# **Executive Summary**

"The U.S. military is only marginally able to meet the demands of defending America's vital national interests."

The United States maintains a military force primarily to protect the homeland from attack and to protect its interests abroad. There are secondary uses—for example, to assist civil authorities in times of disaster or to deter opponents from threatening America's interests—but this force's primary purpose is to make it possible for the U.S. to physically impose its will on an enemy when necessary.

It is therefore critical that the condition of the United States military with respect to America's vital national security interests, threats to those interests, and the context within which the U.S. might have to use "hard power" be understood. Knowing how these three areas—operating environments, threats, and the posture of the U.S. military—change over time, given that such changes can have substantial implications for defense policies and investment, is likewise important.

Each year, The Heritage Foundation's *Index* of U.S. Military Strength employs a standardized, consistent set of criteria, accessible both to government officials and to the American public, to gauge the ability of the U.S. military to perform its missions in today's world. The inaugural 2015 edition established a baseline assessment on which each annual edition builds, assessing the state of affairs for its respective year and measuring how key factors have changed from the previous year.

#### What the Index Assesses

The Index of U.S. Military Strength assesses the ease or difficulty of operating in key regions based on existing alliances, regional political stability, the presence of U.S. military forces, and the condition of key infrastructure. Threats are assessed based on the behavior and physical capabilities of actors that pose challenges to U.S. vital national interests. The condition of America's military power is measured in terms of its capability or modernity, capacity for operations, and readiness to handle assigned missions successfully. This framework provides a single-source reference for policymakers and other Americans who seek to know whether our military power is up to the task of defending our national interests.

Any discussion of the aggregate capacity and breadth of the military power needed to address threats to U.S. security interests requires a clear understanding of precisely what interests must be defended. Three vital interests have been specified consistently and in various ways by a string of Administrations over the past few decades:

- **Defense** of the homeland;
- **Successful conclusion** of a major war that has the potential to destabilize a region of critical interest to the U.S.; and
- **Preservation** of freedom of movement within the global commons (the sea, air, outer-space, and cyberspace domains) through which the world conducts its business.

To defend these interests effectively on a global scale, the United States needs a military force of sufficient size, or what is known in the Pentagon as capacity. The many factors involved make determining how big the military should be a complex exercise, but successive Administrations, Congresses, and Department of Defense staffs have managed to arrive at a surprisingly consistent force-sizing rationale: an ability to handle two major wars or major regional contingencies (MRCs) simultaneously or in closely overlapping time frames. This two-war or two-MRC requirement is embraced in this *Index*.

At the core of this requirement is the conviction that the United States should be able to engage and decisively defeat one major opponent and simultaneously have the wherewithal to do the same with another to preclude opportunistic exploitation by any competitor. Since World War II, the U.S. has found itself involved in a major "hot" war every 15-20 years while simultaneously maintaining substantial combat forces in Europe and several other regions. The size of the total force roughly approximated the two-MRC model. Accordingly, our assessment of the adequacy of today's U.S. military is based on the ability of America's armed forces to engage and defeat two major competitors at roughly the same time.

This *Index*'s benchmark for a two-MRC force is derived from a review of the forces used for each major war that the U.S. has undertaken since World War II and the major defense studies completed by the federal government over the past 30 years. We concluded that a standing (i.e., Active Duty component) two-MRC-capable Joint Force would consist of:

- Army: 50 brigade combat teams (BCTs);
- **Navy:** at least 346 surface combatants and 624 strike aircraft;
- **Air Force:** 1,200 fighter/ground-attack aircraft; and
- Marine Corps: 36 battalions.

This recommended force does not account for homeland defense missions that would accompany a period of major conflict and are generally handled by Reserve and National Guard forces. Nor does it constitute the totality of the Joint Force, which includes the array of supporting and combat-enabling functions essential to the conduct of any military operation: logistics; transportation (land, sea, and air); health services; communications and data handling; and force generation (recruiting, training, and education), to name a very few. Rather, these are combat forces that are the most recognizable elements of America's hard power but that also can be viewed as surrogate measures for the size and capability of the larger Joint Force.

