

# U.S. Marine Corps

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The U.S. Marine Corps (USMC) is the nation's expeditionary armed force, positioned and ready to respond to crises around the world. Marine units assigned aboard ships ("soldiers of the sea") or at bases abroad stand ready to project U.S. power into crisis areas. Marines also serve in a range of unique missions, from combat defense of U.S. embassies under attack abroad to operating the President's helicopter fleet. But every Marine has always been and remains focused primarily on combat: Every Marine is first a rifleman.

Over the past several decades, the Marine Corps has positioned itself for crisis response, but while the Corps has maintained its historical, institutional, and much of its doctrinal focus on operations in maritime environments, the majority of its operational experience at least since 2003 has been in sustained land operations. This has led to a dramatic decline in the familiarity of most Marines with conventional amphibious operations and other types of employment within a distinctly maritime setting.<sup>1</sup> Even with the conclusion of military operations in Afghanistan in 2021, by which time the U.S. military presence had been reduced to just 2,500 military personnel, the general shortage of amphibious ships<sup>2</sup> and the absence of any necessity to deploy large numbers of Marines on amphibious shipping still presented few opportunities for Marines to gain such experience.<sup>3</sup>

Recognizing this shortfall, the Corps' leadership initiated efforts in 2019 to reorient the service toward enabling and supporting the projection of naval power in heavily contested littoral environments with a particular focus on the Indo-Pacific region and China as the "pacing threat" against which Marine Corps capabilities are being assessed and modified.<sup>4</sup> This reorientation was much more

than a simple refocusing on amphibious operations. Following a comprehensive assessment of the operational challenges that the service's operating forces are most likely to face 10 to 15 years in the future, General David H. Berger, 38th Commandant of the Marine Corps, issued Force Design 2030 (FD 2030), his directive to the service to reorganize, re-equip, and retrain Marines in ways that will make them relevant and effective in the presumed operating environment of the next several years and into the 2030s.<sup>5</sup>

As necessary an effort as FD 2030 is, however, the force envisioned by the project is in the process of being made<sup>6</sup> and, although showing remarkable capability in exercises and deployments,<sup>7</sup> has not been proven in battle. Consequently, this *Index* can only assess the Corps that exists today, and our assessments of capacity, capability (modernity), and readiness therefore pertain to the Marine Corps' current status, not to what it might be in the future.

As of late March 2023, "more than 32,000 Marines [were] forward-deployed or stationed across 50 countries. There [were] also, on average, 102 Marine Corps fixed-wing aircraft (F-35, F/A-18, and KC-130J) forward-deployed or stationed overseas, a 22% increase since 2018."<sup>8</sup> Numerous experimentation and exercise events undertaken by the Corps during the preceding year, almost all of which were in operational settings rather than in stateside training environments, included elements of II Marine Expeditionary Force working with 6th Fleet to comprise a naval task force (TF 61.2) charged with developing improved capabilities to deal with crises in Europe, the Mediterranean, and northern Africa; a similar effort in the Indo-Pacific (TF 76.3) involving units from 3rd Marine Expeditionary Brigade and ships from 7th Fleet; and using the USS *Tripoli*

(LHA-7) as an independent platform to expand its utility in responding with air, ground, and communications capabilities that are useful across a range of potential crises.<sup>9</sup> As noted by General Berger, these at-sea evolutions also revealed just how few Marines have the opportunity to gain deployed experience in maritime settings, partly because of the lack of readily available amphibious ships.<sup>10</sup>

The Marine Corps has always prized its crisis-response contributions to national security, and senior service leaders have emphasized this point consistently over the years. Maintaining this emphasis, General Berger made it central to the Corps' efforts to remain combat credible as adversary capabilities evolve, even at the expense of force capacity (the size of the service) and existing capabilities that, while still of value, were perceived as less relevant to the maritime environment of the Indo-Pacific.

Marine Corps leadership has emphasized that China serves as the pacing challenge for the Corps, which means that the military capabilities that China currently has and is developing, as well as the severity of the challenge presented by China, are a benchmark against which to measure "the level of capabilities that we will need in order to have a relative advantage now and into the future."<sup>11</sup> These capabilities will be applicable not only in a fight with China, but also in other scenarios and regions involving other enemies of lesser magnitude. In other words, if the Corps can develop tools, tactics, and skills that are effective against the capabilities China is developing, it will also be better equipped to deal with other opponents in other regions.

Service leadership is assuming that defense budgets will not see any appreciable growth in the next several years, so the Corps has retired or reduced assets and such capabilities as tanks, conventional tube artillery, heavy bridging, and some aircraft and has reduced manpower end strength to make related funding available for other purposes.

In general for the Joint Force, this *Index* focuses on the forces required to win two major wars as the baseline force-sizing metric for the Army, Navy, and Air Force, but it adopts a different paradigm—one war plus crisis response—for the Marine Corps. The three large services are sized for global action in more than one theater at a time; the Marines, by virtue of overall size and most recently by direction of the Commandant (and sustained at present by the

Assistant Commandant<sup>12</sup>), focus on one major conflict while ensuring that all Fleet Marine Forces are globally deployable for short-notice, smaller-scale actions. Marine Corps officials have emphasized that the results of the FD 2030 redesign will ensure that USMC forces are more capable and relevant in any fight, in any region, but the pacing challenge for Corps planners is China.<sup>13</sup>

In earlier editions of the *Index*, the capacity of the Marine Corps was assessed against a two-war requirement of 36 battalions: a historical average of 15 battalions for a major conflict (30 for two major conflicts) and a 20 percent buffer, bringing the total to 36. The Corps has consistently maintained that it is a one-war force and has no intention of growing to the size needed to fight two wars, and both its annual budget requests and its top-level planning documents reflect this position.

However, with China as the primary threat driving Marine Corps force planning and given China's extraordinary investment in modernizing its forces across all capabilities—including the expansion of various sensors, weapons, and platforms that are essential to the creation of an intensely weaponized, layered defense architecture—this *Index* cannot help but note that the Corps will need greater capacity if it is to succeed in war in the very circumstances for which the Marines believe they must prepare and with which this *Index* concurs.

## Capacity

The measures of Marine Corps capacity in this *Index* are similar to those used to assess the Army's: end strength and units (battalions for the Marines and brigades for the Army). The Marine Corps' basic combat unit is the infantry battalion, which is composed of approximately 900 Marines<sup>14</sup> and includes three rifle companies, a weapons company, and a headquarters and service company.<sup>15</sup>

The service has redesignated 3rd Marines, one of its infantry regiments, as 3rd Marine Littoral Regiment (MLR), a new organizational construct it is using to test ideas put forward in FD 2030.<sup>16</sup> Unlike a conventional Marine regiment, the MLR has a single Littoral Combat Team (LCT) based on an infantry battalion but also possessing an anti-ship missile battery, a Littoral Anti-Air Battalion, and a Combat Logistics Battalion. The LCT will focus on employment of platoons, which is radically different from a standard battalion's use of companies.<sup>17</sup>

While a bold move, 3rd MLR will serve as an operational test bed, deriving experience and insights that feed back into the FD 2030 effort. Being operationally employed as a full component of the Corps' operating forces, it is not a standard experimental organization, but because it has not yet been standardized across the Corps, it also cannot yet serve reliably as a reference by which to assess the Corps.

**Infantry.** A dozen years ago, the Marine Corps maintained 27 infantry battalions in its Active Component at an authorized end strength of 202,100.<sup>18</sup> As budgets declined, the Corps prioritized readiness through managed reductions in capacity, including a drawdown of forces, and delays or reductions in planned procurement levels. After the Marine Corps fell to a low of 23 Active Component infantry battalions in fiscal year (FY) 2015,<sup>19</sup> Congress began to fund gradual increases in end strength, returning the Corps to 24 infantry battalions. The deactivation of 3rd Battalion 8th Marines on May 18, 2021, and 2nd Battalion 3rd Marines on January 21, 2022,<sup>20</sup> left the Corps with 22 infantry battalions. Marine Corps leadership plans to stand down one more battalion, which will bring the number to 21.

There has been a consistent decline in the size of the Corps over the past few years. In FY 2022, the Corps operated with an end strength of 174,577 Marines. In FY 2023, it was funded for 177,000 but is projected to finish the year with 172,147. For FY 2024, the service has requested "\$15.6 billion for an active duty end strength of 172,300 Marines and \$904 million for 33,600 reservists aligned with Force Design decisions."<sup>21</sup>

Infantry battalions serve as a surrogate measure for the Corps' total force. As the first to respond to many contingencies, the Marine Corps requires a large degree of flexibility and self-sufficiency, and this drives its approach to the organization and deployment of operational formations that, although typically centered on infantry units, are composed of ground, air, and logistics elements. Each of these assets and capabilities is critical to effective deployment of the force, and any one of them can be a limiting factor in the conduct of training and operations.

