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LIFE AFTER FCS

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Following Secretary Gates' recommendation in April that its manned ground vehicles should be cancelled, the Department of Defense officially terminated the Army's Future Combat Systems (FCS) modernization program in late June. This decision made sense for a number of reasons. First, the cost of the program had increased from approximately \$90 billion to \$160 billion (and possibly much more) over the past six years, even though four of its eighteen major components had already been abandoned. Second, many of the program's critical technologies were immature and unproven, leading to concerns that the FCS would fail to perform as advertised. Third, to function effectively FCS was highly dependent upon capabilities being developed outside the program (including the Joint Tactical Radio System and the Air Force's Transformational Satellite program), several of which have had problems of their own or have already been cancelled. Finally, it was never clear that FCS would significantly improve the Army's ability to defeat the types of opponents that the United States is most likely to confront, in particular nations with significant anti-access capabilities and non-state actors waging modern irregular warfare.¹

Despite its cancellation and subsequent restructuring, it is not entirely clear what will succeed the FCS program or whether the Army's new modernization program will correct its major shortcomings. The purpose of this backgrounder is to offer some preliminary observations on the likely characteristics of the new program, and to raise several questions that the Army will have to address as it goes forward.

The Army's New Modernization Program: A Break from the Past?

At the time of its cancellation, what was previously known as FCS was broken down into several different acquisition programs: one to continue developing the program's information network and related technologies, one to "spin out" individual FCS components (including several unmanned vehicles, unattended sensors, and the non-line-of-sight launch system) to all of the Army's combat brigades, and a third program to design a new generation of manned ground vehicles.² Given the continued development of the network—which was always the most important element of the entire FCS program—and a number of additional

¹ For an overview of the key problems inherent in the FCS program, see Andrew F. Krepinevich and Evan Braden Montgomery, "Correction Course: The Cancellation of the Future Combat Systems Program," *CSBA Backgrounder*, July 2009.

² Marjorie Censer, "DOD Formally Cancels Future Combat Systems," *Inside the Pentagon*, June 23, 2009.

FCS components, it seems unlikely that the new modernization program will be substantially different from the previous one. What remains unknown is whether the newly designed ground vehicles will represent a significant departure from the FCS combat vehicles that Secretary Gates cancelled.

After announcing his decision to terminate the FCS manned vehicles, Secretary Gates publicly maintained that the Army “must have a new, modernized fleet of combat vehicles to replace the Cold War inventory.” He also told his audience at the Army

War College that he had “directed that all of the money for FCS in the out-years be protected to fund the new vehicle modernization program.”³ The Army, in turn, has said that it intends to design new combat vehicles “from a blank sheet of paper.”⁴ Yet what emerges from this process may be very similar to what the Army began with, for two main reasons. First, there is an understandable desire to leverage the work that has already been done on the FCS vehicles. Second, and perhaps more importantly, the Army is proceeding on a very short timeline. It has until the end of August to develop a set of requirements for the new vehicles—which will ultimately determine their specific characteristics—if it hopes to secure the funding in the fiscal year 2011 defense budget that Secretary Gates has promised to set aside for Army vehicle modernization. By that point, the Army will have had only four months to develop this critical element of its new modernization program.⁵

Of course, a number of changes can be expected. Based on Secretary Gates’ criticism that the FCS vehicles were too vulnerable, any new vehicles will almost certainly be larger, more heavily armored, and have V-shaped hulls for better protection against improvised explosive devices (IEDs). Despite these likely changes, however, both sunk costs and time constraints might combine to limit the Army’s choices, yielding vehicles that are only slight modifications of existing designs.

The Risks of the Army’s New Program

If the Army’s new modernization program and particularly its new ground combat vehicles are only marginally different from their previous iterations, they risk suffering from some of the same limitations. The biggest concern involves the information network. Despite the focus that the manned ground vehicles have received in recent months, the network was always the lynchpin of the entire FCS effort—the information that it provided was supposed to enable the relatively small and lightly armored manned vehicles to achieve a level of survivability and lethality that would exceed that of existing armored forces. Moreover, the network was and remains the most complex and technically challenging aspect of the whole endeavor. As it moves forward, the Army should prioritize developing and testing the components of the network and making sure they work together *before* any new vehicle designs are completed

³ Secretary of Defense Robert M. Gates, “Speech to the Army War College (Carlisle, PA),” April 16, 2009, accessed at <http://www.defenselink.mil/speeches/speech.aspx?speechid=1345> on August 8, 2009.

⁴ Andrew Feickert, “The Army’s Future Combat System (FCS): Background and Issues for Congress,” *Congressional Research Service*, May 29, 2009, p. 4.

⁵ Sandra I. Erwin, “Army’s Next Combat Vehicle: New Beginning or FCS Sequel,” *National Defense*, August 2009.

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and production begins. The only alternative is design vehicles that are far less dependent on the network for their survival.

Doing so may be difficult, however. The Army claims that it wants to begin producing the new vehicles in five to seven years—roughly the same timetable called for in the FCS program.⁶ Yet that timetable posed significant challenges, because the network was not going to be fully tested until after all of the vehicles had been prototyped and were about to enter production. This meant that any problems discovered during the network test would have been difficult and costly to fix.⁷ If the Army does intend to move quickly, it must devise a schedule that avoids this potential problem.

