French soldiers with French Foreign Legion's 6th Light Armored Brigade assault objective during bilateral seize-and-capture training exercise with U.S. Marines on Quartier Colonel de Chabrieres, France, May 29, 2015 (U.S. Marine Corps/Christopher Mendoza)

What It Means to Be Expeditionary A Look at the French Army in Africa

By Michael Shurkin

ormer U.S. Army Chief of Staff General Raymond Odierno elaborated a vision for the Service's future that left many questions unanswered. Specifically, he called for the Army to be more expeditionary as

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well as more scalable, tailorable, and regionally aligned. General Odierno's successor and the current Army Chief of Staff, General Mark Milley, similarly has spoken of the need for the Army to be "agile," "adaptive," and "expeditionary," and to have an "expeditionary mindset."¹ Lieutenant General Gustave Perna, writing in the March–April 2016 issue of *Army Sustainment*, has also evoked the imperative of having an "expeditionary Army."² What, however, do these terms mean? What would it take for the Army to realize the generals' vision, and what, if any, are the associated risks?

A recently published RAND study of French army operations in Mali in 2013 noted that in many ways, France's army epitomizes the characteristics General Odierno and General Milley have highlighted. It is a living example of a technologically sophisticated force that checks all of the generals' boxes; it does well precisely the things the generals call on the U.S. Army to do. Studying how the French army has organized itself and operates provides insight into what their ideals might mean in concrete terms for the U.S. Army and the associated benefits—but also the implied compromises and risks U.S. planners need to consider.

When comparing the strengths of the French and U.S. armies, it must be acknowledged that there is little the French can do that the ever-adaptable U.S. Army cannot. However, the Army's generalpurpose forces arguably are not designed and organized to deploy and fight on a small scale (at the brigade level or below), and the Army normally does not create company- and battalion-size units from multiple parent organizations, something the French do routinely. There is usually a cost incurred when organizations do things they are not designed to do.3 American planners, moreover, appear to have different understandings of what constitutes "enough" in terms of force protection, vehicle protection, capabilities, and so forth.4 The French, in contrast, operate on a small scale by design and doctrine and appear to have an altogether different understanding of sufficiency.

Envisioning Expeditionary In February 2013, General Odierno presented his vision of the future in an article in Foreign Affairs, along with issuing the more official 2013 Army Strategic Planning Guidance.⁵ The Army, he noted, changed as a result of a decade of operations in Afghanistan and Iraq. It needed, in effect, to be recentered. The top priority was restoring the Army's conventional capabilities and retaining its value as a deterrent associated with its ability to deploy and sustain indefinitely large formations capable of defeating any adversary. However, for a variety of reasons, the force could not simply revert to what it had been in the 1990s. On the contrary, it had to be something altogether new.

Among other capabilities, Odierno called on the Army to be the following:

- capable of task organizing at increasingly lower levels to execute "small footprint" operations
- capable of rapidly deploying scalable force packages, with the smaller packages capable of rapidly reassembling into larger formations as required
- oriented to stress small-unit leadership that thrives in an environment of dispersed, decentralized operations
- aligned regionally so that operating units are familiar with local cultures, personalities, and conditions.

Odierno's priorities later found expression in the "Army 2025" concept. According to a white paper published in January 2014, the Army has to "operate differently." It has to operate "decentralized, distributed, and integrated." It also must be "mission tailored," with units organized with the "capabilities needed for a specific mission and environment." Units also must be "engaged regionally." At the top of the agenda, however, is a revised force design featuring "optimized combat units (BCT [Brigade Combat Team] 2025)" intended to meet several objectives, among them being "more effectively mission tailored" and "regionally aligned." The Army should have "increased expeditionary capability" and be a "more expeditionary force" that nonetheless "has retained capability."6

What the text does not provide is insight into *how* the force must change to be "more" of in so many ways. The most prominent question, however, remains the meaning of the word *expeditionary*. The fullest definition dating to just prior to the Future Force 2025 project can be found in the 2012 Army Doctrine Reference Publication 3-0, *Unified Land Operations*:

Expeditionary capability is the ability to promptly deploy combined arms forces worldwide into any area of operations and conduct operations upon arrival. Expeditionary operations require the ability to deploy quickly with little notice, rapidly shape conditions in the operational area, and operate immediately on arrival exploiting success and consolidating tactical and operational gains. Expeditionary capabilities are more than physical attributes; they begin with a mindset that pervades the force.⁷