**Aviation.** The Corps last published an update to its Aviation Plan (AVPLAN) on May 3, 2022.<sup>22</sup> The AVPLAN notes that several initiatives undertaken in 2014 have led to marked improvements in readiness with the Corps setting an objective of 75

percent aviation readiness for FY 2021. Since 2018, when readiness was 57 percent across all types of aircraft, the rate has increased by 9 percent to 66 percent in 2023 with a high of 68 percent in tactical aviation (F-35s and F/A-18s) and MV-22 readiness "rising from 52% in 2018 to 64% in 2023."<sup>23</sup>

Manning, however, remains a problem for both manned and unmanned aircraft. In 2018, according to General Berger, the Corps "had 88 of the 203 required F-35 pilots (43% of the requirement). At the end of 2022, we had 218 of 498 F-35 pilots (44% of the requirement). At the end of 2022, we had 200 F-35 pilots in flight school and another 62 at our fleet replacement squadrons with FY23 and FY24 completion dates."<sup>24</sup> Today, "half of our total inventory of UAS officers (72 of 148) are not yet trained and qualified to operate the MQ-9."<sup>25</sup>

The Corps maintains 17 squadrons of fixed-wing fighter/attack aircraft in its Active Component, and almost half are equipped with the F-35.<sup>26</sup> The Corps fielded approximately 28 squadrons during Desert Storm.<sup>27</sup> The reduction corresponds with the general shrinking of the U.S. military since the end of the Cold War but is also a consequence of budget restrictions caused by the Budget Control Act of 2011,<sup>28</sup> the costs of operations over the past 20 years without a corresponding increase in funding, and budget ceilings imposed by the White House and Congress. The reorientation of Marine Aviation in its capacity, type of aircraft, and balance among the various platforms is dictated by FD 2030, which itself is informed by both budget and operational threat realities.

Although the Corps is introducing the F-35 platform into the fleet, F/A-18 Hornets will remain in the force until 2030.<sup>29</sup> This primary tactical aviation capability has to be managed carefully as it is no longer in production. Through various programs, the Marines have extended the service life of their F/A-18 fleet to 10,000 flight hours, making it possible to keep them in service until FY 2030.<sup>30</sup> A similar effort will keep the venerable AV-8B Harrier in use until FY 2027.<sup>31</sup> At present, the Marines have acquired 190 F-35B—the STOVL (Short Take-Off and Vertical Landing) variant of the Joint Strike Fighter (JSF)—and 19 F-35C (carrier capable) aircraft of a planned 353 F-35B and 67 F-35C models.<sup>32</sup> This has enabled the service to stand up 11 JSF squadrons: seven operational; two fleet replacement (used to train new pilots); one test for F-35Bs; and one operational F-35C squadron.<sup>33</sup>

In its heavy-lift rotary-wing fleet, the Corps began a reset of the CH-53E in 2016 to bridge the procurement gap between the CH-53E and the CH-53K King Stallion and aimed to “reset...the entire 143-aircraft fleet by FY20.”<sup>34</sup> However, reporting in 2020 indicated that the Corps was moving rather slowly in this effort, and it was only one-third of the way through the process toward the close of the fiscal year.<sup>35</sup> Even when the reset is complete, the service will still be 57 aircraft short of the stated heavy-lift requirement of 200 airframes and will not have enough helicopters to meet its heavy-lift requirement without the transition to the CH-53K.<sup>36</sup>

The Corps has reported that the CH-53K heavy-lift helicopter has achieved initial operational capability (IOC),<sup>37</sup> opening the door for full production of operational units. The service procured 29 aircraft through FY 2021, 11 in FY 2022, and 12 in FY 2023 and has requested 15 for FY 2024.<sup>38</sup> Ultimately, it plans to acquire 196 operational aircraft that will equip five active squadrons by FY 2029 and a reserve squadron by FY 2030.<sup>39</sup>

As part of its ongoing search for improvements in its MV-22B Osprey, the Corps has tested a version of an electronic warfare radar jamming pod that it uses on other aircraft.<sup>40</sup> In the absence of conventional pylons on which weapons and sensors can be mounted, new capabilities have to be reconfigured to fit inside the aircraft or mounted on the aircraft fuselage.

The Marines have divested two MV-22 squadrons, standing down VMM-264 in FY 2020 and VMM-166 in FY 2021. The Corps’ 2022 AVPLAN still shows the service’s intent to stand down a third squadron by the start of FY 2024, although no action appeared to have been taken as of the time this edition of the *Index* was being prepared. FD 2030 originally proposed reducing the number of MV-22 squadrons to 14, but subsequent experimentation led the Commandant to revise his direction to specify retaining 16 squadrons in the Active force while reducing the number of aircraft per squadron from 12 to 10.<sup>41</sup>

Notably, the Corps has moved aggressively to implement aviation-related actions specified or implied by FD 2030. In May 2021, it disestablished HMLA-367, a light-attack helicopter squadron in Hawaii, sending its still relatively new attack and utility helicopters to Davis–Monthan Airbase in Arizona where they will be placed in the “boneyard”

for possible use in the future. The 27 AH-1Z Viper attack helicopters and 26 UH-1Y Venom utility helicopters that were decommissioned represented approximately one-fifth of the Marine Corps’ inventory of such aircraft.<sup>42</sup> In December 2022, HMLA-367 was reactivated while HMLA-469 was stood down.<sup>43</sup> Earlier that month, HMLA-269 was also disestablished,<sup>44</sup> leaving the Corps with five light/attack helicopter squadrons.

The Corps is also reducing the number of its heavy-lift squadrons of CH-53s. It deactivated HMM-366 in December 2022,<sup>45</sup> deactivated HMM-463 in April 2022,<sup>46</sup> and plans to deactivate one more by FY 2024,<sup>47</sup> leaving five heavy-lift helicopter squadrons in the Active Component to transition to the CH-53K.

**Amphibious Ships.** Amphibious ships, although driven by the Corps’ articulation of what it needs to execute its operational concepts, remain a Navy responsibility. Various documents describe the rationale for and nature of the Marine Corps’ thinking about how it plans to contribute to the projection of naval power in highly contested environments such as that found in the Indo-Pacific region if the U.S. were to find itself at war with China. The Corps’ most recent update to its Force Design 2030 efforts, for example, says that:

Warfighting concepts serve as the foundation for our modernization work. Most recently, we added *Global Positioning Network to Distributed Maritime Operations, Littoral Operations in a Contested Environment, Tentative Manual for Expeditionary Advanced Base Operations, A Concept for Stand-in Forces, and Reconnaissance and Counter-Reconnaissance*. To ensure our amphibious operations concepts remain current, together with the Navy, we are also developing a new concept for *21st Century Amphibious Operations*. It will describe how we will execute amphibious operations against future adversaries in this evolving and complex operational environment. It will also articulate the future role of amphibious operations in support of maritime campaigns and will describe new operating methods that incorporate agile platforms to supplement traditional amphibious ships. Examples include long-range, unmanned systems that infiltrate the adversary’s weapon engagement

zone; dispersed formations of manned and unmanned ships that challenge adversary targeting; and the adoption of disruptive technologies.<sup>48</sup>

These documents inform and reinforce Marine Corps and Navy plans to develop and acquire upwards of 35 small amphibious warships—Medium Landing Ship (LSM), previously known as the Light Amphibious Warship (LAWs), new amphibious vessels that would be smaller than those constituting the current fleet and optimized to support naval operations in the contested environments envisioned by Littoral Operations in a Contested Environment (LOCE) and Expeditionary Advance Base Operations (EABO).<sup>49</sup> LSMs would augment the Navy's current fleet of large amphibious warships, the number of which has been a matter of contention between the Navy and the Marine Corps, driven largely by the amount of funding that is available for shipbuilding.

The Marine Corps held 38 amphibious ships as the minimum requirement for many years but stepped away from that as a prelude to redefining its amphibious operations capabilities.<sup>50</sup> Now the Corps is making the case for 31 traditional amphibious ships as the bare minimum needed to execute operations as envisioned in FD 2030, augmented by LSMs.<sup>51</sup> Five companies have been awarded contracts for further concept development of LSMs,<sup>52</sup> but procurement of the first ship has been delayed until FY 2025.<sup>53</sup> Meanwhile, the number of traditional amphibious ships stood at 31 as of August 2023, down one ship from the same time last year.<sup>54</sup>

The USMC continues to invest in the recapitalization of legacy platforms in order to extend platform service life and keep aircraft and amphibious vehicles in the fleet, but as these platforms age, they also become less relevant to the evolving modern operating environment. Thus, although they do help to maintain capacity, programs to extend service life do not provide the capability enhancements that modernization programs provide. The result is an older, less capable fleet of equipment that costs more to maintain.

### Capability

The nature of the Marine Corps' crisis-response role requires capabilities that span all domains. The USMC ship requirement is managed by the Navy, as

indicated in the preceding section on capacity, and is covered in the Navy's section of the *Index*. The Marine Corps is four years into a force-wide redesign per FD 2030 with modernization (introducing new weapons and platforms) and divestiture (retiring less relevant counterparts) programs shaped accordingly.

During General Berger's tenure as Commandant, the Corps emphasized that force redesign initiatives were self-funded, meaning that the service had divested itself of some capabilities that were less relevant to expected operational demands and had reduced manpower to redirect that funding to other priorities of greater relevance. In FY 2023, General Berger told Congress that the Corps' ability to maintain such self-funding had been exhausted, and the service would therefore need continued congressional support to sustain FD 2030 initiatives.<sup>55</sup>

Nevertheless, defense funding has not kept pace with inflation, and there are some things for which the Corps needs additional money. On June 15, 2021, for example:

Making his case before the House Armed Services Committee...for the Marine Corps' \$47.86 billion [FY 2022] budget request, Berger said he has reduced headquarters staffing by 15%, cut legacy systems and end strength, and has nothing left to draw from to fund programs and projects.

"We have wrung just about everything we can out of the Marine Corps internally," Berger said. "We're at the limits of what I can do."

The Marine Corps' budget request represents a 6.2% increase from fiscal 2021, even as the service plans to reduce the size of the active-duty force by 2,700, to 178,500 Marines. The service ultimately wants to reach 174,000 by 2030—roughly the size it was in fiscal 2002.