#### The Global Operating Environment

Looking at the world as an environment in which U.S. forces would operate to protect America's interests, the *Index* focused on three regions—Europe, the Middle East, and Asia because of the intersection of our vital interests and actors able to challenge them.

**Europe.** For the most part, Europe remains a stable, mature, and friendly environment, home to America's oldest and closest allies, although the migrant and refugee crises are straining the economies and societies of many European nations. The U.S. is tied to Europe by treaty, robust economic bonds, and deeply rooted cultural linkages. In general, America's partners in the region are politically stable; possess mature (though increasingly debtladen) economies; and have fairly modern (but shrinking) militaries. America's longtime presence in the region, Europe's well-established basing and support infrastructure, and the framework for coordinated action provided by NATO make the region quite favorable for military operations. A more muscular, belligerent Russia has caused a review of U.S. force posture on the continent, spurring reinvestment of U.S. military capabilities through programs like the European Reassurance Initiative.

**The Middle East.** The Middle East, by contrast, continues to be a deeply troubled

# **Operating Environment: Europe**

	VERY POOR	UNFAVORABLE	MODERATE	FAVORABLE	EXCELLENT
Alliances				<ul> <li>Image: A second s</li></ul>	
Political Stability				×	
U.S. Military Posture			<ul> <li>Image: A second s</li></ul>		
Infrastructure				×	
OVERALL				<ul> <li>Image: A second s</li></ul>	

### **Operating Environment: Middle East**

	VERY POOR	UNFAVORABLE	MODERATE	FAVORABLE	EXCELLENT
Alliances			<ul> <li>Image: A second s</li></ul>		
Political Stability	<ul> <li>✓</li> </ul>				
U.S. Military Posture			<ul> <li>Image: A second s</li></ul>		
Infrastructure			<ul> <li>Image: A second s</li></ul>		
OVERALL			<ul> <li>Image: A second s</li></ul>		

# **Operating Environment: Asia**

	VERY POOR	UNFAVORABLE	MODERATE	FAVORABLE	EXCELLENT
Alliances				<ul> <li>Image: A second s</li></ul>	
Political Stability			<ul> <li>Image: A second s</li></ul>		
U.S. Military Posture				×	
Infrastructure				<ul> <li>Image: A second s</li></ul>	
OVERALL				<ul> <li>Image: A second s</li></ul>	

### **Global Operating Environment**

	VERY POOR	UNFAVORABLE	MODERATE	FAVORABLE	EXCELLENT
Europe				×	
Middle East			<ul> <li>Image: A second s</li></ul>		
Asia				<ul> <li>Image: A second s</li></ul>	
OVERALL				<ul> <li>Image: A second s</li></ul>	

# **Global Operating Environment**

	VERY POOR	UNFAVORABLE	MODERATE	FAVORABLE	EXCELLENT
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area riven with conflict, ruled by authoritarian regimes, and home to a variety of terrorist and other destabilizing entities. Though the United States does enjoy a few strong partnerships in the region, its interests are beset by security and political challenges, transnational terrorism rooted in the region, and the maturing threat of a nuclear Iran. Offsetting these challenges to some extent are the U.S. military's experience in the region and the basing infrastructure that it has developed and leveraged for nearly 25 years, although these positive elements are decaying as a consequence of continued upheaval in Syria; Iran's pursuit of weapons that threaten both the U.S. and Europe, as well as its continued support of such terrorist groups as Hezbollah; and the increasingly problematic political environment in countries that historically have hosted U.S. forces (Qatar, for example).

