loyalty to the Guard's local political clout than the active military's national and diffuse clout. Congress also has the tools to enforce its preferences. Personnel costs, operations and maintenance as well as military construction are provided in distinct Guard appropriation titles. There is one separate procurement line, the National Guard and Reserve Equipment Appropriation. The

rest of procurement is not in separate titles, but the DOD provides Congress annually a supplement to its procurement request, listing what procurement funding is intended for the Guard.

The Guard then enjoys an organization separate from the military services with a budget semi-separate. In some ways, the Guard shares a mission with the active military and in some ways it has a distinct one. In all, the Guard represents a significant share of the budget the military services do not really control.

Reserves

The other part of the reserve components, the Reserves, are not as independent of the military services as the Guard. They make up about 37 percent of the \$50.9 billion reserve component budget.

What independence the Reserves have has come from efforts by the geographically organized Congress's efforts to protect the geographically organized reserves. The modern reserve system was formalized in 1952 creating the Reserve categories still in place today and for the next decade the active services strengthened their control over the Reserves.⁴⁷ This culminated in Secretary of Defense Robert McNamara in the 1960s proposed merging all Reserve components of the Army under the National Guard, leaving only individuals as reservists. In response, Congress appropriated funds separately to the National Guard and Reserves, and in 1967 made the Chief of the Army Reserve a statutory position requiring service in the Reserves.⁴⁸

This situation held until the 1990s when in the midst of the post-Cold War drawdown, the Defense Department proposed limiting the Reserves' role. In response, Congress affirmed the U.S. Army Reserve Command, created a few years earlier, and established the Naval Forces Reserve, Marine

Forces Reserve, and Air Force Reserve Commands.⁴⁹ In 2000, Congress legislated that the heads of these commands could be three-star flag officers and a year later mandated that they be.

This arrangement provides the Reserves a separate reporting chain, but the three-star flag officer in each of the services still reports to each service's chief without a separately centralized Reserve organization. The principal responsibility of these Reserve chiefs is the management of their budgets.⁵⁰

While not as independent as the Guard, the military services have also been forced over the years to respect some autonomy for the Reserves. Coupled with the Guard's even greater autonomy, the Reserve component does not wholly fall under the military services despite wearing the same uniforms.

Defense Health

Health spending in the DOD, already a large part of the DOD's spending, continues to grow faster than the rest of the DOD budget even while it is administered more and more outside of the services. In FY19, the defense health program was \$50.3 billion or 7.3 percent of the defense budget.⁵¹ While much of this spending goes to caring for the members of the services and their families, the funding is controlled not by the services but by the Defense Health Agency.

That control has been increasing for more than half a century. In the 1950s, military health care was expanded. Prior to 1956, it was principally focused on battlefield readiness: caring for servicemembers injured or sick while in combat.⁵² But as the rest of the United States transitioned to employer-provided health care, military health care was also expanded beyond battlefield readiness to provide military members—and their dependents—more non-combat health care. In 1966, this care was expanded to include insurance-like reimbursement of civilian sector-provided care and then, in the mid-1990s,

consolidating that insurance-like approach with direct care in military facilities.⁵³

These changes in how health care was provided were accompanied with changes in who budgeted and controlled military health care. In 1991, “all medical resources except military personnel funds and resources in support of deployed medical units” was taken out of the services and put under the control of the Assistant Secretary of Defense for Health Affairs (ASD(HA)).⁵⁴ This change is easily visible in budget records as the \$10 billion a year in then-year dollars Defense Health Program appears in defense-wide accounts. The services still managed the medical treatment facilities on bases but the budget for them and the care they provided was controlled by ASD(HA).

In 1998, the TRICARE Management Activity was established to run the consolidated program health care program out of the Office of the Secretary of Defense, staffed mainly with ASD(HA) personnel.⁵⁵ Five years later, the ASD(HA) also became the Director of the TRICARE Management Activity with the deputy assistant secretaries also dual-hatted with TRICARE Management Activity responsibilities.⁵⁶ Prompted by congressional language, in 2013 the Deputy Secretary of Defense ordered the establishment of a Defense Health Agency (DHA) overseen by, but separate from, ASD(HA).⁵⁷ In the FY17 NDAA, Congress took the further step of relieving the services of administering military medical treatment facilities and giving this responsibility to DHA.⁵⁸

The intent of these changes was to focus the services on the readiness mission of providing trauma care in combat, centralizing beneficiary and peacetime care in DHA.⁵⁹ As medicine has specialized ever more, these different roles have also diverged. As such, the reforms have allowed the services to concentrate on their fundamental mission. Nevertheless, the result is still a reduction in service responsibility and control.

Military health care has now had an independent budget for 30 years and now has a dedicated, separate organization administering that health care, including the traditionally service-run military medical treatment facilities. By focusing on beneficiary care rather than combat treatment, DHA and military health care has a mission separate from the services as well.

The Marine Corps

It may seem obvious the Marines are a military service: they have people who identify first and foremost as a Marine, with unique uniforms and a long, martial history. But the Marines have only achieved the full institutional role of a service over the last few decades and achieved control over their budget only in the last few years. Today, the Marines lay claim to \$41.2 billion or 6.0 percent of the defense budget. Though this budget comes most directly from the Navy, the Marines' growth as a truly independent service in the last few decades has meant a concomitant loss to all the other services.

Despite dating their history to the Revolutionary era, the Marines, after World War II, felt their independent existence was so under threat, they had a minimum force structure written into statute.⁶⁰ The Marines were not wrong to feel slighted. The document that set out post-war roles for the services regularly referred to "the three major Services," considering the Marines only as an adjunct of the Navy.⁶¹ The same statute fixing their organization also laid out that the Commandant would join meetings of the Joint Chiefs only when they were considering a matter that "directly concerns the United States Marine Corps" and provided the Secretary of Defense could overrule the Commandant's judgment of when a matter did concern the Marine Corps.⁶² In the mid-1950s, the Marines made up less than 7 percent of the DOD's endstrength and was less than a third the size of the Navy.⁶³

Over the next 70 years, the Marines have evolved into a coequal service of the Army, Navy and Air Force but it has been a slower process than many understand. The Commandant did not become a full member of the Joint Chiefs of Staff until 1978 after the Commandant, General Louis Wilson, championed legislation making it so.⁶⁴ No Marine led a combatant command until 1985 when General George Crist took over Central Command, and it was not until 1995 that a Marine commanded any COCOM besides CENTCOM. No Marine served as Chairman of the Joint Chiefs of Staff until Peter Pace in 2005, almost 20 years after Goldwater-Nichols and 60 years after the position was created.