Berger is using the money he has saved by reorganizing the Marine Corps and shedding capabilities such as tanks and artillery to invest in new technologies and platforms.<sup>56</sup>

Programs such as the Amphibious Combat Vehicle (ACV), F-35, CH-53K, Naval Strike Missile, and Light Amphibious Warship continue to top the list

of major equipment and weapons, but the Corps is also pursuing a variety of unmanned systems (air, ground, and sea) and has placed great emphasis on smaller pieces of gear and individual-level weapons that will enable tactical units to be more effective.<sup>57</sup> These latter items are typically small in cost when compared with aircraft and armored vehicles, but they can have a decisive effect when employed in small-unit actions in the field.<sup>58</sup>

**Vehicles.** Of the Marine Corps' current fleet of vehicles, its amphibious vehicles—specifically, the Assault Amphibious Vehicle (AAV-7A1) and Light Armored Vehicle (LAV)—are the oldest with the AAV-7A1 averaging more than 50 years old and the LAV averaging 40 years old.<sup>59</sup> The Corps invested in upgrades to the AAV over many years but stepped back from such efforts in 2018 as the ACV program bore fruit. In 2020, the Corps justified this as an acceptable near-term risk:

[W]e continue to make strategic choices in the divestiture of certain programs to reallocate funds toward building a more lethal, modern, multi-domain, expeditionary force. This has included accepting near-term capacity risk by reducing depot level maintenance for the legacy Amphibious Assault Vehicle (AAV) as we transition to the Amphibious Combat Vehicle (ACV).<sup>60</sup>

The Marine Corps has also been exploring options to replace its aged LAV with a collection of vehicles under the Advanced Reconnaissance Vehicle (ARV) program.<sup>61</sup> It requested \$63.585 million in its FY 2024 budget submission, on top of \$134 million spent in preceding years (including \$70.583 million in FY 2023),<sup>62</sup> for continued research and design work. According to the Navy's FY 2024 budget justification:

[The ARV] is imperative to realizing Marine Corps requirements for Fleet Marine Force 2030 as the platform that enables the Mobile Reconnaissance Battalion. As part of the portfolio of reconnaissance, surveillance, and target acquisition systems, ARV will be a purpose-built combat vehicle system, highly mobile on land and water, that can sense, communicate, and fight as the manned hub of a robotic and autonomous systems-enhanced

team. Equipped with modern command, control, communications and surveillance systems the ARV will transform the ability of Fleet Marine Forces to sense and communicate within the littoral operating environment by providing a persistent and mobile Systems of Systems to augment and sustain effective sensor webs and kill chains. The ARV is critical towards the modernization of Marine Corps reconnaissance capability.<sup>63</sup>

Once prototyping has been completed, and assuming the Corps decides to proceed, the next steps are “a Milestone B decision point in FY 2025” and a period of “competition leading to Milestone C in FY 2028.” It is expected that initial operational capability will be reached in FY 2030 and that full operational capability of the initial variant will be achieved in FY 2033.<sup>64</sup> In January 2023, the service began its testing of three competing prototypes with the evaluation to conclude before the end of the fiscal year.<sup>65</sup>

On July 30, 2020, an AAV sank off the California coast near San Clemente Island, claiming the lives of eight Marines and one sailor.<sup>66</sup> This led to the halting of all AAV operations until various investigations were completed and the Corps could install supplementary emergency breathing devices in the vehicle and take other steps to improve its safety and survivability.<sup>67</sup> AAV operations were resumed in April 2021 following inspection and modification of vehicles and related training and certification of AAV crews on the improvements.<sup>68</sup>

Nine months later, however, the Corps permanently restricted water operations for the AAV, effectively making it a land-only armored vehicle.<sup>69</sup> “[G]iven] the current state of the amphibious vehicle program,” according to a statement issued by the Corps:

[T]he Commandant of the Marine Corps has decided the AAV will no longer serve as part of regularly scheduled deployments or train in the water during military exercises; AAVs will only return to operating in the water if needed for crisis response. This decision was made in the interest of the long-term health of the amphibious vehicle programs and future capabilities. The AAV will continue to operate on land; 76 percent of its tasks are land-based. In

doing so, we reserve the capability to reverse this decision should the need arise.<sup>70</sup>

Recognizing the problems of its AAV fleet and the urgent need to update with a view to capabilities in line with FD 2030, the Corps accelerated procurement of the ACV. It procured 83 in FY 2022, procured another 74 in FY 2023, and has requested funding for 80 in FY 2024.<sup>71</sup> Combined with the 184 vehicles acquired in previous years, the additions bring the number of ACVs in the Corps' inventory to 341 out of a total program objective of 632.<sup>72</sup>

Acquisition of the Joint Light Tactical Vehicle (JLTV) is steady, although both the number of vehicles acquired in FY 2023 (384) and the number requested for FY 2024 (396) are less than half the number purchased in FY 2022 (837). Since 2017, when fielding of the HMMWV replacement began, the Marines have acquired 5,752 vehicles, and budget documents show plans for the Corps to purchase an additional 3,701 vehicles from FY 2025 through FY 2028.<sup>73</sup> The acquisition objective for the JLTV has varied over the years from 5,500 to just over 9,000.<sup>74</sup> Representatives from Marine Corps Systems Command have reported that the objective has been revised again to have the JLTV be a one-for-one replacement for all of the almost 11,000 HMMWVs currently in the inventory.<sup>75</sup>

**Aircraft.** Fixed-wing fighter-attack aircraft—specifically the AV-8B Harrier and F/A-18 Hornet—continue to age while the Corps pursues delivery of replacement aircraft: the F-35B STOVL variant to replace the AV-8B, in service since 1985, and the F-35C to replace its carrier-capable F/A-18s. To account for a lengthy transition period, the Corps has undertaken various efforts to extend the service life of its Hornets and Harriers to keep them in service until the end of the decade and, to meet the need to train new pilots even as the service retires the aircraft the pilots will fly, has taken such steps as folding the responsibilities of a formal training squadron into an operational unit.<sup>76</sup>

The Corps has acquired 190 of the 353 F-35B aircraft that it plans to purchase and 19 of the 67 F-35Cs, the version designed for use aboard aircraft carriers.<sup>77</sup> Though the F-35 program has been the subject of criticism ever since it began, much of this criticism is misplaced today given the steady decrease in cost per unit and the superior capabilities the aircraft brings to air operations in heavily

contested environments featuring peer-level enemies.<sup>78</sup> “As the Commander of United States Indo-Pacific Command (USINDOPACOM) recently noted during testimony,” according to General Berger, “The importance of the F-35 cannot be overstated.”<sup>79</sup> Additionally, not only is the F-35 “the most advanced fighter, strike, and sensor platform in the world,” but “aircraft like the F-35B provide combatant commanders a competitive warfighting advantage,” and the Corps “remains focused on accelerated transition to an all F-35 tactical aviation (TACAIR) fleet in order to stay in front of our pacing challenge.”<sup>80</sup>

The Corps' current concerns about the aircraft have less to do with its capabilities than they do with the overall cost of modern aircraft in general in the constrained budget environment within which the service is working to redesign its force and its ability to retain a sufficient number of pilots for the aircraft it is buying. As shared by General Berger:

As the head of personnel for the Air Force stated during testimony in 2017, we cannot compete with the airlines. We could not then and we cannot now. This is an issue that requires your oversight. We are at a competitive disadvantage and risk our reservoir of pilots drying up. As an example, in 2018, the Marine Corps had 88 of the 203 required F-35 pilots (43% of the requirement). At the end of 2022, we had 218 of 498 F-35 pilots (44% of the requirement). At the end of 2022, we had 200 F-35 pilots in flight school and another 62 at our fleet replacement squadrons with FY23 and FY24 completion dates. We are making some progress, but not enough—and certainly not quickly enough. We are exploring various options for structuring aviation bonuses and aviation incentive pay under the new authorities granted in the FY23 NDAA. But ever-larger monetary incentives are neither sustainable nor the appropriate remedy. This is not just a Marine Corps problem. It is a joint force problem, and we will continue to work with the other services and Congress as our understanding of this issue develops.<sup>81</sup>

Today, the USMC MV-22 Osprey program is operating with few problems and has completed the MV-22's full acquisition objective of 360.<sup>82</sup>

The MV-22's capabilities are in high demand from the Combatant Commanders (COCOMS), and the Corps is adding such capabilities as fuel delivery, the use of precision-guided munitions, digital interoperability with other platforms, and an improved ability to land in poor-visibility conditions to the MV-22 to enhance its value to the COCOMs.<sup>83</sup>

The USMC's heavy-lift replacement program, the CH-53K, conducted its first flight on October 27, 2015.<sup>84</sup> The CH-53K will replace the Corps' CH-53E, which is now more than 30 years old. Although "unexpected redesigns to critical components" delayed a low-rate initial production decision,<sup>85</sup> the program achieved Milestone C in April 2017. The Corps has purchased 52 aircraft so far and is requesting 15 in FY 2024, against a total acquisition objective of 196.<sup>86</sup>

## Readiness

Riding alongside the Marine Corps' principal Title 10 responsibility to provide "fleet marine forces... for service with the fleet in the seizure or defense of advanced naval bases and for the conduct of such land operations as may be essential to the prosecution of a naval campaign"<sup>87</sup> is its contribution as the military's crisis-response force. This aspect of the Corps' contributions to national defense has been reinforced by service leaders who take pains to allay concerns that their focus on China and the Indo-Pacific will distract them from this important role.<sup>88</sup> The Corps' readiness must therefore account for both high-end conflict against a major opponent in the most complex operational settings and pop-up crises against lesser opponents that cannot be predicted, all of which implies a force that is ready to go at a moment's notice.