The U.S. Army Training and Doctrine Command's 2015 pamphlet The U.S. Army Operating Concept: Win in a Complex World, which bears Odierno's signature and reflects the Future Force 2025 project, builds on the above by adding scalability, tailorability, and the ability to manage in austere environments. It defines *expeditionary* as "the ability to deploy task-organized forces on short notice to *austere* locations, capable of conducting operations immediately upon arrival."8 The pamphlet also adds a new term, expeditionary maneuver, defined as "the rapid deployment of *task* organized combined arms forces able to transition quickly and conduct operations of *sufficient* scale and ample duration to achieve strategic objectives, aims to turn the enemy out of prepared positions or envelop forces from unexpected directions."9

Turning now to the French army, we find that it embodies many of the desired attributes mentioned above. Of particular interest, however, is not the degree to which the French army is expeditionary, but rather what the French example implies for U.S. Army assumptions, as well as the risks involved if it were to become more like the French.

Operation Serval

The French Operation *Serval* began on January 11, 2013, the day after Islamist militants who had already seized control over northern Mali began an offensive that threatened the nation's capital, Bamako. France first responded by committing to the fight special forces (SF) assets that were already in the region. While the SF focused on stopping the offensive and rallying Malian army defenders, France rushed generalpurpose troops into theater. The first to arrive—also on January 11—were units flown in from Chad, where they had been engaged in a long-running operation. Other units drove in from Côte d'Ivoire, while still more units began arriving from France.

By January 15, the French had stopped the militants' offensive and begun advancing north to seize control over the broad strip of land on either side of the Niger River, commonly referred to as the Niger Bend because of the river's curving path. The Bend includes northern Mali's most populous towns, Gao and Timbuktu. The French employed fast-moving armored columns combined with airborne and air-land operations, coordinated with SF and with air support from the French air force. The French took Gao on January 25 and Timbuktu 4 days later. They kept moving quickly, securing distant Kidal-the epicenter of Tuareg militancy-by January 31, and Tessalit on February 8. The campaign climaxed in February and March as French and Chadian forces converged on the Adrar des Ifoghas mountains, where remaining militants made a last stand. By late spring, the "major combat operations" phase of Serval was complete. Serval continued on a smaller scale until it officially came to an end on July 15, 2014, when it was subsumed into a new regional counterterrorism operation, Barkhane. Nine French soldiers lost their lives fighting in Mali between January 11, 2013, and July 15, 2014.

The French in Mali demonstrated a number of features of interest to this article. These include the French army's approach to task organization, which is related to how the French organize their force; France's prioritization of mobility over protection; the army's regional alignment; and finally its expeditionary culture, which relates to all of the above.

Task Organizing

The French in Mali demonstrated an ability to tailor their forces, deploying relatively small task-oriented formations. Although it is difficult to compare the French and American armies, in our assessment of the French forces deployed to Mali compared to U.S. norms, we believe that the Americans would have sent a larger force with a proportionately larger support element. What the French do—and what they have designed their army to do—is measure out their forces in small increments and aim for "just enough." That involves, among other things, the ability to disaggregate and re-aggregate formations on the fly as well as the will to accept a good deal of risk.

The Numbers

Setting aside the unknown number of SF troops who were present in Mali before Serval began, the French contingent in Mali-whose northern half alone is roughly the size of France-started at zero. Moreover, rather than first gathering strength and then committing to the field à la Operation Desert Shield, the French fielded their units as they arrived in theater, often company by company, platoon by platoon. For example, the first non-SF group to arrive in Mali was a 200-man sous-groupement tactique interarmes (SGTIA), a company-scale combined arms task force that was detached from a battalion-size groupement tactique interarmes (GTIA), or combined arms task force, operating in Chad. Two days later, another SGTIA arrived from Côte d'Ivoire by road. The largest single formation to arrive in Mali as a group was a full GTIA of mechanized infantry that reached Dakar, Senegal, by ship, and then drove the rest of the way.

The total force reached roughly 3,400 by the end of January and 5,300 by the end of February. Of those, according to the French military, 1,500 were support personnel, or 28 percent of the overall force.¹⁰ Several experts on U.S. Army operations consulted for this study indicated that a comparable American force (that is, with comparable capabilities) would have required a larger logistical tail of approximately 40 percent, suggesting that the United States would have had to field a larger force overall.

GTIAs and SGTIAs

The French deploy in small numbers in part because they would struggle to do otherwise. Their forces are few and are overcommitted to overseas deployments, and they have no strategic lift of their own. However, the French perhaps in light of their weak logistical capabilities—arguably have made a virtue of necessity by designing their forces to deploy and operate on a small scale and tailor their forces to meet specific needs.