Even more damning, the Marines have not controlled their own budget until very recently. Technically, the Marines receive their funding through the Department of the Navy. Much of the funding, though, comes in Marine Corps-unique appropriation titles like "Military Personnel, Marine Corps" and "Procurement, Marine Corps." Colloquially, these accounts were called Green Dollars and represented "the resources that we unilaterally program."⁶⁵ But the Marines also rely on other funding that was jointly programmed by the Navy and the Marine Corps; such funds "primarily support our aviation requirements under the broader classification of Naval Aviation, and generally provide assets used directly by Marines. Certain items of communications gear may also fall in this category."⁶⁶ Up until 2018, the Marines did not directly control this funding but had to coordinate with the Navy to achieve their goals, particularly in aviation programs. With the FY19 budget request, Marine Corps programs are now delineated at the program element level, giving the Marines control over most of their budget only in the last couple of years.

Today, the Marines still rely on the Navy for their medics, even in combat, and much of their

administrative support. The Marines remain notably smaller in budget terms than the other services, with about a third as much funding, as laid out in Appendix II. The Marines are represented as COCOM commanders at only a 1:3 ratio to the rest of the services.⁶⁷ Though the Marines have also always been a distinct organization with a distinct

mission, the rise of the Marines to being a coequal service is another long-term trend that has eroded the central importance of the Army, Navy, and Air Force within DOD. Today, the Marines are now half as big as either the Navy or Air Force and make up 14 percent of the DOD's endstrength, almost twice what they did in the 1950s.

Table A1: Key Developments in Nonmilitary Department Organizations Control of Funding

Year	National Intelligence	Military Intelligence	National Guard/Reserves	DHP	Marine Corps	SOCOM	MDA
1903			Dick Act				
1916			Amendment to the Dick Act				
1933			NGB Created				
1947	CIA created						
1952	NSA created		Reserve categories formalized		Force structure fixed in statute		
1956				Beneficiary care			
1960	NRO created						
1961	DIA created						
1972	Defense Mapping Agency created						
1978					CMC full member of JCS		
1979			NGB Chief third-star				
1984							SDIO created
1985					First Marine COCOM		
1987						SOCOM established	
1991			Army Reserve Command created	DHP consolidated			
1994							Renamed BMDO

Table A1: Key Developments in Nonmilitary Department Organizations Control of Funding

Year	National Intelligence	Military Intelligence	National Guard/Reserves	DHP	Marine Corps	SOCOM	MDA
1995					First non-CENTCOM Marine COCOM		
1996	NGA created		Reserve Chiefs mandated				
1998				TMA created			
2001			Reserve Chiefs third-star				
2002		USD(I) created				Given synchronizer role	Renamed MDA
2003				ASD(HA) dual-hats as TMA			
2005	DNI created	TIARA and JMIP become MIP			First Marine CJCS		
2012			NGB Chief on JCS				
2013				DHA created			
2018					Control of BISOG		
2019				DHA runs MTF			

See Table A2 for history of Defense Agencies and Field Activities.

Special Operations

SOCOM may be the archetypal example of the services losing authority and responsibility. SOCOM has a distinct budget, a distinct organization, yet pulls its people from the military services and applies them to a mission—the use of force overseas—very similar to the other services. Moreover, that mission and budget was intentionally and consciously taken from the services, and has been favored almost ever since it was. Today, SOCOM controls \$18.9 billion of defense spending or 2.7 percent of the defense budget.

Though the services had always maintained special units, in 1986 Congress passed the Nunn-Cohen amendment to wrest these forces away from the services and give them to a new type of organization. SOCOM was created as a combatant command that also has organize, train, and equip responsibilities with the intent to incubate forces reformers believed the services neglected.⁶⁸ Even after the legislation was passed, the DOD and the services resisted assigning SOCOM forces and giving it independent control of its budget. Only after a 1989 Deputy Secretary memo was SOCOM in charge of its budget.⁶⁹

SOCOM's budget is best captured by Major Force Program-11 (MFP-11), created when SOCOM was created. Major force programs are defense budget accounts that cut across appropriation titles and organization. MFP-11 includes two types of funding: the defense-wide appropriations provided directly to SOCOM for what are known as SOF-unique capabilities, about \$13 billion, and the service common costs for both procurement and personnel still appropriated to the services, about \$5 billion, on which SOCOM builds its special operations forces. Though the military personnel costs are not appropriated to SOCOM, SOCOM's endstrength is accounted for by SOCOM taking much of that funding out of the services' control. Similarly, procurement of service-common

equipment is still technically in the services' budgets, but since large procurement items can be tracked individually, the services do not fully control that funding.

Since SOCOM's creation, it has grown in size and independence. SOCOM was originally created with around 20,000 personnel, but is now up to 60,000 active members and another 8,000 reserve members. Before September 11, 2001, SOCOM's budget was only \$3.2 billion, less than a sixth its current size. Moreover, SOCOM has gained greater independence, most notably in the 2004 Unified Command Plan which designated SOCOM as “the lead combatant commander for planning, synchronizing, and as directed, executing global operations against terrorist networks...”⁷⁰ That designation gave SOCOM a mission it controlled distinct from other combatant commanders, which when coupled with its ability to organize, train, and equip in support of that mission gave it greater independence from the services.

SOCOM is maybe the most direct example of the services losing responsibility and authority. SOCOM represents an explicit wresting from the services of a mission performed by uniformed personnel on a daily basis. Its growth in size and independence highlights that the initial choice to take it from the services has been further ratified over time.

Missile Defense Agency

The Missile Defense Agency (MDA) again represents intentionally taking responsibility away from the services. It is an organization outside of the services with a dedicated budget outside of the services' control. In FY19, it had a budget of \$10.3 billion or just under 2 percent of the defense budget.