Marine Corps guidance identifies multiple levels of readiness that can affect the ability to conduct operations:

*Readiness is the synthesis of two distinct but interrelated levels. a. unit readiness—The ability to provide capabilities required by the combatant commanders to execute their assigned missions. This is derived from the ability of each unit to deliver the outputs for which it was designed. b. joint readiness—The combatant commander's ability to integrate and synchronize ready combat and support forces to execute his or her assigned missions.*<sup>89</sup>

To this General Berger added an expanded perspective that includes force modernization as an essential element to ensure that combat forces remain relevant and therefore ready. As he and Air Force Chief of Staff General Charles Q. Brown, Jr., have argued, only by divesting old capabilities that would not be useful in changed circumstances and investing in new capabilities that account for more capable enemies and the characteristics of key operational theaters can U.S. forces be ready. "To do this," however, "we cannot let our focus on near-term availability consume the resources necessary to generate truly relevant future readiness through adaptive modernization."<sup>90</sup>

Divestiture carries with it some risk unless replacement capabilities are brought into the force as old or legacy capabilities are retired. For example, the Marine Corps' decision to get rid of tanks and a large percentage of its tube artillery means that the service will not have these capabilities should it be called into battle before new items can be fielded in meaningful numbers. Early reports of promising replacement capabilities to compensate for the loss of the Abrams main battle tank, for example, are encouraging, but the Corps now no longer has tanks while the improved replacement remains to be fielded.<sup>91</sup> This has a bearing on readiness to the extent that the force has a *current* ability to win in combat. The force might be ready but in a different posture. For a few years, the Marines could be more light-infantry than the middle-weight "two-fisted fighter" proudly described by a former Commandant a decade ago.<sup>92</sup>

Unfortunately for this *Index*, the Corps reports its current readiness in vague, generalized terms instead of providing data that external audiences could use to form their own conclusions with respect to this important question. It should be noted, however, that this approach is generally used by all of the services: Detailed readiness reports are classified to prevent potential enemies from obtaining sensitive information.

In the past, the services' leaders would report to Congress in formal testimony the various percentages of key equipment that were or were not available, share the status of primary units or types of force capabilities, and perhaps provide insight into maintenance or supply backlogs. The absence of such details from Marine Corps statements during the past few years reveals that the Corps prefers



not to share such information, at least currently. Corps officials have shared very encouraging anecdotal reports of lessons being learned in force-on-force exercises and the testing of new equipment and weapons that appear to validate the direction and objectives of FD 2030, but our assessment of the Corps' readiness must rely on the tone of statements and discussions, inferences derived from the totality of efforts and programs, and the sense one gets from anecdotal evidence of the seriousness with which the service is preparing for current and future employment.

As mentioned, the Marine Corps has undertaken a great reorientation to ready itself for war not just against China, but against any adversary that has the ability to field modern weapons and sensors in a heavily contested maritime environment. The service believes that the changes it is pursuing to this end will be relevant and necessary for combat environments outside of the Indo-Pacific as well, because many countries are acquiring capabilities that are now possible and affordable with modern technologies.<sup>93</sup> With this as the driver, combined with the reiteration of the Corps' role as a force in readiness, the service's words, actions, and policies strongly reinforce a focused commitment to combat readiness and rapid progress<sup>94</sup> in realizing the goals of its great reorientation.<sup>95</sup>

To improve force capabilities from the level of the individual to the most senior operational commands, the service is pushing several initiatives. Among them:

- The Marine Corps School of Infantry has revamped its training for entry-level infantry Marines, extending the eight-week course to 14 weeks and including new coursework and field training intended to sharpen the thinking skills of Marines who will likely find themselves operating more independently than has been the case in the past.<sup>96</sup>
- “In May [2021], the Marine Corps broke ground on a new, state-of-the-art wargaming facility intended to house various capabilities to enhance warfighter preparedness.” The Corps intends that the center, planned for use as early as 2024, will “help Marines better visualize the threat environment” and participate in war games of various sizes with a focus on

realism and that it will also “provide data to inform decisions affecting force development [and] support existing and developing weapons platforms and capabilities in all regions of the globe.”<sup>97</sup>

- Taking this emphasis on thinking, training, and war-gaming scenarios to the field, the Corps and the Navy teamed to execute a two-week Large Scale Exercise 2021—billed as the largest the services have conducted in many years—that involved 25,000 personnel, 36 live units, 50 virtual units, and a half-dozen major commands spread across 17 time zones.<sup>98</sup> LSE 2021 was followed in August 2023 by LSE 2023, which involved 10,000 personnel, “six Navy and Marine Corps component commands and seven U.S. numbered Fleets around the globe” across 22 time zones.<sup>99</sup>
- On the landward side of testing new capabilities, the Marines have conducted a series of force-on-force exercises (free-play exercises employing units with the ability to respond creatively to events rather than being limited to scripted or controlled play); have deployed new force designs in novel ways; and have operationally proved the utility of new force packages in real-world settings, all of which has both validated the initial arguments framing FD 2030 and driven adjustments to the effort.<sup>100</sup>
- The Corps has transitioned its 3rd Marine Regiment, based in Hawaii, into a new organizational construct reflecting FD 2030 initiatives. The 3rd Marine Littoral Regiment is serving as the tactical and operational test bed for the service's many initiatives.<sup>101</sup> This will be followed by the similar transition of 12th Marine Regiment, an artillery unit, into the 12th MLR sometime in FY 2025.<sup>102</sup>

Such efforts, from improvements to infantry training to war gaming to large exercises, are steps that appear to be having a positive effect on currently fielded forces. Although proof at scale has yet to be seen, they do reveal attitudes, priorities, and perspectives that reflect a level of seriousness about warfighting.

Within the Marine Corps, perhaps because it is a smaller service, changes in direction and attitude are conveyed to the force by senior leaders and adopted force-wide more easily than is the case in the larger services. While this does not directly replace hard data on mission-capable rates for equipment used by the Marines or cleanly substitute for unclassified reports about the readiness of units composing the Fleet Marine Force, it can be seen

as a surrogate for the Corps' attention to its level of readiness. The extended operational demands of Iraq and Afghanistan having concluded, the force is reconstituting its readiness as it reorients toward the requirements of FD 2030, LOCE, and EABO.

In the absence of any other direct reporting, this *Index's* assessment of the Corps' readiness for current operations is therefore an optimistic one.

## Scoring the U.S. Marine Corps

### Capacity Score: Weak

Based on the deployment of Marines across major engagements since the Korean War, the Corps requires roughly 15 battalions for one major regional contingency (MRC).<sup>103</sup> This requirement is based on the presumption of a rather conventional force using known (current) equipment and capabilities against a similar opponent.

This *Index* acknowledges the service's work to develop new capabilities and approaches to fighting and is certainly aware of the trends in new technologies and associated thinking about how warfare *might* change in the future, but until this happens, one can assess only what can be known at present. Consequently, the Corps' historical need for 15 battalions (and associated enabling elements) for one major conflict translates to a force of approximately 30 battalions to fight two MRCs simultaneously according to the metric used in previous editions of the *Index*. The government force-sizing documents that discuss Marine Corps composition support the larger measure. Though the documents that make such a recommendation count the Marines by divisions rather than battalions, they are consistent in arguing for three Active Marine Corps divisions, which in turn requires roughly 30 battalions.

With a 20 percent strategic reserve, the ideal USMC capacity for a two-MRC force-sizing construct is 36 battalions. However, the Corps has repeatedly made the case that it is a one-war force that must also have the ability to serve as the nation's crisis-response force.<sup>104</sup> It has just as consistently resisted growing in end strength even during the years of high operational demand associated with peak activities in Operation Iraqi Freedom (Iraq) and Operation Enduring Freedom (Afghanistan). Most recently, General Berger has stated flatly that

the Corps will trade manpower for modernization and that he intends to shrink the Corps from its current 22 infantry battalions to 21 battalions both to free resources so that they can be applied to new formations and to maintain capability investments in other areas such as Marine Special Operations Command.<sup>105</sup>

Manpower is by far the biggest expense for the Marines. In the Corps' FY 2023 budget, the military personnel account was \$16.0 billion (an increase of \$500 million over FY 2022),<sup>106</sup> dwarfing both the \$10.254 billion allocated for operations and maintenance<sup>107</sup> and the \$3.67 billion allocated for the procurement of new equipment.<sup>108</sup> Nevertheless, the historical record with regard to the use of Marine Corps forces in major contingencies argues for the larger number. More than 33,000 Marines, for example, were deployed in Korea, and more than 44,000 were deployed in Vietnam. In the Persian Gulf, one of the largest Marine Corps missions in U.S. history, some 90,000 Marines were deployed, and approximately 66,000 were deployed for Operation Iraqi Freedom.

One could reasonably presume that in a war with China—a war in which the Marines would employ many small, highly distributed units—the demand for forces would be similar to the demand during these historical instances of Marine Corps employment. The pacing threat for the Corps is China, the archetype for countries developing new tools and operational concepts that will likely require distribution of the Marine Corps across a large, contested littoral battlespace. The Corps has been refining its sense of what these formations will require, but they have yet to be proven in operational employment at significant scale. Consequently, we can only assess the service's current status against

historical demand. Even a one-major-war Marine Corps should possess a larger end strength and more tactical units (infantry battalions as the surrogate measure for the total Corps) than it currently has, especially with the trend bending downward to even fewer units.

As a one-war force that also needs the ability to provide crisis-response forces, sustain operations in the face of combat losses, and sustain its support for efforts that are not USMC-specific such as its service component contribution to U.S. Special Operations Command, the Corps should have a minimum of 30 battalions.

- **One-MRC-Plus Level:** 30 battalions.
- **Actual 2023 Level:** 22 battalions.

The Corps is operating with 73 percent of the number of battalions it should have relative to the revised benchmark set by this *Index* and has stated its intent to shrink from its current 22 battalions to 21 battalions. Marine Corps capacity is therefore scored as “weak.” Reducing operational strength by another battalion would bring it down even more to just 70 percent of the strength it should have.