The French pushed modularity to well below the brigade level. They did this in the 1990s as part of a number of sweeping reforms intended to transform the army from a large conscription-based continental force designed to fight the Soviet Union into a smaller, more expeditionary force. (By law, the French military could not deploy conscripts overseas, thereby forcing the army to rely on an "army within the army" consisting of fully volunteer formations that historically had a colonial vocation. Chief among them are the Foreign Legion and the "Troupes de Marine," or Marines, who in the 19th century were part of the French Navy.) The French understood that in order to pack as much capability as possible into a smaller force, that force would have to be modular and flexible.¹¹ The army dissolved its divisions in favor of brigades, which became force providers, and placed regiments at the center of gravity. The French in 2015 revived its divisions, but operationally speaking, there is little change, and what really matters now as in 2013 are the French army's task-organized and scalable battalion- and company-level task forces, GTIAs and SGTIAs.

Published French army doctrine defines GTIAs and SGTIAs as task-organized combined arms forces designed to operate autonomously and independently according to their commanders' intent; the objective is decentralized and distributed operations in keeping with maneuverist doctrine and mission command.¹²

SGTIAs and GTIAs have the same structure but are different in terms of scale. SGTIAs are composed of a core of four platoons—three infantry and one armored, or vice versa—together with a command element and those support elements deemed necessary, often including some indirect fire capability as well as joint fires coordinators of various possible



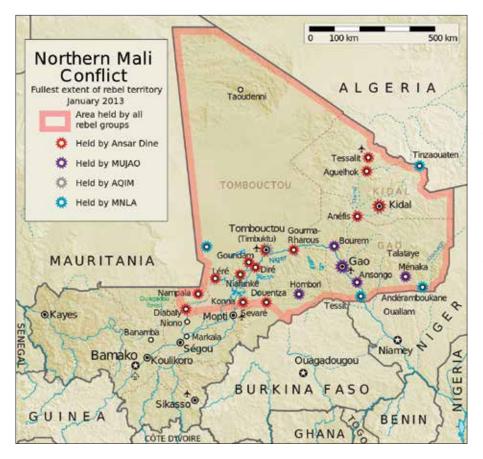
French soldier sits aboard U.S. Air Force C-17 Globemaster III en route to Mali, where French forces were fighting extremists who took control of much of north of country, January 20, 2013 (U.S. Air Force/Nathanael Callon)

types. A captain commands the force. GTIAs are larger, composed of four companies-three infantry and one armored, or vice versa-with a command element and those support elements deemed necessary. A colonel commands. Additional platoons or companies can be tacked on as needed up until the task force reaches a limit of eight. In Mali, several GTIAs operated simultaneously, each with distinct areas of operation or missions and all under the command of a brigade-level headquarters established in theater, led by a brigade commander. Thus, the French created a provisional Serval brigade. Only some of the forces participating in the operations, it should be noted, are from the brigade commander's home brigade.

The exact composition of GTIAs and SGTIAs varies according to mission requirements and the resources at hand. SGTIAs in Afghanistan reportedly were large and diverse owing to the numerous requirements associated with operating there, which included everything from indirect fire to human terrain teams. The GTIAs and SGTIAs in Mali were smaller and in fact did not comply with the doctrinally mandated 3/1 structure, reflecting some combination of commanders' estimation of the force size required and unit availability. For example, GTIA 3, which participated in the Adrar des Ifoghas offensive in northern Mali in February 2013, consisted of three companies (one mechanized infantry, one armor, and one engineering). It also had an artillery component consisting of two Caesar self-propelled howitzers and four 120mm mortars, communications and electronic warfare elements, and tactical drones.

The GTIAs and SGTIAs in Mali often have drawn from a diverse array of regiments. They routinely bring soldiers from regular line regiments together with marines and legionnaires, infantrymen with cavalry troops, sappers, artillerists, and so forth, structuring them into different formations with different command structures on the fly, as the mission evolved.¹³

In the case of planned deployments, such as those that were slated for Afghanistan, GTIAs and SGTIAs are more homogenous with respect to home regiments and brigades. They also train and deploy together as SGTIAs, cycling through France's national training centers as such. In addition, French officers are trained to function in and command GTIAs and SGTIAs. Commanding SGTIAs, for example, is part of the formal training for French army captains, which includes working with officers of other branches to ensure that they know enough about how the others do their jobs to understand how to work effectively with them. Presumably, collective and individual training of this sort reduces the turbulence that might be associated with cobbling units together on the fly in response to emergencies.