MDA dates its history from the creation of the Strategic Defense Initiative Organization (SDIO) in 1984. SDIO itself was created to oversee the Reagan administration's ballistic missile defense program

outside of the usual military bureaucracy, predating the creation of even SOCOM.⁷¹ SDIO was renamed the Ballistic Missile Defense Organization in 1994 and then the Missile Defense Agency in 2002, but throughout it was structured as a defense agency outside of any military department.

MDA's relationship with the military services has waxed and waned over the years, principally depending on whether it was focusing more on theater missile defense or national missile defense. Theater missile defense necessarily required closer coordination with the military services since it relied on service-owned and operated systems.⁷² In contrast, the national missile defense mission has tended to involve unique research and development programs directed more unilaterally by the defense agency.⁷³ For the most part, missile defense operations are still conducted by uniformed personnel whose first loyalty is to their service, not to MDA.

MDA is organized outside of the military departments controlling a significant amount of funding determined through little coordination with the services. Since its inception, it has been a key element of the fragmentation of responsibility within the DOD.

Other Defense Agencies

The defense agencies are in some ways the purest expression of the decline in service preeminence.

They are intentionally organized separate from the services with their own budgets. Totaled up, they account for \$25.2 billion or 3.7 percent of the defense budget. But, in other ways, the defense agencies serve solely as relatively efficient support for the services. Besides MDA, the largest agency has a budget of only \$3.4 billion or less than half a percent of the defense budget (see side box for more detail). For most, their mission is only independent in an administrative sense as they support the broader purpose of the services.

As part of the 1958 Defense Reorganization Act, Congress authorized the Secretary of Defense to create defense agencies to improve “effectiveness, economy or efficiency...for the carrying out of any supply or service activity common to more than one military department.”⁷⁴ Importantly, these agencies were outside the three military departments and their services. The first two agencies created under this Act were existing organizations that were renamed. The Armed Forces Special Weapons Project had been created in 1947 along with the civilian Atomic Energy Commission to manage the atomic military functions.⁷⁵ In line with the new law, it was renamed the Defense Atomic Support Agency in 1959 (eventually becoming today's DTRA). And Defense Advanced Research Project Agency (DARPA) predated the 1958 reorganization act by six months, created to emphasize basic and applied research and development following Sputnik.⁷⁶

Table A2. Defense Agencies and Field Activities

Defense Agency or Field Activity	Established (or Predecessor)	Predecessors
National Security Agency ^b	1952	None
National Geo-Spatial Intelligence Agency ^b	1953	National Photographic Interpretation Center, Defense Mapping Agency, Defense Dissemination Program Office, Central Imagery Office, National Imagery and Mapping Agency ^c
Defense Threat Reduction Agency	1958	On-Site Inspection Agency, Defense Special Weapons Agency, Defense Nuclear Agency, and the Defense Technology Security Administration
Defense Advanced Research Projects Agency	1958	Advanced Research Projects Agency
Defense Information Systems Agency	1960	Defense Communications Agency
National Reconnaissance Office ^b	1961	None
Defense Logistics Agency	1961	Defense Supply Agency
Defense Intelligence Agency ^b	1961	None
Defense Contract Audit Agency	1965	Defense Audit Service
Defense Civil Preparedness Agency	1972	Transferred to Federal Emergency Management Agency in 1979
Defense Human Resources Activity	1974	Defense Manpower Data Center and Civilian Personnel Management Service
Washington Headquarters Services ^a	1977	None
Defense Security Cooperation Agency	1978	Defense Security Assistance Agency
Office of Economic Adjustment ^a	1978	None
Defense Technical Information Center ^a	1979	Air Documents Research Center
Defense Media Activity ^a	1979	Defense Audiovisual Agency
Defense Legal Services Agency	1981	None
Missile Defense Agency	1984	Strategic Defense Initiative Organization and Ballistic Missile Defense Organization
Defense Commissary Agency	1990	None
Defense Finance and Accounting Service	1990	None
Defense POW/MIA Accounting Agency	1993	Defense POW/Missing Personnel Office and Joint POW/MIA Accounting Command
Defense Security Service	1997	Defense Investigative Service

Table A2. Defense Agencies and Field Activities

Defense Agency or Field Activity	Established (or Predecessor)	Predecessors
Defense Contract Management Agency	2000	Current
Defense Technology Security Administration ^a	2001	None
Pentagon Force Protection Agency	2002	Defense Protective Service
Defense Test Resource Management Center	2004	None
Defense Business Transformation Agency	2005	Disestablished 2011
Defense Health Agency	2013	TRICARE Management Activity

^a Field Activity

^b Intelligence agency

^c "The Advent of the National Geospatial-Intelligence Agency," Office of the NGA Historian, September 2011, p. 21-24.

But in 1960, Secretary of Defense Thomas Gates created the Defense Communications Agency. All the services had been developing their own long-haul telecommunications systems. All the services recognized their respective systems needed to talk to the other services' systems, but none did.⁷⁷ The Army proposed taking operational responsibility for all the services' systems but the Navy and Air Force countered by proposing an independent agency to consolidate responsibility.⁷⁸ As has occurred frequently, when the services recognized a common need they preferred an outside agency take over rather than trust each other. Secretary Gates ratified

the counterproposal, creating the first new defense agency, which is still in operation today as the Defense Information Systems Agency.

The next Defense Secretary, Robert McNamara, then centralized common functions despite the services' protests. In 1961, his first year in office, he created both the Defense Intelligence Agency and the Defense Support Agency, which has become the Defense Logistics Agency.⁷⁹

More defense agencies have been created over the years. Today there are 19 defense agencies and eight

Working Capital Funds

Defense Agencies' budgets are complicated by Working Capital Funds (WCFs). The budget figures used here are direct appropriations to the defense agencies. But many defense agencies operate as WCFs.