### Capability Score: Strong

The Corps receives scores of “marginal” for “Capability of Equipment,” “marginal” for “Age of Equipment,” “strong” for “Health of Modernization Programs,” and “very strong” for “Size of Modernization Program.” This *Index* recognizes that within the Capability and Age portfolios, the old equipment exists mostly in ground combat vehicles. The Marines have modernized their aviation assets almost completely and are moving aggressively to introduce new ground platforms like the ACV and JLTV to offset the deteriorating condition of the AAV and HMMWV fleets, respectively.

In the aggregate, the service’s aviation arm and its rapid introduction of new munitions, weapons, and a host of communications equipment, sensors, and unmanned platforms likely compensate for the aged AAV, HMMWV, and AV-8B Harriers, resulting in a score of “strong” for Marine Corps capability.

### Readiness Score: Strong

The Marine Corps has exhibited an especially focused and aggressive commitment to ensuring that

its forces are ready for action. This is the point of FD 2030. However, the history of military services is littered with the debris of grand vision statements and futuristic concepts that were unrealized in practical implementation.

That the Marine Corps’ effort is substantially different from those of other services in the past is evidenced by irrevocable decisions to cashier old equipment and implement significant changes in education and training programs, dramatic investments in experimentation and war gaming, rapid acquisition of new capabilities, and profound redesign of operational units. The real changes in programs and organizations that reflect its published rhetoric are compelling evidence that the Corps means what it has been saying about maintaining readiness. The authors of the *2024 Index* believe it to be a low-risk proposition to apply the evidence of preparing for the future to current forces in terms of their focus on readiness for combat. The force remains encumbered by old primary equipment, but its effort to spend the money needed to keep it serviceable mitigates this problem to a reasonable extent.

The Corps is still too small, but the force it has is fully focused on warfighting. Consequently, the *2024 Index* assesses Marine Corps readiness as “strong,” continuing the assessment reached in the *2023 Index*.

### Overall U.S. Marine Corps Score: Strong

The score for the Marine Corps was raised to “strong” from “marginal” in the *2022 Index* and remains “strong” in this edition for two reasons: because the *2021 Index* lowered the threshold for capacity from 36 infantry battalions to 30 battalions in acknowledgment of the Corps’ argument that it is a one-war force that also stands ready for a broad range of smaller crisis-response tasks and because of the Corps’ extraordinary, sustained efforts to modernize (which improves capability) and enhance its readiness during the assessed year.

Of the five services, the Marine Corps is the only one that has a compelling story for change, has a credible and practical plan for change, and is effectively implementing its plan to change. However, in the absence of additional funding in FY 2024, if the Corps retains its intention to reduce the number of its battalions from 22 to 21, this reduction, if implemented, will limit the extent to which it can conduct distributed operations as it envisions and

replace combat losses (thus limiting its ability to sustain operations).

Though the service remains hampered by old equipment in some areas, it has nearly completed modernization of its entire aviation component, is making good progress in fielding a new Amphibious Combat Vehicle, is fast-tracking the acquisition of

new anti-ship and anti-air weapons, and is aggressively leveraging developments in unmanned systems and advanced computing and communication technologies. Full realization of its redesign plan will require the acquisition of a new class of amphibious ships, for which the Corps needs support from the Navy.

## U.S. Military Power: Marine Corps

	VERY WEAK	WEAK	MARGINAL	STRONG	VERY STRONG
Capacity		✓			
Capability				✓	
Readiness				✓	
<b>OVERALL</b>				✓	

# MARINE CORPS SCORES



Procurement and Spending ■ Through FY 2023  
■ Pending

## Light Wheeled Vehicle

PLATFORM	Age Score	Capability Score	REPLACEMENT PROGRAM	Size Score	Health Score
<p><b>HMMWV</b></p> <p>Inventory: <b>10,607</b> Fleet age: <b>25</b> Date: <b>1983</b></p> <p>The HMMWV, commonly known as the “Humvee,” is a light wheeled vehicle used to transport troops and various weapons systems. It provides some protection against small arms fire, fragmentation, and blast damage. Initially introduced in the 1980s and significantly upgraded in the early 2000s, HMMWVs are being replaced by the Joint Light Tactical Vehicle (JLTV).</p>	2	2	<p><b>Joint Light Tactical Vehicle (JLTV)</b></p> <p>Timeline: <b>2017-TBD</b></p> <p>The JLTV program is a joint program with the Army, meant eventually to replace all HMMWVs. Full-rate production was achieved in FY 2019. The first set of JLTVs were fielded in March 2019; initial operational capability (IOC) was achieved in mid-summer 2019.</p>	5	5
<p><b>JLTV</b></p> <p>Inventory: <b>3,626</b> Fleet age: <b>3</b> Date: <b>2019</b></p> <p>The Joint Light Tactical Vehicle (JLTV) is replacing the HMMWV as a light wheeled vehicle for troop transport. The vehicle provides stronger protection from IEDs and threats with which the Humvee struggled during the conflicts in Iraq and Afghanistan. The JLTV improves reliability, survivability, and transportability while retaining the capability to be outfitted for specific missions.</p>	5	5	<p><b>PROCUREMENT</b></p> <p>5,752 4,097</p> <p><b>SPENDING (\$ millions)</b></p> <p>\$2,465 \$3,512</p>		

**NOTE:** See page 532 for details on fleet ages, dates, timelines, and procurement spending. JLTV spending figures reflect the full joint program spending

# MARINE CORPS SCORES

1 2 3 4 5  
Weakest ← → Strongest

Procurement and Spending ■ Through FY 2023 ■ Pending

## Amphibious Assault Vehicle

PLATFORM	Age Score	Capability Score	REPLACEMENT PROGRAM	Size Score	Health Score
<p><b>AAV</b></p> <p>Inventory: <b>417</b> Fleet age: <b>51</b> Date: <b>1972</b></p> <p>The Amphibious Assault Vehicle (AAV) is an amphibious landing vehicle that is designed to transport Marines from vessels at sea to shore. Though old, the AAV has received numerous upgrades over the years to keep it viable for land combat operations. In 2021, the decision was made to restrict AAVs from amphibious operations because of their age and reduced reliability during water operations. The AAV is being replaced by the Amphibious Combat Vehicle (ACV).</p>	1	1	<p><b>Amphibious Combat Vehicle (ACV)</b></p> <p>Timeline: <b>2018–2026</b></p> <p>The ACV is replacing the aged AAV. It achieved IOC in November 2020, and full-rate production was ordered in December 2020. In 2022, two ACVs were involved in operational mishaps, and the Marines decided to limit certain ACV amphibious operations until handling characteristics are better understood and operator skills are improved. An improved training program began to graduate students in July 2023.</p>	4	4
<p><b>LAV-25</b></p> <p>Inventory: <b>298</b> Fleet age: <b>38</b> Date: <b>1983</b></p> <p>The Light Armored Vehicle (LAV) is an eight-wheeled armored reconnaissance vehicle. It is designed for off-road and moderate amphibious capabilities. This allows for highly mobile fire support in most terrains. The LAV will be in service until 2035.</p>			<p><b>PROCUREMENT</b>                      <b>SPENDING (\$ millions)</b></p> <table border="0"> <tr> <td style="text-align: center;"> <div style="width: 100%; height: 10px; background-color: #003366; border: 1px solid #003366;"></div> <p>341                      289</p> </td> <td style="text-align: center;"> <div style="width: 100%; height: 10px; background-color: #cccccc; border: 1px solid #cccccc;"></div> <p>\$2,124                      \$2,411</p> </td> </tr> </table>		<div style="width: 100%; height: 10px; background-color: #003366; border: 1px solid #003366;"></div> <p>341                      289</p>
<div style="width: 100%; height: 10px; background-color: #003366; border: 1px solid #003366;"></div> <p>341                      289</p>	<div style="width: 100%; height: 10px; background-color: #cccccc; border: 1px solid #cccccc;"></div> <p>\$2,124                      \$2,411</p>				

## Attack Helicopters

PLATFORM	Age Score	Capability Score	REPLACEMENT PROGRAM	Size Score	Health Score
<p><b>AH-1Z Viper</b></p> <p>Inventory: <b>134</b> Fleet age: <b>12</b> Date: <b>2010</b></p> <p>The AH-1Z Viper is the Marine Corps' attack helicopter. The Viper has greater speed, payload, and range, as well as upgraded landing gear, advanced weapons systems, and a fully integrated glass cockpit, compared to its predecessor, the AH-1W Super Cobra. The Viper provides Marines with close air support, armed escort/reconnaissance, and anti-armor capabilities. The Viper's expected operational life span is 30 years.</p>	4	5	None		