Mobility vs. Protection

The French army operates a vehicle fleet that is well suited for precisely the kinds of operations it conducted in Mali. To be more specific, France has mechanized nearly all of its units, using relatively light, wheeled armored vehicles that can be transported in C-130s and C-160s as well as driven long distances over poor quality roads and cross country. While lacking the level of protection of main battle tanks and heavy infantry fighting vehicles such as the American Bradley, the wheeled armor units of the French army provide considerable firepower for their weight class, especially when compared with the U.S. Stryker. French light tanks, armored personnel carriers, and infantry fighting vehicles (véhicule blindé de combat d'infanterie, or VBCI) are equipped with 105mm guns (AMX-10RC), 90mm guns (ERC 90), and 25mm automatic cannons. The armored reconnaissance and combat vehicle (engin blindé de reconnaissance et *de combat*, or EBRC), slated to replace the AMX-10RC within the decade, has

been tested with a 120mm gun, according to one report.¹⁴

The French assess that mobility is more important than protection, and they gamble that being able to move quickly provides more protection than heavier armor. French doctrine emphasizes rapid coordinated movements calculated to maintain the operational initiative-precisely the kind of campaign the French conducted in Mali. This approach worked there, although it is not clear how well French armored units would hold up against a more sophisticated enemy equipped with antitank guided missiles (ATGMs) or other standoff precision weapons. We also must wonder if the French would make the same tradeoff if they had more robust logistical capabilities, including a fleet of C-17s.

The French nonetheless have doubled down on their commitment to light armor as they modernize. The VBCI, which entered service recently and has been deployed to Afghanistan, the Central African Republic, and Mali, and the multirole armored vehicle (*véhicle* blindé multi-rôles, or VBMR) and the EBRC, which are due to enter service by 2020, are heavier than the vehicles they are intended to replace and offer greater protection, including add-on armor kits. However, they remain roughly in the Stryker weight class (the VBCI weighs in at 25.6 tons, and the VBMR and EBRC are expected to be lighter or roughly the same). French developers have focused on maintaining their predecessors' mobility while enhancing their capabilities, primarily by means of technology-enabling networked warfare. The VBCI, VBMR, and EBRC ostensibly will exercise high degrees of situational awareness and fight in close coordination with networked dismounted infantry, other vehicles, artillery, and air support.15

Interestingly, there appears to be a current within the French army that favors lower technology vehicles such as the venerable VAB, AMX-10RC, and ERC-90. For example, Colonel Michel Goya, a leading French military analyst, has argued in the past that perhaps cheaper, simpler weapons would be preferable because their lower cost would enable the army to invest more in quantity and training.16 With regard to Mali, the French claim to have found that the low-tech nature of the vehicles used there was a virtue. Most of the French vehicles in Mali-with the notable exception of the VBCI and arguably the Caesar and VBL—are old and slated for replacement or at least modernization. The French now state that their outdated equipment proved less delicate and easier to fix in the field than newer equipment.17

But not everyone was pleased by the performance of the aging vehicles. The GTIA 3 commander, for example, commented that the roughly 30-year old VABs and AMX-10RCs were "breathing their last" and that their "performance reached a level that was at times preoccupying and makes their replacement indispensable for continuing to conduct engagements at this level of difficulty."¹⁸ The problem, however, appears to have been the vehicles' age, not their level of sophistication, as has been confirmed by recent reports.¹⁹

Particularly important to the French are the relatively light logistical



U.S. Airmen and French soldiers load equipment inside U.S. Air Force C-17 Globemaster III in Istres, France, January 21, 2013 (U.S. Air Force/Nathanael Callon)

requirements associated with light wheeled armor. Indeed, given the generally poor infrastructure in countries such as Mali and France's weak logistical capabilities, anything that reduces the logistics burden is an advantage.

French logistical capabilities, it should be made clear, were stretched to their extreme limits in *Serval*, even with airlift borrowed from allies. The troops that France rushed to Mali initially had with them only the essentials (in many cases, 3 days' worth of food and 9 liters of water), and the subsequent focus of logistical efforts remained on providing the bare essentials (food, water, fuel) as troops raced north and east.²⁰ France also assumed responsibility for sustaining the Chadian force; it may well have done the same for some of the other African contingents in theater.