DOD's Financial and Management Regulation describes WCFs as such:

Revolving funds were established to satisfy recurring Department of Defense requirements using a businesslike buyer-and-seller approach. The generators of requirements justify the need for funds to the Congress, but are not always the organizations that execute the requirement. In some instances, the "customers" or "buyers" contract with DoD "provider" or "seller" organizations that have expertise in the service or product required, and operate under business financial management principles. Unlike profit-oriented commercial businesses, the revolving funds goal is to break even over the long term. Revolving fund selling prices established in the budget are stabilized or fixed during execution to protect customers from unforeseen fluctuations that would impact on their ability to execute the programs approved by the Congress.

These arrangements mean much greater sums flow through some defense agencies than just their direct appropriations. For instance, in FY19 the Defense Logistics Agency had a direct appropriation of \$800 million but had revenue of \$44.7 billion. This revenue comes from the services and other customers but then DLA provides \$44.6 billion worth of goods and services to the services and other customers.

While some express frustration with how WCF operations work, most believe it achieves the business-like efficiency the funds are supposed to achieve. For more information, see:

- ◆ "Defense-Wide Working Capital Fund Agencies Apply Most Key Operating Principles but Should Improve Pricing Transparency," Government Accountability Office, GAO-20-65, November 2019.
- ◆ DoD Financial Management Regulation Volume 2B, p. 9-1, June 2004.
- ◆ "Working Capital Fund FY2019 Agency Financial Report," Defense Logistics Agency, p. 25.

defense field activities with another 16 agencies that once existed now disestablished (as captured in Table A2).⁸⁰ Most of those disestablished evolved into current counterparts and of the 19 current ones, four are parts of the intelligence community and others reside in the Defense Health Agency and Missile Defense Agency (discussed above because of their unique roles).

Defense agencies are the epitome of the Fourth Estate and so are regularly complained about, a dynamic that is not new. The Goldwater-Nichols Act tried to grapple with the defense agencies, endeavoring to make those with an operational role more responsive by designating them Combat Support Agencies and by trimming their size. One part of this effort was forcing the DOD to report regularly whether the defense agencies were the most efficient way to achieve their goal.⁸¹

Despite the concerns, consolidating has continued to be an attractive answer, even to the services, when confronted with a need for greater efficiency. The Defense Media Activity consolidated all of the services' media components, providing the services continued audio-visual support while taking most of the costs off their books. The Defense POW/MIA Accounting Agency absorbed the Joint POW/MIA Accounting Command from a service-support COCOM element. And Washington Headquarters Services continues to take on more responsibility for

administration of the National Capital Region, relieving the services of each maintaining independent resources.

Moreover, despite the fear that these consolidations led to empire-building, many of the agencies have seen their number of personnel decline over the last 20 years (as shown in Table A3). Personnel increases in agencies mainly stem from the reorganizations and consolidations discussed above. Even then, overall, these agencies show an 18 percent decline in personnel over 20 years.⁸² In contrast, the Army, Navy, and Air Force have seen their number of personnel decline by just under 9 percent in that period and the Marines have grown by 8 percent.⁸³ That greater relative decline is prima facie evidence for more efficient management through consolidation, the main purpose of defense agencies.⁸⁴

Nevertheless, that main purpose, consolidation for efficiency, is a direct attack on the autonomy and self-sufficiency of the military services. Efficiency is achieved by organizing and budgeting tasks separately from the services, even when the services have a significant stake in those tasks. In that sense, defense agencies represent an 80-year trend of taking responsibility from the military services.

Table A3: Defense Agency Personnel Over Time

	FY98	FY08	FY18	Change
DMA ^a	902	588	1,469	+567
WHS	1,532	2,354	2,034	+502
DHRA ^b	693	897	1,193	+500
DPAA ^c	101	115	576	+475
DLSA	101	359	412	+311
PFPA ^d		971	1,282	+311
DSCA	305	816	460	+155
DCAA	4,336	3,989	4,438	+102
DARPA	156	167	177	+21
DTRA	1,965	1,737	1,984	+19
DTRMC		34	34	0
OEA	52	39	41	-11
DTSA		232	152	-80
DTIC		307	208	-99
DSS ^e	2,465	727	852	-1,613
DODEA	13,276	12,733	11,972	-1,304
DeCA	17,051	14,743	13,604	-3,447
DLA & DCMA ^f	46,205	32,812	38,033	-8,172
DFAS	20,396	11,713	11,795	-8,601
BTSA ^g		309		
Total	109,536	85,642	90,716	-20,364

^a AFIS only in 1998 and 2008. FY18 reflects the consolidation of AFIS with the Media Components of the Army, Navy, Air Force, and Marine Corps into DMA.

^b DHRA has had a number of additions in this time period: Office of the Actuary in 2003, SAPRO in 2005, DTMO in 2006, DCPAS and DLNSEO in 2012, DSPO in 2013, OPA in 2016, DANTES in 2017, and DMOC and DEOC in 2018. Source: "Business Operations Plan: FY20-26," Defense Human Resources Activity, p. 4.

^c DPMO and not including JPAC in 1998 and 2008.

^d PFPA was created in 2002 from elements within WHS.

^e Responsibility for personnel security investigations transferred to OPM in 2005.

^f DCMA broken out from DLA in 2000.

^g BTSA established in 2005 and disestablished in 2011.

DISA is rolled into intelligence agencies in data so not displayed separately.
Source: FY20 and FY00 Defense Manpower Requirements Report, table 2-4.

External Funds, COCOMs and Oversight

Finally, three smaller, but distinct types of funding lie largely outside of the control of the services: passthroughs, COCOMs and oversight.

External Funds

Several funds are appropriated to the Army, who oversees their execution, but for purposes outside the service. These include \$4.9 billion for the Afghanistan Security Forces Fund (ASFF), \$1.4 billion for the Counter ISIS Train and Equip Fund (CTEF), and \$1.0 billion for chemical agents and munitions destruction (CMD). ASFF provides equipment and training for Afghan forces. CTEF provides the same for non-U.S. forces supporting the counter-ISIS mission. CMD destroys the U.S. inventory of lethal chemical agents and munitions in accordance with the Chemical Weapons Convention. While all are important, the funding passes through the Army to outside militaries and groups. Together, they make up \$7.3 billion, about 1 percent of the defense budget.