**NOTE:** See page 532 for details on fleet ages, dates, timelines, and procurement spending.

# MARINE CORPS SCORES

1 2 3 4 5  
Weakest ← Strongest

Procurement and Spending ■ Through FY 2023 ■ Pending

## Tactical Aircraft

PLATFORM	Age Score	Capability Score	REPLACEMENT PROGRAM	Size Score	Health Score
<p><b>AV-8B</b></p> <p>Inventory: <b>53</b> Fleet age: <b>31</b> Date: <b>1985</b></p> <p>The Harrier is the Marine Corps' ground attack aircraft. It is a subsonic jet capable of hovering as a helicopter hovers. The Harrier has a Vertical/Short Take-Off and Landing (V/STOL) system that is designed to fly from amphibious assault ships and unconventional runways. These unique capabilities allow it to operate in a variety of environments that other jets find inaccessible. The aircraft is being replaced by the F-35B and will be fully retired around 2025.</p>	1	1	<p><b>F-35B/C</b></p> <p>Timeline: <b>2007-2029</b></p> <p>The F-35B (STOVL Variant) is replacing the AV-8B Harrier, providing the Corps with a fifth-generation stealth STOVL aircraft. Specifically designed for the Marine Corps, the B-model achieved IOC in 2015. It is being procured at a much higher quantity than the C-model, and full operational capability is expected in the late 2020s. The F-35C (Carrier Variant) is also being procured by the Marine Corps, replacing the F/A-18. Designed for operations by aircraft carrier, the F-35C is being procured to give Marines the ability to launch from carriers while the F-35B launches from amphibious assault ships. The Marines activated their first F-35C squadron in December 2020. Full operational capability is expected in the late 2020s.</p>	5	4
<p><b>F/A-18 C-D</b></p> <p>Inventory: <b>213</b> Fleet age: <b>32</b> Date: <b>1978</b></p> <p>The F/A-18 C and D models are all-weather attack aircraft designed for interdiction and close air support. The C-version is a single seat aircraft, and the D-model is a two-seat aircraft that incorporates a Weapons and Sensors Officer who handles a broader range of weapons and expands the aircraft's ability to conduct night attack missions. The Corps will retire the aircraft as the F-35 B and C models are fully fielded, which should be around 2030.</p>	2	1	<p><b>PROCUREMENT</b></p> <p>177 192</p> <p><b>SPENDING (\$ millions)</b></p> <p>\$27,122 \$26,407</p>		
<p><b>F-35B/C Lightning II</b></p> <p>Inventory: <b>145</b> Fleet age: <b>4</b> Date: <b>2015</b></p> <p>The F-35B is the Marine Corps variant of the Joint Strike Fighter (JSF) Program. It is a fifth-generation, stealth multi-role fighter. Its next-generation technology allows it to dominate combat missions with greatly reduced risk of detection by the enemy. Unique to the other variants, the B-Model is designed with a Short Take-Off Vertical Landing (STOVL) system that allows for operation from short flight decks and unconventional runways. This combines the unique operational capabilities of the AV-8B Harrier with the new technology offered by the JSF program. The F-35C is the Navy's version of the JSF, built to conduct catapult-assisted takeoffs and cable-arrested landings on aircraft carriers. The Marine Corps operates a portion of its F-35 fleet to leverage carrier-based operations.</p>	5	5			

**NOTE:** See page 532 for details on fleet ages, dates, timelines, and procurement spending.

# MARINE CORPS SCORES



Procurement and Spending ■ Through FY 2023 ■ Pending

## Medium Lift

PLATFORM	Age Score	Capability Score	REPLACEMENT PROGRAM	Size Score	Health Score
<p><b>MV-22B Osprey</b></p> <p>Inventory: <b>273</b> Fleet age: <b>9</b> Date: <b>2007</b></p> <p>The Osprey is a vertical takeoff, tilt-rotor aircraft that combines the vertical capabilities of a helicopter with those of a traditional fixed-wing aircraft, enabling the Osprey to fly much faster and farther than a helicopter. Similar to the AV-8B, this allows the aircraft to take off and land in environments where normal aircraft cannot go. The Osprey provides transport for personnel, cargo lift, and support for expeditionary assaults. The life expectancy of the MV-22B is 23 years.</p>	3	5	<p><b>MV-22B</b></p> <p>Timeline: <b>2007-TBD</b></p> <p>Fielding of the Osprey was completed in 2019 with the MV-22B replacing the CH-46E helicopter. Production was halted in FY 2023 once the Corps' full acquisition objective was reached.</p> <p><b>PROCUREMENT</b> <b>SPENDING (\$ millions)</b></p> <p>359 5 \$30,502 \$23,095</p>	5	5

## Heavy Lift

PLATFORM	Age Score	Capability Score	REPLACEMENT PROGRAM	Size Score	Health Score
<p><b>CH-53E Super Stallion</b></p> <p>Inventory: <b>129</b> Fleet age: <b>34</b> Date: <b>1981</b></p> <p>The CH-53E is a heavy-lift rotary-wing aircraft. The Super Stallion transports heavy equipment and supplies for amphibious assault operations and sustained operations ashore. Able to be aerial refueled, it can enable operations across vast distances. The aircraft will operate through 2025, to be replaced by the more advanced CH-53K.</p>	5	1	<p><b>CH-53K</b></p> <p>Timeline: <b>2017-2030</b></p> <p>The CH-53K King Stallion program is currently in full-rate production. It will replace the aging CH-53E and provide increased range, survivability, and payload. The King Stallion achieved IOC in April 2022 and is scheduled to deploy in 2024. It is on schedule to declare Full Operational Capability in FY 2029.</p> <p><b>PROCUREMENT</b> <b>SPENDING (\$ millions)</b></p> <p>40 156 \$6,397 \$18,428</p>	5	3

## Tanker

PLATFORM	Age Score	Capability Score	REPLACEMENT PROGRAM	Size Score	Health Score
<p><b>KC-130J</b></p> <p>Inventory: <b>46</b> Fleet age: <b>13</b> Date: <b>2005</b></p> <p>The KC-130J is a large multi-role aircraft that is used primarily as a tanker and cargo transport. It can be equipped for various missions including air-to-air refueling, reconnaissance, and medevac operations.</p>	4	5	<p><b>KC-130J</b></p> <p>Timeline: <b>2005-2024</b></p> <p>The KC-130J is both a tanker and a transport aircraft. The procurement program for the KC-130J is not facing acquisition problems. Procurement is planned to be complete by 2024.</p> <p><b>PROCUREMENT</b> <b>SPENDING (\$ millions)</b></p> <p>84 27 5,988 \$4,215</p>	4	4

**NOTE:** See Methodology for descriptions of scores. Fleet age is the average between the last year of procurement and the first year of initial operational capability. The date is when the platform achieved initial operational capability. The timeline is from the start of the platform's program to its budgetary conclusion. Spending does not include advanced procurement or research, development, test, and evaluation (RDT&E). Total program dollar value reflects the full F-35 joint program, including engine procurement. As part of the F-35 program, the Navy is purchasing 67 F-35Cs for the U.S. Marine Corps that are included here. The MV-22B program also includes some costs from U.S. Air Force procurement. AH-1Z costs include costs of UH-1 procurement.



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13. Transcript, "House Armed Services Committee Holds Hearing on the Fiscal Year 2023 Navy Budget Request," U.S. Navy Office of Information, May 11, 2022, <https://www.navy.mil/Press-Office/Testimony/display-testimony/Article/3029896/house-armed-services-committee-holds-hearing-on-the-fiscal-year-2023-navy-budge/> (accessed August 30, 2023).

14. Based on an ongoing series of experiments, it appears that the Corps will settle on an infantry battalion slightly larger than 800 Marines. See Berger, statement before House Armed Services Committee, April 28, 2023, p. 8.
15. To be clear, the Corps has thought of itself in terms of Marine Air Ground Task Forces (MAGTFs), a collection of ground, aviation, and logistics capabilities under a common commander, for nearly six decades, but because its size and composition vary by task, the MAGTF is not helpful as a consistent reference for capacity; thus, we use battalions as a measure that is generally understood by most students of military affairs. For an expanded discussion, see Dakota L. Wood, "Rebuilding America's Military: The United States Marine Corps," Heritage Foundation *Special Report* No. 211, March 21, 2019, pp. 15–16, <https://www.heritage.org/defense/report/rebuilding-americas-military-the-united-states-marine-corps>. With specific reference to its infantry battalions, the Corps is engaged in a fundamental redesign as a subcomponent of FD 2030, but until the reorganization effort is complete, the force that it would use in an emerging crisis for the foreseeable future will consist of the standard infantry battalions and supporting arms and units that it possesses today. For additional information, see U.S. Marine Corps, "2030 Infantry Battalions," August 2, 2021, <https://www.marines.mil/News/News-Display/Article/2708161/2030-infantry-battalions/> (accessed August 29, 2023).
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67. For a concise explanation of the incident and follow-on actions by the Marine Corps, see press release, "Marine Corps Releases Command Investigation into the Assault Amphibious Vehicle Mishap off the Coast of Southern California on July 30, 2020," *U.S. Marine Corps*, March 25, 2021, <https://www.marines.mil/News/Press-Releases/Press-Release-Display/Article/2551200/marine-corps-releases-command-investigation-into-the-assault-amphibious-vehicle/> (accessed August 30, 2023). The Corps allocated \$39.5 million in FY 2020 and \$87.5 million in FY 2021 to AAV improvements, partly to address shortfalls identified as a result of the accident. See Exhibit P-40, "Budget Line Item Justification: PB 2022 Navy, Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 02: Weapons and Combat Vehicles / BSA 1: Tracked Combat Vehicles, P-1 Line Item Number / Title: 2021 / AAV7A1 PIP," in U.S. Department of the Navy, *Department of Defense Fiscal Year (FY) 2022 Budget Estimates, Navy, Justification Book Volume 1 of 1, Procurement, Marine Corps*, May 2021, pp. 1 and 2, [https://www.secnav.navy.mil/fmc/fmb/Documents/22pres/PMC\\_Book.pdf](https://www.secnav.navy.mil/fmc/fmb/Documents/22pres/PMC_Book.pdf) (accessed August 30, 2023), and Exhibit P-5, "Cost Analysis: PB 2022 Navy, Appropriation / Budget Activity / Budget Sub Activity: 1109N / 02 / 1, P-1 Line Item Number / Title: 2021 / AAV7A1 PIP, Item Number / Title [DODIC]: 1 / AAV7A1 PIP," in *ibid.*, pp. 3 and 4.
68. Gidget Fuentes, "Marines: Limited AAV Operations on Water Resume as Vehicle Inspections, Unit Certifications Required in Fatal Sinking Aftermath," *U.S. Naval Institute News*, April 21, 2021, <https://news.usni.org/2021/04/21/marines-limited-aav-operations-on-water-resume-as-vehicle-inspections-unit-certifications-required-in-fatal-sinking-aftermath> (accessed August 30, 2023).
69. Sam LaGrone, "BREAKING: Marines Keeping AAVs Out of the Water Permanently," *U.S. Naval Institute News*, December 15, 2021, <https://news.usni.org/2021/12/15/breaking-marines-keeping-aavs-out-of-the-water-permanently> (accessed August 30, 2023).
70. *Ibid.*
71. Exhibit P-40, "Budget Line Item Justification: PB 2024 Navy, Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 02: Weapons and Combat Vehicles / BSA 1: Tracked Combat Vehicles, P-1 Line Item Number / Title: 2025 / Amphibious Combat Vehicle Family of Vehicles," in U.S. Department of the Navy, *Department of Defense Fiscal Year (FY) 2024 Budget Estimates, Navy, Justification Book Volume 1 of 1, Procurement, Marine Corps*, March 2023, p. 5, [https://www.secnav.navy.mil/fmc/fmb/Documents/24pres/PMC\\_Book.pdf](https://www.secnav.navy.mil/fmc/fmb/Documents/24pres/PMC_Book.pdf) (accessed August 30, 2023).
72. Andrew Feickert, "The Marine Corps' Amphibious Combat Vehicle (ACV)," Congressional Research Service *In Focus* No. IF11755, updated March 13, 2023, <https://crsreports.congress.gov/product/pdf/IF/IF11755> (accessed August 30, 2023).