In late March 2013, a leading defense blogger reported, based on his contacts in the French army, that ground troops were just barely keeping their vehicles in working order.²¹ A news report of the fighting in the Adrar des Ifoghas mountains described the operations in terms of "roughing it." It commented that the army had been in the field for a month and noted that the logistical support was providing water, food, and fuel, but otherwise the troops were left to get by as best they could. It was "the price to pay for taking so many people so far in so little time."22 Colonel Bertrand Darras, who at the time was with the French Ground Forces Command, commented that the troops in Mali after a few weeks in the field resembled "Napoleon's army before the Italian campaign" more than they did a fully equipped modern force because of the condition of their equipment, uniforms, boots, and so on. They had no air conditioning, showers, or toilets, Darras stated, and had trouble sleeping because of the heat: "We disregarded all standards to keep the high momentum required to destroy as much of the enemy as we could."23

The statements about *Serval* contain a great deal of bravado, but they make clear

that the French had little in the way of excess sustainment capacity. Any savings such as that which might have come from using wheeled versus tracked vehicles probably helped a great deal.

France's choice of vehicles also gives its army a degree of flexibility regarding how it gets its units to the theater of operations and moves them around once there. Most vehicles arrived in theater by air, but a significant portion drove to Mali from points elsewhere in West Africa. As mentioned, some reached Mali by driving from Senegal or Côte d'Ivoire.

Once in theater, the French units had to cover a lot of ground. For example, the commander of GTIA 3 in Mali boasted that his battalion, during 6 weeks of operations, remained almost entirely "in the zone of operations, near or in contact with the enemy, without returning to base, without technical pauses, and without conducting repairs." He continued, "Each vehicle traveled 2,500 to 5,000 km" off-road and on difficult terrain.²⁴



French soldier discusses objectives with U.S. Soldier during field training exercise in Arta, Djibouti, March 16, 2016 (U.S. Air Force/Kate Thornton)

Regional Expertise

The French army is, for all intents and purposes, a regionally aligned force. Setting aside their long colonial experience on the continent, the French know Africa well. All French army units rotate through Africa on 4-month "shortduration missions." France's explicitly expeditionary brigades—that is, the historically "colonial" units that conduct the lion's share of the country's overseas operations—also conduct 2- or 3-year "long-term missions" in Africa.

The payoff was evident in Mali, where the French were able to make up for their own small numbers in part by calling upon regional and local allies, with whom they know how to work effectively. The most obvious example was the 2,250man Chadian contingent, which played an important role in some of the most intense fighting in the campaign. Also of note is the French army's work with the Tuareg contingent in the Malian army loval to General Haji ag Gamou, whose men provided the French with invaluable help, primarily by scouting and translating. Working with ag Gamou's men did not come without risk, however, given that he represents a particular faction within Tuareg society and has a long history of conflict with other Tuareg notables, particularly ones hailing from Kidal and the elite clans of the restive Kel Adagh confederation. What must be stressed, though, is that the French almost certainly knew what they were doing and understood all the pertinent ramifications and risks. The French, in other words, arrived in Mali already knowing the human terrain and did not have to race to get up to speed.

Another way in which regional expertise paid off was France's ability to rely on regional bottled-water suppliers (pre-certified by the French health service) and fuel providers. The French operate with the rule that whatever can be sourced locally, should be sourced locally. In the case of water and fuel, the French literally knew whom to call and had pre-existing contracts with regional suppliers.²⁵

Expeditionary Culture

A less tangible yet significant factor in French operations in Mali is the expeditionary culture that serves the French army well when operating at a small scale with limited resources. This might be particularly true of France's specifically expeditionary units, most if not all of which historically have had an explicitly colonial vocation, most obviously the marines and the Foreign Legion. These, it should be stressed, are not SF (although there are French marine SF regiments as well as commando-qualified legionnaires) but rather general-purpose forces with a long-standing expeditionary mission and outlook. Since the reforms of the 1990s, however, this expeditionary

culture is also apparently true of the historically continentally focused regiments that now share responsibility for overseas deployments and rotate through Africa alongside the former colonials and distinguished themselves in Operation *Serval*.

Among the aspects of colonial operations that arguably have some relevance for today is the small size of French deployments, the degree of autonomy that unit commanders exercised, the high degree of risk they accepted, and their interest in leveraging local knowledge. French colonial forces were invariably small and relatively ill resourced, reflecting France's priorities (protecting the homeland) and its determination to colonize cheaply or not at all. Badly outnumbered and for the most part operating autonomously and without the possibility of timely reinforcements or relief, colonial commanders-often just captains and below-learned to leverage local knowledge. Indeed, France owes its success in northern Mali during the colonial period in part to the commanders' practice of attending to local politics and the human terrain so as to better deploy divide-and-conquer tactics, forge military alliances, and so on. Commanders knew whom to trust, whom to promote, and whom to push aside.