COCOMs

The Combatant Commands are budgeted through the services and rely on military personnel. But the

COCOMs report directly to the Secretary of Defense through a separate chain of command than the services, blunting the services' control of the funding. In total, the COCOMs control about \$4.5 billion, which is seven-tenths of a percent of the defense budget. Each COCOM averages \$260 million in operations and maintenance funding each year and about 2,300 people, both military and civilian. While the COCOMs are not usually the specific examples invoked, they do represent a prominent, if budgetarily small, part of the Fourth Estate.

Oversight

The most prominent part of the Fourth Estate and the one that draws the services' ire most is probably the top-level oversight functions of the Department, specifically the Office of the Secretary of Defense (OSD), the Joint Staff (TJS), and the Office of Inspector General. OSD and TJS are organizations outside the control of the services. They are also organizations with claims to direct the services. The Office of the Inspector General also explicitly stands outside the control of the services but is not usually considered as controlling the services.

Appendix II: Methodology and Sources

Part I: The Fourth Estate Fallacy

Defense-wide and Defense Health Program was data taken from Office of Management and Budget FY20 Budget Request Public Budget Database in budget authority. Discretionary funding only.

- ◆ BRAC line from same source compiling three accounts: “Department of Defense Base Closure Account 1990,” “Department of Defense Base Closure Account 2005,” and “Department of Defense Base Closure Account.” These accounts are tied to the specific BRAC rounds and are mainly used to fund service activities but are uneven over time.
- ◆ War line is two accounts: “Iraq Freedom Fund,” which is appropriations to fund the invasion of Iraq and spikes in 2003 and “Defense Emergency Response Fund,” which is appropriations to fund operations after September 11 and spikes in 2001.
- ◆ Transfer Funds are “Drug Interdiction and Counter-Drug Activities, Defense,” “The Department of Defense Environmental Restoration Accounts,” and “Department of Defense Acquisition Workforce Development Fund.” These funds spend out through other accounts, with residuals providing uneven funding over time.

SOCOM compiled from Department of Defense Budget Request Appropriation Title Summaries for Defense-wide funding (dash-one manual) from 1996 to 2020 and from OMB President’s Budget Request Appendix from 1993 to 1996.

Classified taken from Defense-wide O&M for Budget Activity 4, Budget Activity Group “Classified programs” or “Other programs.” Before 1996, the funding line “Intelligence and Communications Activities” from OMB PB

Appendices for Department of Defense—Military Programs.

MDA taken from “Historical Funding for MDA FY85-17,” Missile Defense Agency, https://www.mda.mil/global/documents/pdf/FY17_histfunds.pdf.

Part II. Fragmentation of DOD

Source: Department of Defense Appropriation Title Summaries (dash-one manual) for PB20 request.

Classified funding taken from O&M Activity Group “Classified Programs” and Subactivity Group or Budget Line Item, “Classified Programs” across O&M, Procurement, and RDT&E titles. Also includes the account “Classified Program USD(P).” Also includes identified Procurement and RDT&E accounts for National Security Agency in DW. MILPERS allocated based on FY20 Defense Manpower Requirements Report, Office of the Assistant Secretary of Defense for Manpower & Reserve Affairs Total Force Manpower & Resources Directorate, April 2019, (DMRR) Table 2-4, Manpower in Defense-Level Activities and Accounts. Service levels proportioned at share of officer population of active military, DMRR Table 1-4. Cost per military member calculated by dividing Pay and Allowances of Officers by total active officers.

Guard/Reserves taken from all O&M, MILPERS, and MILCON accounts labelled as for National Guard or Reserves. Procurement taken from “Procurement Programs Reserve Components.” No selected reserves personnel costs apportioned for defense agencies or other defense-wide activities.

Marines calculated for FY19 by applying percentage shares for Navy and Marine Corps by appropriation title included in FY20 Budget Rollout Brief.

Defense Health Program includes DHP funding across titles (found only in O&M summaries within budget documents); Medicare-eligible health care contributions. It apportions the military personnel figure found in the FY20 Budget Overview Figure, 2.1, by number of service personnel found in FY20 DHP Exhibit PB-11A. It does not include \$400 million in military construction noted in the Budget Overview.

Other Defense Agencies are DW O&M, Procurement, RDT&E, and Revolving Funds with service personnel costs apportioned according to totals in DMRR Table 2-4 for the following agencies: Court of Appeals for U.S. Armed Forces (CAAF), Defense Advanced Research Projects Agency (DARPA), Defense Acquisition University (DAU), Defense Contract Audit Agency (DCAA), Defense Contract Management Agency (DCMA), Defense Commissary Agency (DeCA), Defense Human Resources Agency (DHRA), Defense Information Systems Agency (DISA), Defense Logistics Agency (DLA), Defense Legal Services Agency (DLSA), Defense Media Activity (DMA), Department of Defense Education Activity (DODEA), Defense POW/MIA Accounting Office (DPAA), Defense Security Cooperation Agency (DSCA), Defense Security Service (DSS), Defense Technical Information Center (DTIC), Defense Threat Reduction Agency (DTRA), Defense Technology Security Administration (DTSA), Office of Economic Adjustment (OEA), Space Development Agency (SDA). Also includes all DW MILCON.

SOCOM O&M, RDT&E, and Procurement taken from DW summaries. Remainder of MFP-11 as shown in DOD FY20 Greenbook Table 6-4 apportioned by personnel found in DMRR “USSOCOM Manpower Narrative.” No service-common procurement costs accounted for.

Space uses MFP-12 from DOD FY20 Greenbook Table 6-4. All attributed as Air Force funding. This

methodology overcounts Air Force funding in MFP-12 by not attributing some funding to other services. This overcount is offset by Secretary of the Air Force formally designating additional accounts to be directed to the Space Force but not publicly released yet. This methodology predates the declassification of the Space Force budget in the FY21 budget request.

MDA is DW O&M, Procurement and RDT&E plus apportioned cost of 123 MDA active military from DMRR Table 2-4. It does not include operational units or service missile defense capabilities.

Passthroughs include Chemical Agents & Munitions Destruction, Afghanistan Security Forces Fund, and Counter ISIS Train and Equip Fund (CTEF). All from Army.