73. Exhibit P-40, “Budget Line Item Justification: PB 2024 Navy, Appropriation / Budget Activity / Budget Sub Activity: 1109N: Procurement, Marine Corps / BA 05: Support Vehicles / BSA 2: Tactical Vehicles, P-1 Line Item Number / Title: 5095 / Joint Light Tactical Vehicle,” in U.S. Department of the Navy, *Department of Defense Fiscal Year (FY) 2024 Budget Estimates, Navy, Justification Book Volume 1 of 1, Procurement, Marine Corps*, p. 345.
74. Andrew Feickert, “Joint Light Tactical Vehicle: Background and Issues for Congress,” Congressional Research Service Report RS22942, updated July 13, 2020, p. 6, <https://crsreports.congress.gov/product/pdf/RS/RS22942> (accessed August 30, 2023).
75. Private correspondence with the author, July 19, 2022.
76. Statement of Lieutenant General Mark R. Wise, Deputy Commandant for Aviation, U.S. Marine Corps, in hearing, *Fiscal Year 2022 Budget Request of the Department of Defense for Fixed-Wing Tactical and Training Aircraft Programs*, Subcommittee on Tactical Air and Land Forces, Committee on Armed Services, U.S. House of Representatives, July 13, 2021, <https://www.govinfo.gov/content/pkg/CHRG-117hrg45620/html/CHRG-117hrg45620.htm> (accessed August 30, 2023), and Annette Weston, “Sundown Ceremony for Harrier Training Squadron Marks End of Nearly 40-Year Era,” NewsChannel 12 [New Bern, North Carolina], October 27, 2021, <https://wcti12.com/news/local/sundown-ceremony-for-harrier-training-squadron-marks-end-of-nearly-40-year-era> (accessed August 30, 2023).
77. Accounting for Marine Corps possession of F-35s is a rather complicated exercise. The service reports how many aircraft it has in its inventory in its Aviation Plan, a public document that is not published every year. On page 51 of the 2022 AVPLAN (the most recent version), the Corps reports an inventory of 116 F-35B and 10 F-35C aircraft with eight F-35Bs listed separately in depot maintenance; it is not clear whether those eight F-35Bs are included in the 116. The data used in the table are taken from a budget document published in November 2021. Thus, when the Corps published its 2022 AVPLAN, F-35Bs in the Corps’ inventory could be 116 or 124 depending on how one accounts for those that are in depot maintenance. On page 56 of the AVPLAN, the Corps shows the transition plan by which it is replacing older aircraft with new aircraft; the AV-8B Harrier is being replaced by the F-35B, for example, and the F/A-18 is being replaced by the F-35C. According to this chart, by the end of FY 2021 (roughly accounting for its dataset dated from November 2021), the Corps had approximately 127 F-35B and 10 F-35C aircraft, but these counts do not include aircraft purchased by the Marines in a given year (for example, FY 2021, 2022, or 2023) that might still be in production or in transition between the manufacturer, acceptance by the service, and fielding in a squadron. Department of the Navy budget documents for naval aviation (which covers both U.S. Navy and U.S. Marine Corps aircraft) capture aircraft purchased in a fiscal year; they do not account for aircraft that exist in operational units. Within the budget documents, there is an explanatory footnote clarifying that budget numbers for F-35s purchased by the Department of the Navy for both the Corps and the Navy through FY 2010 did not differentiate between F-35B and F-35C models, nor was there a clear distinction between Navy and Marine Corps F-35Cs. In FY 2011, a separate budget line number was assigned to F-35B models, and greater clarity was given to F-35Cs. Pages 13 and 41 of the Navy’s FY-2024 budget activities justification book for aviation procurement includes a note explaining that from FY 2008–FY 2010, the Navy procured 29 F-35Bs. These 29 aircraft are not included in the “Prior Years” amount of 129 F-35B aircraft shown on page 41, a number that captures how many F-35Bs were purchased from FY 2011–FY 2021. Similarly, page 14 shows the breakout between Navy and Marine Corps F-35C models, but even here the numbers are not clear. The USMC AVPLAN shows 10 F-35Cs in inventory and 10 assigned to a squadron in its TACAIR Transition Plan chart (assigned to VMFA-314). But page 13 of the Navy budget document shows 143 F-35Cs procured from FY 2011–FY 2021 and, in Note (1), 340 F-35Cs purchased from the start of the program through FY 2021. Thus, the Navy purchased 483 F-35Cs through FY 2021 but on page 14 accounts for only nine aircraft bought specifically for the Marine Corps: three in FY 2022 and six in FY 2023, long after the Corps fielded its 10 aircraft in a single squadron. Combining all of this information—accounting for Navy budget documents and the Corps’ AVPLAN—it appears that the Corps has (whether in operational units or not) 19 F-35Cs and 190 F-35Bs fielded or purchased through FY 2023. For the stout-of-heart researcher, see Exhibit P-40, “Budget Line Item Justification: PB 2024 Navy, Appropriation / Budget Activity / Budget Sub Activity: 1506N: Aircraft Procurement, Navy / BA 01: Combat Aircraft / BSA 1: Combat Aircraft, P-1 Line Item Number / Title: 0147 / Joint Strike Fighter CV,” in U.S. Department of the Navy, *Department of Defense Fiscal Year (FY) 2024 Budget Estimates, Navy, Justification Book Volume 1 of 3, Aircraft Procurement, Navy, Budget Activities 01–04*, pp. 13 and 14; Exhibit P-40, “Budget Line Item Justification: PB 2024 Navy, Appropriation / Budget Activity / Budget Sub Activity: 1506N: Aircraft Procurement, Navy / BA 01: Combat Aircraft / BSA 1: Combat Aircraft, P-1 Line Item Number / Title: 0152 / JSF STOVL,” in *ibid.*, p. 41; and U.S. Marine Corps, *2022 United States Marine Corps Aviation Plan*, pp. 51, 56, and 57.
78. For an explanation of current F-35 cost and performance matters, see John Venable, “Swiss Government Purchase of F-35A Fighter Jet Reveals Critical Flaws in U.S. Air Force Decision to Buy F-15EX,” Heritage Foundation *Issue Brief* No. 5202, July 12, 2021, <https://www.heritage.org/sites/default/files/2021-07/IB5202.pdf>.
79. Berger statement, May 9, 2022.
80. *Ibid.*
81. Berger, statement before House Armed Services Committee, April 28, 2023, p. 4.
82. Exhibit P-40, “Budget Line Item Justification: PB 2024 Navy, Appropriation / Budget Activity / Budget Sub Activity: 1506N: Aircraft Procurement, Navy / BA 01: Combat Aircraft / BSA 1: Combat Aircraft, P-1 Line Item Number / Title: 0164 / V-22 (Medium Lift),” in U.S. Department of the Navy, *Department of Defense Fiscal Year (FY) 2024 Budget Estimates, Navy, Justification Book Volume 1 of 3, Aircraft Procurement, Navy, Budget Activities 01–04*, p. 85.
83. U.S. Marine Corps, *2022 United States Marine Corps Aviation Plan*, pp. 90, 96.