The French analyst Goya, a former marine, argues that much of the outlook and practices of France's colonial units have survived and serve them well today. He describes today's marine regiments' approach explicitly as "colonial" and defines it in terms of a "global approach" that involves not just tactics, but also mixing in with the population and understanding the entire context in which one is operating.26 When asked about institutional continuity from the colonial era, another marsouin (the French equivalent of leatherneck) questions cultural continuity yet notes that French marine regiments today operate in the same conditions as in the past, suggesting that, in effect, they operate in the same way.27

French officers interviewed by the author also draw a distinction between how they are taught to operate and the "American way," with which they have become familiar in Afghanistan. According to a French marine who had been involved in *Serval*, for example, the U.S. Army can fight "properly" in the sense that it can think in terms of going about an operation the best way. In contrast, he stated, the French army sees itself as having to make the best of whatever resources may be available. Thus, he explained, planning for *Serval* was an exercise in thinking through what was and was not available and coming to terms with the associated risk.

Goya carried the argument further and defined the American approach to warfare in terms of detecting the enemy, locating it, and then using firepower to destroy it-"fire maneuver," he termed it. This compares with destroying the enemy through combat, or "combat maneuver," which is riskier. The French see fire maneuver as a luxury, something one can do when one has the means. According to Goya, France's Ground Forces Command has gone so far as to express the desire that the French army post-Afghanistan "de-Americanizes" so as not to retain the "bad habits" picked up fighting alongside the U.S. military. "We learned a lot of methods from the Americans," he stated. Another officer, a legionnaire who had participated in multiple African and Afghan deployments, similarly expressed concern that the French army had learned some bad lessons in Afghanistan with regard to fighting "American-style warfare," in the sense that infantrymen worked in close conjunction with drones, satellites, and aircraft providing close air support. France cannot afford to fight like that, he stated, and besides, it was contrary to the experience of most French officers most of the time, who have to operate in the field with few resources.28

Accepting Risk

Waging war on the cheap necessarily translates into risk, especially if one favors close combat, as the French officers above claim. In contrast to the U.S. Army, which can be described as a "belt and suspenders" institution, which often uses backup or redundant systems, the French army considers such amenities a luxury. Thus, it operated in Mali at or beyond the limits of its sustainment capabilities with a force structure, vehicles, and other elements carefully and optimistically calculated to be little more than sufficient: just enough troops, just enough force protection, just enough helicopters, just enough vehicles with just enough capabilities, and so forth.

According to the French senate, for example, the VABs and VBCIs used in Mali were not equipped to counter improvised explosive devices (IEDs) for the simple reason that those that were so equipped were all in Afghanistan.²⁹ Moreover, although VBCIs offer better protection and other capabilities than any of the other vehicles used in Mali, only 36 VBCIs were used there, compared with 177 venerable VABs. There were so many VABs and other out-of-date lightarmor vehicles in Mali partly because the French had been gambling that they were good enough. If they thought otherwise, they presumably would make replacing them a higher priority.³⁰ As it happened, the enemy did not make effective use of its antitank weapons or IEDs and did not possess ATGMs. But the French could not have been certain that would be the case.

Similarly, the airborne operation in Timbuktu featured a night-time combat drop of 250 lightly armed legionnaires, a risky enterprise in the best of circumstances. The French seem not to have had good intelligence regarding the threat on the ground, for they conducted the drop to block retreating fighters but encountered none. The French could just as easily have underestimated the threat as they overestimated it.³¹

Finally, the French cut things close with respect to three key requirements: fuel, water, and medical support. French doctrine regarding fuel is that one should never go below a 10-day reserve. Ten days is the French army's red line. In the first month of *Serval*, however, the French, who often raced well ahead of their logistical elements, operated with 24 hours of reserve. Any "rupture," moreover, would have taken 12 hours to address.³² The French also struggled to



U.S. Airman communicates with French air force pilots during tactical exercise in Djibouti, February 24, 2016 (U.S. Air Force/Kate Thornton)

keep the most forward-deployed troops in northern Mali supplied with water and at times fell below the required 10 liters per man, per day. The extreme heat reduced significantly the lift of aircraft, obliging the French to rely on convoys of trucks.³³ There, the problem was that the bottled water reached Gao in containers, but the trucks that took the water north of Gao could not handle containers, and there was a limit to how many crates of bottled water could be loaded on their beds before they fell off while driving over the rough terrain (there are no paved roads north of Gao). The French would not have managed had they not jury-rigged walls for the truck beds using wooden pallets.34