COCOMs are Army accounts for Combatant Command Support, Navy accounts for Combatant Commanders Core Operations and Direct Mission Support, and Air Force accounts for COCOM plus proportional MILPERS cost to DMRR Table 2-4.

Oversight is the following line items: Office of the Secretary of Defense; Joint Chiefs of Staff; Systems Engineering; Major Equipment, OSD; Technical Studies, Support and Analysis; Joint Staff Analytical Support; Support to Networks and Information Integration; OUSD(C) IT Development Initiatives; General Support to USD (Intelligence); Major Equipment, TJS; Wargaming and Support for Strategic Analysis (SSA); Studies and Analysis Support – OSD; Planning and Decision Aid System (PDAS). All Operational Test & Evaluation funding and Office of the Inspector General Funding. Plus proportional MILPERS costs tied to DMRR Table 2-4.

DW captures the remainder of funding not described above.

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References

- ¹ “Remarks by President Trump at Signing Ceremony for S.1790, National Defense Authorization Act for Fiscal Year 2020,” Joint Base Andrews, Prince George’s County, Maryland, December 20, 2019.
- ² Builder, Carl. *The Masks of War: American Military Styles in Strategy and Analysis*, (Johns Hopkins University Press: 1989), p. 4.
- ³ Eaglen, Mackenzie. “Esper Is Attempting the Biggest Defense Reform in a Generation,” DefenseOne, January 15 and Sydney Freedberg, Jr, “2020 SecNav Spencer Seeks Goldwater-Nichols Changes After Deadly Collisions,” *Breaking Defense*, December 14, 2017; and Government Accountability Office, “Military Service Chiefs’ Concerns Reflect Need to Better Define Requirements before Programs Start,” GAO-15-469, June 2015.
- ⁴ Reichmann, Kelsey. “This is who wants to reform the Fourth Estate now,” Defense News, July 22, 2019.
- ⁵ Locher III, James R. “Has It Worked?—The Goldwater-Nichols Reorganization Act,” *Naval War College Review*, Vol. 54 (2001), No. 4.
- ⁶ Serbu, Jared. “30 years after Goldwater-Nichols, Senate eyes another DoD reorganization,” Federal News Network, November 11, 2015.
- ⁷ Cancian, Mark. “Why Chairman Thornberry Failed to Tame DOD’s Fourth Estate,” *Breaking Defense*, May 25, 2018.
- ⁸ Secretary of Defense Mark Esper, Keynote Address by Secretary of Defense Mark T. Esper at the Reagan National Defense Forum, December 7, 2019 and Mac Thornberry, “Congress must act to rein in DOD waste, red tape,” *Military Times*, April 24, 2018.
- ⁹ The Fourth Estate in budget terms refers to the DOD category defense-wide spending, which captures all spending not managed by a Military Department. This report will use only discretionary spending. These figures reflect the calculations in the following charts. See appendix II for full details.
- ¹⁰ See Appendix I for a greater discussion on the relative decline of defense agencies. Personnel data taken from FY20 and FY00 Defense Manpower Requirements Report, Table 1-1.
- ¹¹ CBO found a similar point when looking at DOD’s operations and support costs, identifying increased medical costs as the greatest driver. Operations and support costs are not directly analogous to defense-wide spending because it captures spending in the military services as well. “Trends in the Department of Defense’s Support Costs,” Congressional Budget Office, October 4, 2017.
- ¹² Hitchens, Theresa. “Budget Battles: IC Costs Mean Air Force Gets Short Straw, Say Advocates,” *Breaking Defense*, January 16, 2020.
- ¹³ Hyten, John. “Thoughts on National Security Space Organization,” January 2017, captured in Gary Shugart, “Army’s Voice in Space,” Purview, April-June 2018. He was responding to recommendations found in “Defense Space Acquisitions: Too Early to Determine If Recent Changes Will Resolve Persistent Fragmentation in Management and Oversight,” Government Accountability Office, GAO-16-529R, July 27, 2016.
- ¹⁴ Harrison, Todd. “Why We Need a Space Force,” Center for Strategic and International Studies, October 3, 2018.
- ¹⁵ When first created in 1947, the overarching agency was called the National Military Establishment. Not until 1949 was the Department of Defense formally created and the Departments of Army, Navy and Air Force downgraded to “military departments” rather than cabinet departments.
- ¹⁶ DOD FY20 Greenbook, Table 7-5. The Marine Corps had only 74,000 personnel, or less than 20 percent of the smallest service, the Navy.
- ¹⁷ “U.S. Intelligence Community Budget,” Office of the Director of National Intelligence, accessed June 19, 2020, <https://www.dni.gov/index.php/what-we-do/ic-budget>.
- ¹⁸ Cohen, Rachel S. “‘Pass-Through’ Reform, Modernization Among Aerospace Priorities in 2021 NDAA,” *Air Force Magazine*, April 30, 2020 and Dave Deptula, “The 2021 Defense Budget Won’t Meet U.S. Strategic Goals. Here’s How We Can Adapt,” *Forbes*, February 11, 2020.
- ¹⁹ This figure does not include \$400 million in Military Construction spending attributed to DHP.
- ²⁰ “Military Personnel on Active Duty by Grade in which Serving,” Defense Manpower and Data Center, June 30, 1954.
- ²¹ Eaglen, Mackenzie. “Esper Is Attempting the Biggest Defense Reform in a Generation,” DefenseOne, January 15, 2020 sees an outsized role for the COCOMs. Russell Rumbaugh does not: Russell Rumbaugh, “Best Man for the Job?: Combatant Commanders and the Politics of Jointness,” *Joint Force Quarterly*, Vol. 75, September 2014.
- ²² See Appendix Part II for what budget lines this figure includes.