Asia. Though the region includes longstanding U.S. allies that are stable and possess advanced economies, the tyranny of distance makes U.S. military operations in the region difficult in terms of the time and sealift and airlift required, a challenge that is only exacerbated as the size of the U.S. military continues to shrink. The region is critical to U.S. economic interests because Asian markets account for 40 percent of U.S. trade; consequently, the increasingly aggressive postures of China and North Korea have caused concern. In 2017, China was more overtly aggressive in pressing its claims to disputed islands and waters. Both South Korea and Japan have expressed alarm over North Korea's intentions, especially with respect to its missile program. Combined with a slight decrease in political stability across the region, Asia as an operating environment has trended toward more challenging for the U.S. in 2017.

Summarizing the condition of each region enables us to get a sense of how they compare in terms of the challenge the U.S. would have in projecting military power and sustaining combat operations in each one.

As a whole, the global operating environment currently rates a score of "favorable," meaning that the United States should be able to project military power anywhere in the world as necessary to defend its interests without substantial opposition or high levels of risk, but conditions could easily tip this aggregate score into the "moderate" category if conditions continue to degrade in both Asia and the Middle East in 2018.

#### Threats to U.S. Interests

Our selection of threat actors discounted troublesome states and non-state entities that lacked the physical ability to pose a meaningful threat to vital U.S. security interests. This reduced the population of all potential threats to a half-dozen that possessed the means to threaten U.S. vital interests and exhibited a pattern of provocative behavior that should draw the focus of U.S. defense planning. This *Index* characterizes their behavior and military capabilities on five-point, descending scales.

All of the six threat actors selected—Russia, China, Iran, North Korea, and terrorist groups in the Middle East and Afghanistan—remained actual or potential threats to U.S. interests over the past year. All amply demonstrated a commitment to expanding their capabilities to pursue their respective interests that directly challenged those of the U.S. All also continued or increased their aggressive behavior when compared to the 2016 *Index*.

Worryingly, all of the six noted threat actors now rank "high" on the scale of threats to U.S. interests, with Russia coming close to being elevated to "severe" from its past score of "high."

Russia and China continue to be the most worrisome, both because of the ongoing modernization and expansion of their offensive military capabilities and because of the more enduring effect they are having within their respective regions. Russia has maintained its active involvement in the conflict in Ukraine, has been more assertive in the Baltic Sea region, and has continued to insert itself into the Syrian conflict. China's provocative behavior continues to include militarization of islands that it has built in highly disputed international waters of the South China Sea. China

# **Threat Categories**

Behavior	HOSTILE	AGGRESSIVE	TESTING	ASSERTIVE	BENIGN
Capability	FORMIDABLE	GATHERING	CAPABLE	ASPIRATIONAL	MARGINAL

# **Behavior of Threats**

	HOSTILE	AGGRESSIVE	TESTING	ASSERTIVE	BENIGN
Russia		<ul> <li>✓</li> </ul>			
Iran		<ul> <li>✓</li> </ul>			
Middle East Terrorism		<ul> <li>✓</li> </ul>			
Af-Pak Terrorism		<ul> <li>✓</li> </ul>			
China			<ul> <li>Image: A second s</li></ul>		
North Korea		<b>~</b>			
OVERALL		<b>~</b>			

### **Capability of Threats**

	FORMIDABLE	GATHERING	CAPABLE	ASPIRATIONAL	MARGINAL
Russia	<ul> <li>✓</li> </ul>				
Iran		<ul> <li>✓</li> </ul>			
Middle East Terrorism			<ul> <li>Image: A second s</li></ul>		
Af-Pak Terrorism			<ul> <li>Image: A second s</li></ul>		
China	<ul> <li>✓</li> </ul>				
North Korea		<ul> <li>✓</li> </ul>			
OVERALL		<ul> <li>Image: A second s</li></ul>			

# **Threats to U.S. Vital Interests**

	SEVERE	HIGH	ELEVATED	GUARDED	LOW
Russia		<ul> <li>✓</li> </ul>			
Iran		<ul> <li>✓</li> </ul>			
Middle East Terrorism		<ul> <li>✓</li> </ul>			
Af-Pak Terrorism		<ul> <li>✓</li> </ul>			
China		<ul> <li>✓</li> </ul>			
North Korea		<ul> <li>✓</li> </ul>			
OVERALL		<b>~</b>			