The Scope of the New Modernization Effort

A major issue for the Army is how extensive it wants its new vehicle modernization effort to be. The FCS program was supposed to yield a family of eight manned ground vehicles that would replace all of the Abrams tanks, Bradley Fighting Vehicles, M113 armored personnel carriers, and Paladin self-propelled howitzers in a Heavy Brigade Combat Team (BCT). Yet the Army may have to settle for a more limited variety of new vehicles.⁸ Even before Secretary Gates' announcement in April, there were reports that the Army was considering postponing or cancelling four of the eight FCS manned vehicles—possibly including the Mounted Combat System, the closest thing to a replacement for the M1 Abrams tank—in order to contain program cost growth.⁹ General George Casey, the Army Chief of Staff, has also made it clear that the Army will not devise another \$160 billion modernization program, but will instead pursue a less costly alternative.¹⁰ Given these financial constraints, the Army may need to be far more selective in its modernization efforts, replacing some but not all of the different types of vehicles in its armored fleet.¹¹

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Even if the Army remains committed to replacing all of the armored vehicles that comprise a Heavy BCT, it may have to settle for replacing fewer than the fifteen Heavy BCTs that the FCS program called for. The Army has said that it plans to revisit the mixture of combat brigades in the total force, and it is possible that the Quadrennial Defense Review will recommend that several Heavy BCTs should be converted to Stryker BCTs over time.¹² This would give the Army a larger “medium weight” force, which should make it more versatile. Presuming that the Heavy BCTs earmarked for transition to Strykers will come from the Active Component

⁶ “Statement by General Peter W. Chiarelli and Lieutenant General N. Ross Thompson, III, before the Senate Armed Services Committee, Subcommittee on Airland, on the Modernization of the United States Army and Future Combat Systems Program Management,” June 16, 2009, p. 4, accessed at <http://armed-services.senate.gov/statemnt/2009/June/Chiarelli-Thompson%2006-16-09.pdf> on August 11, 2009.

⁷ Government Accountability Office, Report to Congressional Committees, “Defense Acquisition: Decisions Needed to Shape Army’s Combat Systems for the Future,” March 2009, pp. 16, 21–22.

⁸ Christopher Drew, “Conflicting Priorities Endanger High-Tech Army Program,” *New York Times*, July 20, 2009.

⁹ Kris Osborn and John T. Bennett, “Half of FCS Vehicles May Be Axed,” *Defense News*, February 23, 2009. Sandra Erwin, “Army’s Next Combat Vehicle: Cheaper and Simpler,” *National Defense*, July 2009.

¹⁰ According to one recent report, the Army’s new plan may prioritize certain vehicles, including a new command-and-control vehicle as well as an infantry fighting vehicle. Megan Scully, “Army Readies Draft of Modernization Plan,” *Congress Daily*, August 17, 2009.

¹² Greg Grant, “Army to Boost Stryker Brigades,” *DOD Buzz*, accessed at <http://www.dodbuzz.com/2009/05/15/army-boosts-stryker-brigades/> on August 8, 2009.

(which seems likely, given that the National Guard will have only seven Heavy BCTs by 2013, versus nineteen in the Active Component), the pool of brigades whose equipment the FCS program was intended to replace could be much smaller.

At the same time, the Army is likely to maintain a number of Heavy BCTs in the force more-or-less indefinitely. Keeping a significant—albeit smaller—number of Heavy BCTs makes sense as a hedge, in case the new vehicle modernization program experiences technical problems, or in case the United States faces contingencies where heavily armored forces provide a significant advantage. Not surprisingly, the Army is recapitalizing and upgrading many of its Abrams and Bradleys to improve their performance and extend their service life.¹³ Moreover, if several Heavy BCTs are replaced with Stryker BCTs, then it may be possible to retire the oldest armored vehicles and lower the average age of the remaining fleet.

Conclusion

Perhaps the biggest difficulty the Army confronts goes beyond vehicle performance characteristics or the precise composition of its armored fleet. Instead, the real issue is how to avoid spending time, effort, and resources on platforms that may appear quite useful when they are conceived, but are rendered far less relevant by the time they come to fruition, if not sooner. Addressing this issue is extremely difficult. Threats often change, and when they do the desirable qualities of weapons systems may change as well. Yet this uncertainty cannot be allowed to impede significant modernization efforts from being undertaken. In this case, however, rushing to judgment on a new generation of ground vehicles makes little sense, because it sharply increases the risk that the Army will not adequately resolve the many problems which led to the FCS program's cancellation. A counterargument would hold that the Army needs a new generation of armored ground vehicles as soon as possible, given the age of the current fleet as well as the stress that has been placed on it from ongoing operations in Afghanistan and Iraq. But there is no adversary on the horizon that is attempting to directly challenge the United States' significant advantage in mechanized ground warfare. If the Army appears to be "racing against the clock," it may be more for budgetary than strategic reasons. Namely, it may believe that if it fails to develop a new set of ground combat vehicles to replace those that have been cancelled, the funding allocated for Army vehicle modernization will be shifted elsewhere. This concern may make sense from a narrow, parochial perspective, but it is not in the Army's long-term interests, or the nation's. Because its advantage in conventional warfare is likely to persist for some time, the Army should prioritize developing a modernization plan correctly rather than quickly. At the same time, Secretary Gates should maintain his pledge that funding previously earmarked for the FCS program's manned ground vehicles over the next several years will be reserved for the Army's new vehicle modernization program, while also providing the Army with additional time to develop and refine that program—especially if the results of its soon-to-be-concluded assessment fall short of expectations.

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¹³ "Statement by Chiarelli and Thompson on the Modernization of the United States Army and Future Combat Systems Program Management," p. 4, and Kris Osborn, "U.S. Army May Replace M113s with Bradleys," *Defense News*, May 25, 2009.