- ²³ Major Headquarters Activities are defined by DOD and reported in the Defense Manpower Requirements Report.
- ²⁴ Hone, Thomas C. *Power and Change: The Administrative History of the Office of the Chief of Naval Operations, 1946-1986*, (Naval Historical Center: 1989), p. 24; Victor Krulak, *First to Fight*, (US Naval Institute: 1984), p. 32; William J. Lynn, "The Wars Within: The Joint Military Structure and its Critics," Robert Art, Vincent Davis, and Samuel Huntington, ed, *Reorganizing America's Defense: Leadership in War and Peace*, Pergamon-Brassey's: 1985, page 198, Note 59: 1984 SASC Hearings on DoD Organization, p. 205; and Vincent Davis, *The Admiral's Lobby*, (University of North Carolina Press: 1967), p. 233-4.
- ²⁵ Government Accountability Office, "DOD Needs to Improve its Oversight of Executive Agents," GAO-17-061, September 2017, p. 7-14.
- ²⁶ Hammond, Paul. *Organizing for Defense: The American Military Establishment in the Twentieth Century*, (Greenwood Press: 1961) and James R. Locher III, "Has It Worked?—The Goldwater-Nichols Reorganization Act," *Naval War College Review*, Vol. 54 (2001), No. 4. For a discussion of how reforms could have centralized military authority instead, see William J. Lynn, "The Wars Within: The Joint Military Structure and its Critics," Robert Art, Vincent Davis, and Samuel Huntington, ed, *Reorganizing America's Defense: Leadership in War and Peace*, (Pergamon-Brassey's: 1985).
- ²⁷ Hicks, Kathleen. "Invigorating Defense Guidance: A Beyond Goldwater-Nichols Phase 4 Report," Center for Strategic and International Studies, March 2008, p. 12 and Laurence Lynn and Richard Smith, "Can the Secretary of Defense Make a Difference?" *International Security*, Vol. 7, No. 1 (Summer 1982).
- ²⁸ Another analogy might be the Coast Guard which is a military service because it is listed in Title 10. Yet the Coast Guard does not even belong to DOD creating a distinction that may override any comparison.
- ²⁹ 10 USC 101, which came from P.L. 84-1028 passed on August 10, 1956, which created Title 10 to consolidate the statutes governing DOD. This act drew for its definition of armed forces from the Uniform Code of Military Justice, itself only codified in P.L. 81-504, passed on May 5, 1950. While the National Security Act of 1947 referred to the armed forces, it did not define the term.
- ³⁰ Department of Defense, "Writing Style Guide and Preferred Usage for DOD Issuances," February 10, 2020.
- ³¹ Department of Defense, "DOD Dictionary of Military and Associated Terms," January 2020, p. 19.
- ³² The \$14.4 billion is SOCOM's official figure not including funds for procurement and military personnel within the military departments. The \$19.6 billion MFP-11 includes funds from across DOD, which SOCOM may or may not control. The figure in section 2 is derived from the methodology described in Appendix I.
- ³³ Government Accountability Office, "Special Operations Forces: Additional Actions Are Needed to Effectively Expand Management Oversight," GAO-19-386, May 2019.
- ³⁴ Zegart, Amy. *Flawed by Design: The Evolution of the CIA, JCS, and NSC*, (Stanford University Press: 1999), p. 163-222.
- ³⁵ Howe, George. "The Early History of NSA," National Security Agency, approved for release on September 18, 2007, https://www.nsa.gov/Portals/70/documents/news-features/declassified-documents/cryptologic-spectrum/early_history_nsa.pdf
- ³⁶ Hays, Peter. "Struggling Towards Space Doctrine: US Military Space Plans, Programs, and Perspectives During the Cold War," (Fletcher School of Law and Diplomacy unpublished dissertation: 1994), p.181.
- ³⁷ Kaplan, Lawrence, Ronald Landa, Edward Drea, *The McNamara Ascendancy: 1961-1965*, (OSD Historical Office: 2006), p. 22-24.
- ³⁸ "The Advent of the National Geospatial-Intelligence Agency," Office of the NGA Historian, September 2011, p. 21-24.
- ³⁹ Diamond, John. *The CIA and the Culture of Failure: US Intelligence from the End of the Cold War to the Invasion of Iraq*, (Stanford Security Press: 2008), p. 46-47, 260 and Donald Rumsfeld, "Transforming the Military," *Foreign Affairs*, May/June 2002.
- ⁴⁰ Danforth, Lawrence. "One Dog to Kick," National War College thesis, 2003.
- ⁴¹ Adams, Gordon and Cindy Williams, *Buying National Security: How American Plans and Pays for its Global Role and Safety at Home*, (Routledge: 2010), p. 132-134 and Janet A. McDonnell, "The Office of the Under Secretary of Defense for Intelligence: The First 10 Years," *Studies in Intelligence* Vol. 58, No. 1 (Extracts, March 2014).
- ⁴² Public Law 73-64, sec. 16.
- ⁴³ Public Law 73-64, sec. 6.