#### to navigate international waters in the region. North Korea has executed an alarming

number of missile tests: 18 as of early August 2017 compared to 21 for all of 2016. These tests have demonstrated the commitment of Kim Jong-un's regime to fielding a force of shortrange, medium-range, and long-range ballistic, cruise, and submarine-launched missiles, presumably with the ability to carry nuclear warheads. The latest tests have hinted at North Korea's ability to reach targets in the United States. These developments, combined with its increasingly hostile rhetoric toward the West over the past year, make North Korea the most volatile threat addressed in the *Index*. Terrorism based in Afghanistan continues

to challenge the stability of that country. To the extent that various groups based in the region straddling the border with Pakistan remain potent and active, they also remain a threat in being to the stability of Pakistan, which is a matter of concern given Pakistan's status as a nuclear power and its sustained frictions with India, also a nuclear power.

In addition, Iran's efforts to develop more advanced military capabilities and its active support of the various terrorist groups operating in the Middle East continue to undermine regional security conditions and therefore to threaten the regional interests of the U.S.

With these threats taken together, the globalized threat to U.S. vital national interests as a whole during 2017 remained "high."

#### The Status of U.S. Military Power

18

Finally, we assessed the military power of the United States in three areas: capability, capacity, and readiness. We approached this assessment by military service as the clearest way to link military force size, modernization programs, unit readiness, and (in general terms) the functional combat power (land, sea, and air) represented by each service. We treated the United States' nuclear capability as a separate entity given its truly unique characteristics and constituent elements, from the weapons themselves to the supporting infrastructure that is fundamentally different from the infrastructure that supports conventional capabilities.

**GUARDED** 

LOW

These three areas of assessment (capability, capacity, and readiness) are central to the overarching questions of whether the U.S. has a sufficient quantity of appropriately modern military power and whether military units are able to conduct military operations on demand and effectively.

As reported in all previous editions of the Index, the common theme across the services and the U.S. nuclear enterprise is one of force degradation resulting from many years of underinvestment, poor execution of modernization programs, and the negative effects of budget sequestration (cuts in funding) on readiness and capacity. While the military has been heavily engaged in operations, primarily in the Middle East but elsewhere as well, since September 11, 2001, experience is both ephemeral and context-sensitive. Valuable combat experience is lost as the servicemembers who individually gained experience leave the force, and it maintains direct relevance only for future operations of a similar type: Counterinsurgency operations in Iraq, for example, are fundamentally different from major conventional operations against a state like Iran or China.

Thus, although the current Joint Force is experienced in some types of operations, it lacks experience with high-end, major combat operations, and it is still aged and shrinking in its capacity for operations.

### **Threats to U.S. Vital Interests**

also continues its aggressive naval tactics to

intimidate such neighboring countries as Ja-

pan and the Philippines and continues to bully

other countries that try to exercise their right

SEVERE

HIGH

**ELEVATED** 

In the aggregate, the United States' military posture is rated **"marginal"** and is trending toward **"weak,"** a condition unchanged from the *2017 Index*.

Overall, the *2018 Index* concludes that the current U.S. military force is likely capable of meeting the demands of a single major regional conflict while also attending to various presence and engagement activities but that it would be very hard-pressed to do more and certainly would be ill-equipped to handle two nearly simultaneous major regional contingencies. The limits imposed on defense spending and the programmatic volatility created by continuing resolutions, passed in lieu of formal budgets approved on schedule, have kept the military services small, aging, and under significant pressure. Essential maintenance continues to be deferred; the availability of fewer units for operational deployments increases the frequency and length of deployments; and old equipment continues to be extended while programmed replacements are either delayed or beset by developmental difficulties.