84. Vice Admiral Paul Grosklags, Representing Assistant Secretary of the Navy (Research, Development and Acquisition); Lieutenant General Jon Davis, Deputy Commandant for Aviation; and Rear Admiral Michael C. Manazir, Director Air Warfare, statement on “Department of the Navy’s Aviation Programs” before the Subcommittee on Seapower, Committee on Armed Services, U.S. Senate, April 20, 2016, p. 21, [http://www.armed-services.senate.gov/imo/media/doc/Grosklags-Davis-Manazir\\_04-20-16.pdf](http://www.armed-services.senate.gov/imo/media/doc/Grosklags-Davis-Manazir_04-20-16.pdf) (accessed August 30, 2023).
85. U.S. Government Accountability Office, *Defense Acquisitions: Assessments of Selected Weapons Programs*, GAO-16-329SP, March 2016, p. 93, <http://www.gao.gov/assets/680/676281.pdf> (accessed August 29, 2023).
86. Exhibit P-40, “Budget Line Item Justification: PB 2024 Navy, Appropriation / Budget Activity / Budget Sub Activity: 1506N: Aircraft Procurement, Navy / BA 01: Combat Aircraft / BSA 1: Combat Aircraft, P-1 Line Item Number / Title: 0158 / CH-53K (Heavy Lift),” in U.S. Department of the Navy, *Department of Defense Fiscal Year (FY) 2024 Budget Estimates, Navy, Justification Book Volume 1 of 3, Aircraft Procurement, Navy, Budget Activities 01-04*, p. 61.
87. 10 U.S. Code § 8063(a), <https://www.law.cornell.edu/uscode/text/10/8063> (accessed August 29, 2023).
88. Berger, statement before House Armed Services Committee, April 28, 2023, p. 36.
89. U.S. Marine Corps, *Commander’s Readiness Handbook*, May 2014, p. iv, <https://www.hqmc.marines.mil/Portals/138/HiRes%20Commanders%20Readiness%20Handbook.pdf> (accessed August 29, 2023). Italics in original.
90. General Charles Q. Brown, Jr., and General David H. Berger, “Redefine Readiness or Lose,” War on the Rocks, March 15, 2021, <https://warontherocks.com/2021/03/redefine-readiness-or-lose/> (accessed August 29, 2023).
91. “[Lieutenant General Eric] Smith used the anti-armor mission as an example of how the service [is] evolving. Before, the Marines would use their own tanks to target enemy tanks. Now, the service is divesting its entire fleet of tanks to free up money to invest in higher priorities. Instead, it can use long-range precision munitions launched from the back of a JLTV to destroy enemy tanks from a more mobile posture and from longer ranges. ‘The experimentation that we’ve done now to date successfully using lightweight mounted fires—think the back of a Joint Light Tactical Vehicle—is killing armor at ranges, rough calculation, about 15, 20 times the range that a main battle tank can kill another main battle tank,’ Smith said. He added the Marine Corps didn’t get rid of its tanks because they weren’t good at taking out adversary tanks, but rather ‘we can kill armor formations at longer ranges using additional and other resources without incurring a 74-ton challenge trying to get that to a shore, or to get it from the United States into the fight. You simply can’t be there in time.’” Megan Eckstein, “Early Experiments Are Proving out Tank-Free Marine Corps Concept,” U.S. Naval Institute News, February 10, 2021, <https://news.usni.org/2021/02/10/early-experiments-are-proving-out-tank-free-marine-corps-concept> (accessed August 30, 2023). General Berger has built on this point with his annual updates that report progress with FD 2030. For his most recent discussion of divestiture, replacement capabilities, and readiness, see Berger, “Force Design 2030 Annual Update,” May 2022, p. 16.
92. J.R. Wilson, “State of the Corps: The Final Interview with Gen. James T. Conway, Commandant of the Marine Corps,” Defense Media Network, October 24, 2010, <https://www.defensemedianetwork.com/stories/state-of-the-corps/> (accessed August 30, 2023).
93. The ongoing war in Ukraine is a ready example of how modern technologies, once unreachable because of cost, complexity, and rarity, are now ubiquitous and affordable and are being leveraged to support military operations at all levels of war. What was once the preserve of major states, advanced technologies can be adapted from the commercial market to great effect. For various examples, see Jason McGee-Abe, “One Year on: 10 Technologies Used in the War in Ukraine,” TechInformed, February 24, 2023, <https://techinformed.com/one-year-on-10-technologies-used-in-the-war-in-ukraine/> (accessed August 30, 2023); Robin Fontes and Jorrit Kamminga, “Ukraine a Living Lab for AI Warfare,” *National Defense*, March 24, 2023, <https://www.nationaldefensemagazine.org/articles/2023/3/24/ukraine-a-living-lab-for-ai-warfare> (accessed August 30, 2023), and Annika Burgess, “What Ukraine’s Weapons Innovation and Commercial Technologies Tell Us About the Future of War,” ABC [Australian Broadcasting Corporation] News, February 3, 2023, <https://www.abc.net.au/news/2023-02-04/diy-weapons-innovation-drones-in-ukraine-war-russia/101910506> (accessed August 30, 2023).
94. When questioned about Force Design 2030 initiatives during his confirmation hearing on his nomination to be 39th Commandant of the Marine Corps, Assistant Commandant General Eric Smith said, “So those efforts are on pace and need to go faster, because also as referenced from Ranking Member Wicker, whether the year is ’27, ’26, ’25, for the Marines, we are the fight tonight force. We want to be even more ready than we are every single day. That is our mission when we wake up. ♣ So, Force Design is on track. We need to accelerate those areas where we can...” See stenographic transcript of hearing *To Consider the Nomination of: General Eric M. Smith, USMC for Reappointment to the Grade of General and to be Commandant of the Marine Corps*, Committee on Armed Services, U.S. Senate, June 13, 2023, p. 22, [https://www.armed-services.senate.gov/imo/media/doc/transcript\\_61323.pdf](https://www.armed-services.senate.gov/imo/media/doc/transcript_61323.pdf) (accessed August 30, 2023).
95. See Berger, “Commandant’s Planning Guidance.”
96. See Sarah Cammarata, “Infantry Training More Intense as Marine Corps Makes Major Changes, Commandant Tells Senators,” *Stars and Stripes*, June 25, 2021, [https://www.stripes.com/branches/marine\\_corps/2021-06-24/Infantry-training-more-intense-as-Marines-Corps-makes-major-changes-commandant-tells-senators-1793441.html](https://www.stripes.com/branches/marine_corps/2021-06-24/Infantry-training-more-intense-as-Marines-Corps-makes-major-changes-commandant-tells-senators-1793441.html) (accessed August 30, 2023); Chad Garland, “Marine Corps Seeks to Make ‘Smarter’ Infantry Force with New Course,” *Stars and Stripes*, February 22, 2021, <https://www.stripes.com/theaters/us/marine-corps-seeks-to-make-smarter-infantry-force-with-new-course-1.663144> (accessed August 30, 2023); and Gidget Fuentes, “Marines Retooling Infantry Training for Complex Warfare in Pacific,” U.S. Naval Institute News, May 6, 2021, <https://news.usni.org/2021/05/06/marines-retooling-infantry-training-for-complex-warfare-in-pacific> (accessed August 30, 2023).
97. Matt Gonzales, “Breaking New Ground: Corps’ Wargaming Center Ready for Construction,” U.S. Marines, June 24, 2021, <https://www.marines.mil/News/News-Display/Article/2670179/breaking-new-ground-corps-wargaming-center-ready-for-construction/> (accessed August 30, 2023).



98. Diana Stancy Correll, "Navy, Marine Corps Aim to Refine, Test Modern Warfighting Concepts in Large Scale Exercise 2021," *Navy Times*, August 9, 2021, <https://www.navytimes.com/news/your-navy/2021/08/09/navy-marine-corps-aim-to-refine-test-modern-warfighting-concepts-in-large-scale-exercise-2021/> (accessed August 30, 2023), and Sam LaGrone, "Large Scale Exercise 2021 Tests How Navy, Marines Could Fight a Future Global Battle," U.S. Naval Institute News, August 9, 2021, <https://news.usni.org/2021/08/09/large-scale-exercise-2021-tests-how-navy-marines-could-fight-a-future-global-battle> (accessed August 30, 2023).
99. U.S. Navy, U.S. Fleet Forces Command, "Navy and Marine Corps Commence Large Scale Exercise 2023," August 9, 2023, <https://www.usff.navy.mil/Press-Room/News-Stories/Article/3488030/navy-and-marine-corps-commence-large-scale-exercise-2023/> (accessed August 30, 2023).
100. Berger, Senate Armed Services Committee testimony, May 12, 2022, pp. 17–19.
101. U.S. Marine Corps, "Redesignated: 3rd Marine Regiment Becomes 3rd Marine Littoral Regiment."
102. Dzirhan Mahadzir, "New Marine Littoral Regiment Key to Expanded Pacific Security Cooperation, U.S., Japanese Leaders Say," U.S. Naval Institute News, January 12, 2023, <https://news.usni.org/2023/01/12/new-marine-littoral-regiment-key-to-expanded-pacific-security-cooperation-u-s-japanese-leaders-say> (accessed August 27, 2023).
103. This count is based on an average number of 1.5 divisions deployed to major wars (see Table 6, "Historical U.S. Force Allocation," in "An Assessment of U.S. Military Power," *supra*) and an average of 10–11 battalions per division.
104. General David H. Berger and Ryan Evans, "A Chat with the Commandant: Gen. David H. Berger on the Marine Corps' New Direction," *War on the Rocks*, April 6, 2020, <https://warontherocks.com/2020/04/a-chat-with-the-commandant-gen-david-h-berger-on-the-marine-corps-new-direction/> (accessed August 30, 2023), and General David H. Berger, Commandant of the Marine Corps, "The 38th Commandant's Intent," U.S. Marine Corps, July 17, 2019, <https://www.cmc.marines.mil/Priorities-Guidance-and-Concepts/Article/Article/2929844/the-38th-commandants-intent/> (accessed August 30, 2023).
105. Berger, "Force Design 2030," pp. 2, 7, 8, and 11.
106. U.S. Department of the Navy, Office of Budget–2023, *Highlights of the Department of the Navy FY 2024 Budget*, DON Budget Card, [https://www.secnav.navy.mil/fmc/fmb/Documents/24pres/DON\\_Budget\\_Card.pdf](https://www.secnav.navy.mil/fmc/fmb/Documents/24pres/DON_Budget_Card.pdf) (accessed August 30, 2023).
107. *Ibid.*
108. Exhibit P-1, "FY 2024 President's Budget, Total Obligational Authority, DoD Component Summary," in U.S. Department of the Navy, *Department of Defense Fiscal Year (FY) 2024 Budget Estimates, Navy, Justification Book Volume 1 of 1, Procurement, Marine Corps*, p. vii.