Similarly, the French have a rule regarding the amount of medical support that must be on hand for a given number of soldiers. In Mali at a certain point, according to the French G-4, doctrine dictated that they needed to have the ability to perform 12 major surgeries at the same time when in fact they could only support 2.³⁵ French officers also disclosed that they were not capable of providing the "golden hour" standard of medical support called for by French doctrine for all of the operations going on at the same time. In at least one instance, they had to choose not to provide golden hour coverage to one operation to provide it to another.³⁶

The French army is a living example of precisely the kind of force General Odierno and General Milley have envisioned for the future of the U.S. Army. The French force has demonstrated that it is adept at deploying small, scalable, task-organized forces that can disaggregate and re-aggregate on the fly; it has a force structure well suited for expeditionary operations; and it leverages deep regional expertise. It also has an expeditionary culture. Associated with these characteristics are elements that distinguish the French army from the American:

- sub-brigade modularity
- relatively light armored vehicles that emphasize mobility over firepower
- an institutional and command culture accustomed and suited to austerity
- greater acceptance of risk.

If we break apart the first point, modularity, we find important differences with respect to training and the authorities and responsibilities bestowed upon company commanders, which facilitate the kind of decentralized and distributed operations associated with mission command. Indeed, French officers interviewed for a separate study on interoperability claim to be on the extreme end of the mission command scale relative to their North Atlantic Treaty Organization Allies with respect to the degree of autonomy and responsibility they invest in lower echelons and their commanders.

Whereas the French appear confident that their success on the battlefield and low casualty rates demonstrate the proficiency of their military, we are reminded of Napoleon's alleged remark that the quality he looked for the most in his generals was that they be lucky. Moreover, *Serval* does not shed light on France's capacity to handle more intense conventional conflicts or to provide the conventional deterrent power that U.S. commanders and French defense policy alike call for.

Given the French example, it appears that moving the U.S. Army toward being more expeditionary would require revisiting decisions regarding force structure, the kinds of armored vehicles the Army uses, and how it task-organizes. Does the BCT structure make the most sense? We must also question the premise that one can be more expeditionary while retaining all other capabilities. Given limited resources, we would have to give up something. In this case, it might mean losing some ability to conduct large-scale conventional warfare or quite simply demoting protection as a priority for vehicle design. Becoming more like the French would also mean having a culture premised on austerity and learning to be comfortable bringing much less to the fight than what one considers ideal. In the end, having a "small footprint" in the French way would mean assuming greater risk. JFQ

Notes

¹ "Advance Policy Questions for General Mark A. Milley, USA, Nominee for Chief of Staff of the Army," July 21, 2015, available at <www.armed-services.senate.gov/imo/media/ doc/Milley_07-21-15.pdf>.

² Gustave Perna, "Projecting an Expeditionary Army," *Army Sustainment*, March–April 2016, 2–3.

³ For a discussion of some of the turbulence associated with task-organizing to reflect assigned missions that differ from designed missions, see Christopher G. Pernin et al., *Readiness Reporting for an Adaptive Army* (Santa Monica, CA: RAND, 2013). This work details ways in which units have had to scramble to redesign themselves to meet changing operational requirements and the associated turbulence.

⁴Task Force Hawk is a classic example of the Army's institutional resistance to "going small" and to deploying only a portion of an Apache unit without the full panoply of support elements and a large contingent intended to provide force protection. See Bruce Nardulli et al., *Disjointed War: Military Operations in Kosovo, 1999* (Santa Monica, CA: RAND, 2002).

⁵ Raymond T. Odierno, "The Force of Tomorrow," *Foreign Policy*, February 4, 2013, available at <www.foreignpolicy.com/articles/2013/02/04/the_force_of_tomorrow>.

⁶ "Army Vision—Force 2025 White Paper," U.S. Army Capabilities Integration Center, January 23, 2014, 2.

⁷ Army Doctrine Reference Publication 3-0, *Unified Land Operations* (Washington, DC: Headquarters Department of the Army, 2012), 1–7.

⁸ The U.S. Army Operating Concept: Win in a Complex World, TRADOC Pamphlet 525-3-1, U.S. Army Training and Doctrine Command, 2014, 44.

⁹ Ibid., 15.

¹⁰ French army G4, email to author, May 5, 2015.