The military services have continued to prioritize readiness for current operations by shifting funding to deployed or soon-to-deploy units while sacrificing the ability to keep non-deployed units in "ready" condition; delaying, reducing, extending, or canceling modernization programs; and sustaining the reduction in size and number of military units. While Congress and the new Administration have taken some positive steps to fund readiness in 2017 more robustly, they have not overturned the Budget Control Act that caps defense spending. Without a real commitment to increases in modernization, capacity, and readiness accounts over the next few years, America's military branches will continue to be strained to meet the missions they are called upon to fulfill.

As currently postured, the U.S. military is only marginally able to meet the demands of defending America's vital national interests.

We characterized the services and the nuclear enterprise on a five-category scale ranging from "very weak" to "very strong," benchmarked against criteria elaborated in the full report. These characterizations should not be construed as reflecting the competence of individual servicemembers or the professionalism of the services or Joint Force as a whole; nor do they speak to the U.S. military's strength relative to other militaries around the world. Rather, they are assessments of the institutional, programmatic, and material health or viability of America's hard military power.

Our analysis concluded with these assessments:

• **Army as "Weak."** The Army's score remained "weak" for reasons similar to those cited in previous editions of the *Index*. The Army has continued to trade end strength and modernization for improved readiness in some units for current operations. However, accepting risks in these areas has enabled the Army to keep only one-third of its force at acceptable levels of readiness, and even for units deployed abroad, the Army has had to increase its reliance on contracted support to meet maintenance requirements. Budget cuts have affected combat units disproportionately: Over the past few years, a 16 percent reduction in total end strength has led to a 32 percent reduction in the number of brigade combat teams and similar reductions in the number of combat aviation brigades. In summary, the Army is too small for the tasks it is assigned, its equipment continues to age, and it struggles to improve the readiness of its operating forces. Concerned by the prospect of a "hollow force" (i.e., units that exist on paper but are woefully understaffed), Army officials, instead

of using a 2017 congressional authorization to increase end strength by creating more units, chose merely to increase the level of staffing in existing units.

- Navy as "Marginal." The Navy's readiness score returned to the 2016 Index's score of "marginal." While the Navy is maintaining a solid global presence (slightly more than one-third of the fleet is deployed on any given day), it has little ability to surge to meet wartime demands. As in 2016, the Navy's decision to defer maintenance has kept ships at sea but also has affected the Navy's ability to deploy. With scores of "weak" in capability (largely because of old platforms and troubled modernization programs) and "marginal" in capacity, the Navy remained just able to meet operational requirements in 2017. Continuing budget shortfalls in its shipbuilding account will hinder the Navy's ability to improve its situation, both materially and quantitatively, for the next several years-an even larger problem considering that the Navy has revised its assessment of how many ships it needs to 355 instead of the 308 for which it has been budgeting in its 30-year shipbuilding plan.
- Air Force as "Marginal." Although • the Air Force's overall score remains the same as last year's, a clearer picture of the USAF's aircraft inventory yielded a significant drop in deliverable fighter capacity: The Air Force possesses 923 combat-coded tactical fighter aircraft, 236 below last year's capacity assessment and 277 below the Index assessment of 1,200 needed to meet a two-MRC level of military strength. While the Air Force's readiness score remained "marginal," this assessed area continues to trend downward due to increasing evidence of training and maintenance shortfalls, as well as pilots' own assessments of their forces obtained by The Heritage Foundation through

personal interviews. Combined with a continued capability score of "marginal," the Air Force's overall military strength score continues to trend downward at a time when America's dominance in the air domain is increasingly challenged by the technological advances of potential adversaries.