- ⁴⁴ “The New Militia Bureau Chief,” *The New York Times*, January 1, 1921.
- ⁴⁵ Priscilla Offenhauer, “General and Flag Officer Authorizations for the Active and Reserve Components: A Comparative and Historical Analysis,” Library of Congress, p. 40.
- ⁴⁶ See “Additional Views of Commission E. Gordon Stump,” in *Transforming the National Guard and Reserves into a 21st-Century Operational Force*, Final Report of Commission on the National Guard and Reserve, January 2008.
- ⁴⁷ Buchalter, Alice and Seth Elan, “Historical Attempts to Reorganize the Reserve Components,” Library of Congress, October 2007, p. 28.
- ⁴⁸ Buchalter, Alice and Seth Elan, “Historical Attempts to Reorganize the Reserve Components,” Library of Congress, October 2007, p. 5-14.
- ⁴⁹ Buchalter, Alice and Seth Elan, “Historical Attempts to Reorganize the Reserve Components,” Library of Congress, October 2007, p. 32.
- ⁵⁰ *Transforming the National Guard and Reserves into a 21st-Century Operational Force*, Final Report of Commission on the National Guard and Reserve, January 2008, p. 351-352.
- ⁵¹ This figure does not include \$400 million in Military Construction spending attributed to DHP.
- ⁵² Dolfini-Reed, Michelle and Jennifer Jebo, “The Evolution of the Military Health Care System: Changes in Public Law and DOD Regulations,” CRM D0000437.A3, Center for Naval Analyses, July 2000, p. 4.
- ⁵³ The 1966 change was the creation of The Civilian Health and Medical Program of the Uniformed Services (CHAMPUS) and the mid-1990s program was TRICARE. Michelle Dolfini-Reed and Jennifer Jebo, “The Evolution of the Military Health Care System: Changes in Public Law and DOD Regulations,” CRM D0000437.A3, Center for Naval Analyses, July 2000, p. 26 and 31.
- ⁵⁴ Brannman, Shayne, Lauren Byrne, Senanu Asamoah, Nwadianna Uzoukwu, and Eric Christensen, “Military Medical Executive Education Review,” CRM D0016545.A2/Final, Center for Naval Analyses, September 2007, p. 17.
- ⁵⁵ “A Report to Congress on the Organizational Structure of the Office of the Assistant Secretary of Defense for Health Affairs and the TRICARE Management Activity,” Department of Defense, 2010. p. 5
- ⁵⁶ “A Report to Congress on the Organizational Structure of the Office of the Assistant Secretary of Defense for Health Affairs and the TRICARE Management Activity,” Department of Defense, 2010. p. 5
- ⁵⁷ “Additional Analysis of Costs and Benefits of Potential Governance Structures Is Needed,” Government Accountability Office, GAO-12-911, September 2012, p. 3 responding to
- ⁵⁸ John, Sarah K., Dylan J. Carrington-Fair, Matthew S. Goldberg, Laura A. Hildreth, Jamie M. Lindly, W. Patrick Luan, and Madeline Minnici, “Feasibility Study for the Consolidation of Military Medical Education and Training Organizations, Functions, and Activities,” Institute for Defense Analyses, IDA Paper P-10615 Revised, September 2019, p. 5.
- ⁵⁹ John, Sarah K., Dylan J. Carrington-Fair, Matthew S. Goldberg, Laura A. Hildreth, Jamie M. Lindly, W. Patrick Luan, and Madeline Minnici, “Feasibility Study for the Consolidation of Military Medical Education and Training Organizations, Functions, and Activities,” Institute for Defense Analyses, IDA Paper P-10615 Revised, September 2019, p. 5.
- ⁶⁰ 10 USC 8063. Victor Krulak, *First to Fight: An Inside View of the U.S. Marine Corps*, (Naval Institute Press: 1984), p. 17-66.
- ⁶¹ “Functions of the Armed Forces and the Joint Chiefs of Staff,” Joint Secretariat, April 21, 1948, usually referred to as the Key West Agreement.
- ⁶² Public Law 82-416, June 1952.
- ⁶³ “Military Personnel on Active Duty by Grade in which Serving,” Defense Manpower and Data Center, June 30, 1954.
- ⁶⁴ Brewster, Albert E. “The Commandant of the Marine Corps and the JCS,” *Marine Corps Gazette*, March 2008.
- ⁶⁵ “Marine Corps Planning and Programming Manual,” MCO P3121.1, October 1, 1991.
- ⁶⁶ “Marine Corps Planning and Programming Manual,” MCO P3121.1, October 1, 1991.
- ⁶⁷ Rumbaugh, Russell. “Best Man for the Job?: Combatant Commanders and the Politics of Jointness,” *Joint Force Quarterly*, Vol. 75, September 2014.
- ⁶⁸ Tucker, David and Christopher Lamb, *United States Special Operations Forces* (Columbia University Press: 2007), p. 97.
- ⁶⁹ Marquis, Susan. *Unconventional Warfare: Rebuilding U.S. Special Operations Forces*, (Brookings Institution Press: 1997), p. 148-225.
- ⁷⁰ Drea, Edward J., Ronald H. Cole, Walter S. Poole, James F. Schnabel, Robert J. Watson, and Willard J. Web, “History of the Unified Command Plan: 1946-

- 2012,” Office of the Chairman of the Joint Chiefs of Staff Joint History Office, 2013, p. 91-92.
- ⁷¹ Baucom, Donald. “The U.S. Missile Defense Program, 1944-1994: A Protracted Revolution,” Ballistic Missile Defense Organization, February 1995, p. 7-8.
- ⁷² Baucom, Donald. “The U.S. Missile Defense Program, 1944-1994: A Protracted Revolution,” Ballistic Missile Defense Organization, February 1995, p. 23-24.
- ⁷³ For example, see Thomas Karako and Wes Rumbaugh, “Reorganizing the Missile Defense Enterprise,” *Defense News*, August 6, 2018.
- ⁷⁴ Public Law 85-599, Sec. 3.
- ⁷⁵ *Defense’s Nuclear Agency, 1947-1997*, Defense Threat Reduction Agency, 2002, p. 26-30.
- ⁷⁶ DARPA was created by DOD directive 5105.15, signed February 7, 1958 and validated by Public Law 85-326, section 7, passed February 12, 1958.
- ⁷⁷ “Our History: The Beginnings,” Defense Information Systems Agency, <https://www.disa.mil/about/our-history>, accessed May 6, 2020.
- ⁷⁸ “Army Study of Defense Agencies and DOD Field Activities, Vol. 2: Findings and Recommendations for Individual Agencies and Activities,” Headquarters, Department of the Army, August 31, 1987, p. 29.
- ⁷⁹ Kaplan, Lawrence, Ronald Landa, and Edward Drea, *The McNamara Ascendancy, 1961-1965*, (Office of the Secretary of Defense Historical Office: 2006), p. 22-29 and James Hewes, *From Root to McNamara: Army Organization and Administration*, (Center of Military History: 1975), p. 313.
- ⁸⁰ *Department of Defense Key Officials: September 1947-April 2020*, (Office of the Secretary of Defense Historical Office: 2020), p. 79-82.
- ⁸¹ “DOD Needs to Address Inefficiencies and Implement Reform across Its Defense Agencies and DOD Field Activities,” Government Accountability Office, GAO-18-592, September 2018.
- ⁸² The table and cited figure does not include DISA, which is compiled along with the intelligence agencies, which this paper argues are responding to different forces.
- ⁸³ FY20 and FY00 Defense Manpower Requirements Report, table 1-1.
- ⁸⁴ Richanbach, Paul H., Kathy M. Conley, Alan B. Gelder, Daniel L. Cuda, and Jim R. Dominy, “TRANSCOM-DLA Roles and Responsibilities,” Institute for Defense Analyses, IDA Paper P-8784, November 2017.