¹¹For more on French army reforms and the embrace of modularity in the 1990s, see Paul Brutin, "L'Armée de terre, les réformes, l'armée de demain," *La Jaune et la Rouge: Revue mensuelle de l'association des anciens élèves et diplomés de l'école*, November 1997, available at <www.lajauneetlarouge.com/article/larmeede-terre-les-reformes-larmee-de-demain#. VBIkZeevyD4>; François Lecointre, "De la fin de la guerre à la fin de l'armée," *Institut Jacques Cartier*, September 5, 2012, available at <www.institut-jacquescartier.fr/tags/ modularite/>; Michel Klein, "Armée de Terre: armée d'emploi," *Fondation pour la Recherche Stratégique*, February 14, 2007.

¹² FT-02, *Tactique Générale* (Paris: Centre de doctrine et d'emploi de forces, 2008), 41–43. See also FT-04, *Les fondamentaux de la manœuvre interarmes* (Paris: Centre de doctrine et d'emploi de forces, 2011).

¹³ "Par les airs et par la piste: L'ouverture du théâtre Serval," *Béret Rouge*, May 2013.

¹⁴ "Scorpion Excites French Combat Vehicle Industries," *Defense Update*, n.d.

¹⁵ Ministère de la Défense, "Le programme SCORPION," *Armée de Terre*, March 16, 2015.

¹⁶ Michel Goya, "Dix millions de dollars le milicien: La crise du modèle occidental de guerre limitée de haute technologie," *Politique Étrangère*, no. 1 (2007), 201.

¹⁷ "L'engagement des forces prépositionnées en Afrique," *Béret Rouge*, May, 2014, 6.

¹⁸ François Marie Gougeon, "Témoignage d'un chef de corps engagé dans l'opération *Serval,*" *Opération Serval: Le retour de la manœuvre aéroterrestre dans la profondeur* (Paris: Centre de Doctrine d'Emploi des Forces, 2014), 50.

¹⁹ Le mantien en condition opérationnelle des matériels militaires: des efforts à poursuivre (Paris: Cour des comptes, 2014); Ministère de la Défense, "Question No. 47347 de M. François Cornut-Gentille," Assemblée Nationale, July 8, 2014.

²⁰ Céline Brunetaud, "La chaîne soutien en opérations: À coups d'expédition," *Terre Info Magazine*, May 2013, 10.

²¹ Philippe Chapleau, "Rusticité et ingéniosité: Malgré tout, les véhicules tirent la langue au Mali," *Lignes de Défense*, March 30, 2013. The same blogger put the number of vehicles operated by the *Serval* brigade at 730, including 150 VABs, 100 VBLs, 36 VBCIs, and 20 AMX-10RCs.

²² Etienne Monin, "Les derniers jours de la guerre dans l'Adrar au Mali—France Info," *France Info*, March 25, 2013.

²³ Bertrand Darras, email to author, April 28, 2013.

²⁴ Gougeon, 48.

²⁵ Interviews with French logistics officers, March 2015.

²⁶ A 2010 issue of the French military publication *Doctrine Tactique* refers to this as "global maneuver" and associates it with counterinsurgency. See "La Manœuvre globale: Cadre général de la contre rebellion," *Doctrine Tactique*, no. 19.

²⁷ Interview with Frédéric Garnier, October 2, 2013.

²⁸ Personal communication with a legionnaire, Carlisle, PA, November 7, 2012.

²⁹ Jean-Pierre Chevènement and Gérard Larcher, *Rapport d'information fait au nom* de la commission des affaires étrangères, de la défense et des forces armées par le groupe de travail "Sahel," en vue du débat et du vote sur l'autorisation de prolongation de l'intervention des forces armées au Mali (article 35 de la Constitution), French Senate, April 16, 2013, 20.

³⁰ The planned replacement for the VAB is the VBMR, which has not yet entered production.

³¹ The last time that particular unit, the 2nd REP, did a combat jump was at Kolwezi, Zaire, in 1978, when 450 legionnaires jumped in daylight into a city held by hostile forces and took fire as they jumped. The legionnaires were outnumbered and outgunned and spent the day in firefights. Five were killed.

³² Interview with French G4, Paris, February 5, 2015.

³³ Interview with French logistics officer, Lille, France, February 3, 2015.

³⁴ Interview with French logistics officer, Lille, France, February 2, 2015.

³⁵ Interview with French G4, Paris, February 5, 2015.

³⁶ Doctrine d'emploi des forces terrestres en zones desertiques et semi-desertiques (edition provisoire) (Paris: Centre de Doctrine d'Emploi des Forces, 2013), 43; Philippe Roux, "RAND Corporation Conference: French Army Update Sahel Operation 'Serval' Lessons Identified," PowerPoint presentation, RAND, Arlington, VA, October 23, 2013.