- Marine Corps as "Weak." The Corps continues to deal with readiness challenges driven by the combined effects of high operational tempo and low levels of funding. Aviation remained the largest challenge for the Corps in 2017 as maintenance and flight hour shortfalls combined with old platforms to cause the service to self-assess a dire state of readiness. The Corps' modernization programs are on track, but it will take several years for new equipment to be produced and fielded; ground combat systems, in particular, are long overdue for replacement. Unlike in past years, the Corps did not publicly provide detailed information about the status of its active-duty force with respect to its state of readiness for combat. The Corps has said the deploy-to-dwell ratio for its active force has dipped below 1:2, revealing increased stress on the force. This, combined with a clear assessment of poor aviation readiness, drove the Marine Corps' overall strength score from "marginal" to "weak" in 2017, making it the only service to drop to a lower category.
- Nuclear Capabilities as "Marginal." Warhead modernization, warhead/system testing, and adequate investment in the intellectual and talent underpinnings of the nuclear enterprise continue to be the chief problems facing America's nuclear capability. Delivery platform modernization continued to receive strong support from Congress and the Administration during 2017, with major investments in next-generation bomber and ballisticmissile submarine programs, but the force

depends on a very limited set of weapons (in number of designs) and models that are quite old, in stark contrast to the aggressive programs of competitor states. Of continued concern is the "marginal" score for "Allied Assurance" at a time when Russia has rattled its nuclear saber in a number of recent provocative exercises; China has been more aggressive in militarily pressing its claims to the South and East China Seas; North Korea is investing heavily in a submarine-launched ballistic missile capability; and Iran retains its nuclear infrastructure program as a key feature of the Joint Comprehensive Plan of Action (JCPOA) meant to restrain Iran's nuclear program. The aggressive pace of North Korea's missile testing, which purportedly is tied to its nuclear aspirations, is of particular concern.

#### **U.S. Military Power**

	VERY WEAK	WEAK	MARGINAL	STRONG	VERY STRONG
Army		✓			
Navy			<ul> <li>Image: A second s</li></ul>		
Air Force			<ul> <li>Image: A second s</li></ul>		
Marine Corps		✓			
Nuclear			<ul> <li>Image: A second s</li></ul>		
OVERALL			<b>~</b>		

### **U.S. Military Power: Army**

	VERY WEAK	WEAK	MARGINAL	STRONG	VERY STRONG
Capacity		<ul> <li>✓</li> </ul>			
Capability			<ul> <li>Image: A second s</li></ul>		
Readiness		<ul> <li>✓</li> </ul>			
OVERALL		<ul> <li>Image: A second s</li></ul>			

### **U.S. Military Power: Navy**

	VERY WEAK	WEAK	MARGINAL	STRONG	VERY STRONG
Capacity			<b>~</b>		
Capability		<ul> <li>✓</li> </ul>			
Readiness			<ul> <li>Image: A set of the set of the</li></ul>		
OVERALL			<ul> <li>Image: A second s</li></ul>		

# **U.S. Military Power: Air Force**

	VERY WEAK	WEAK	MARGINAL	STRONG	VERY STRONG
Capacity			~		
Capability			<b>~</b>		
Readiness			<ul> <li>Image: A second s</li></ul>	_	
OVERALL			<ul> <li>Image: A set of the set of the</li></ul>		

# **U.S. Military Power: Marine Corps**

	VERY WEAK	WEAK	MARGINAL	STRONG	VERY STRONG
Capacity		<ul> <li>✓</li> </ul>			
Capability			<ul> <li>✓</li> </ul>		
Readiness		<ul> <li>✓</li> </ul>			
OVERALL		<ul> <li>Image: A second s</li></ul>			

### **U.S. Military Power: Nuclear**

	VERY WEAK	WEAK	MARGINAL	STRONG	VERY STRONG
Warhead Surety				<ul> <li>Image: A second s</li></ul>	
Delivery Platform Reliability				~	
Warhead Modernization		<b>~</b>			
Delivery Systems Modernization				~	
Nuclear Weapons Complex		~			
National Labs Talent			<ul> <li>Image: A second s</li></ul>		
Force Readiness			<ul> <li>✓</li> </ul>		
Allied Assurance			<ul> <li>Image: A second s</li></ul>		
Nuclear Test Readiness		✓			
OVERALL			<ul> <li>Image: A second s</li></ul>		