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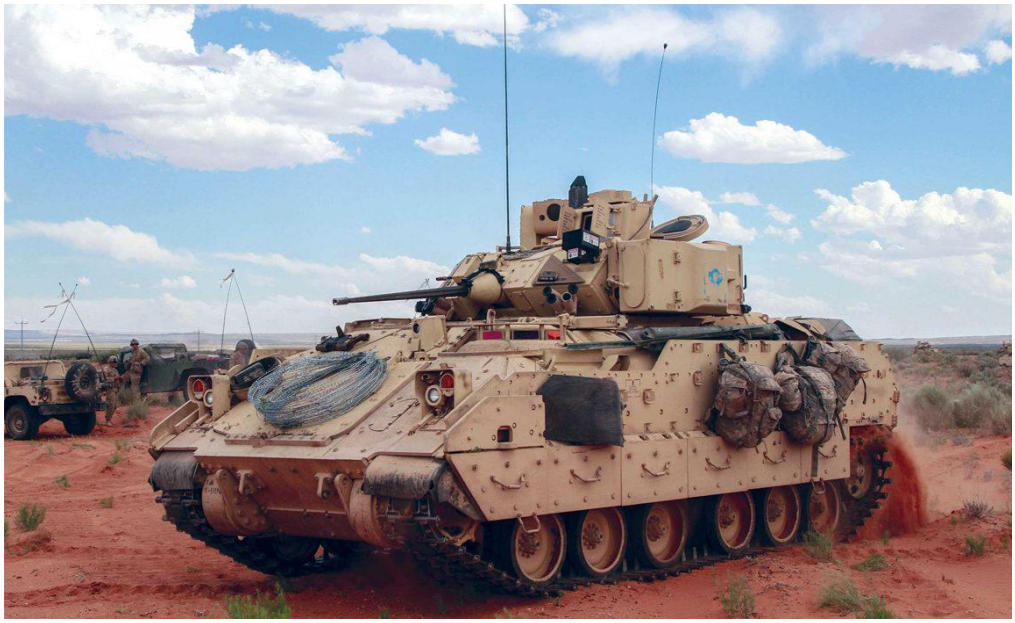
Waste

The Army's Lousy Tracked Record

Buying a new fighting vehicle has become C.Y.A. (Cover Your Armor)

BY **MARK THOMPSON** | FILED UNDER **ANALYSIS** | MARCH 16, 2020

11 MINUTE READ



*The Bradley has been the Army's key battlefield taxi for nearly 40 years. (Photo: **U.S. Army**)*

It doesn't fly. It doesn't float. It fights firmly situated on the ground. And get this: It isn't even a tank. So why does the Army keep spinning its treads in its efforts to buy an armored fighting vehicle to ferry soldiers to the front lines? All told, some **$24 billion** has evaporated in three different efforts to replace

the Bradley Fighting Vehicle. Plainly, three strikes and you're *not* out in today's Army.

What's bizarre is that the only thing defeating the Army here is its refusal to be realistic. "The Army asked for a great deal of capability on a very aggressive schedule," Bruce Jette, the Army's top weapons buyer, **said** after the latest snafu. "It is clear a combination of requirements and schedule overwhelmed industry's ability to respond within the Army's timeline," even though the effort involved close cooperation between the Army and its contracting partners.

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But why the rush? By reaching for the stars, the Army keeps crashing and burning. Aren't the civilians running the Pentagon supposed to know when they're being sold a bill of goods, and refuse to go along? Isn't that supposed to be the best thing about the **revolving door** that spins the brains of the military-industrial complex between the Pentagon and the defense contractors? So they'll know when soldiers, never mind taxpayers, are being screwed?

Apparently not.

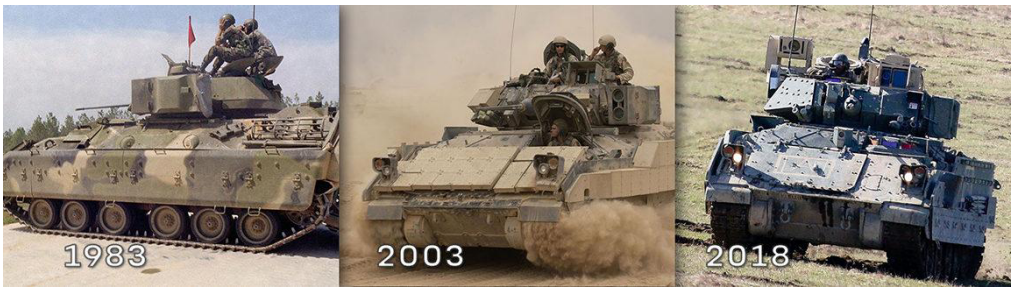
Unlike shiny aircraft and huge warships, Army armor is relatively small potatoes, and doesn't get the attention it deserves. But it should. And we'd be remiss not to note that since the Cold War's end, the service also has wasted almost **$7 billion** failing to produce its next-gen **RAH-66** Comanche helicopter, and about **$2 billion** on its **Crusader** self-propelled howitzer.

But it's tough to learn from the past when it keeps getting erased. For example, curious taxpayers seeking to learn what their billions got for the failed Future

Combat Systems will click on what used to be the Army webpage singing its praises and end up **on a dead page**.

That's a **$20 billion** dead end.

And official military photographs of the vehicles are elusive, too, for an obvious reason. "The Army decided to replace Bradley Fighting Vehicles 17 years and $22b ago," the headline of a recent NBC opinion **piece** reads. "They still don't have a prototype." So the service publishes photos like this, showing how the Bradley has been new and improved over the decades:



*(Source: **Department of Defense**)*

Armor, like many of us, has always had a love-hate relationship with weight. More weight means more protection for soldiers, something that has become sacred in recent wars. During World War II, **2,501** American troops died storming the Normandy beaches on D-Day, well beyond the 1,899 U.S. troops killed in action during more than 18 years of war in Afghanistan. But weight also has disadvantages: It takes longer to get to the fight, it's slower once it gets there, and it requires more maintenance and fuel. And weight hampers armor's mobility along narrow streets and across rickety bridges.

But maybe only by looking back at how the Army has repeatedly screwed up can we look forward and try to avoid the same mistakes the fourth time around.

The Bradley Fighting Vehicle

The 25-ton M2 **Bradley Fighting Vehicle** arrived in 1981, in the early heady days of the Reagan defense buildup. It was designed to replace the venerable M113 armored personnel carrier. The M2 and its three-member crew were designed to deliver up to seven soldiers to Germany's Fulda Gap, where they would duel feared Soviet BMP infantry fighting vehicles. Less than half the weight of its war-fighting partner, the M-1 tank, it was outfitted with a 25 mm cannon that has led many to mistake it for a tank.

But its original aluminum armor proved insufficient, to put it gently. It led to the **storied conflict** between the Army and Jim Burton, an Air Force officer serving as a Pentagon weapons tester. The contretemps led to wholesale changes in the Bradley and in weapons testing. It also spawned that rarest of Hollywood offerings, the **Pentagon procurement farce**.

The Future Combat Systems

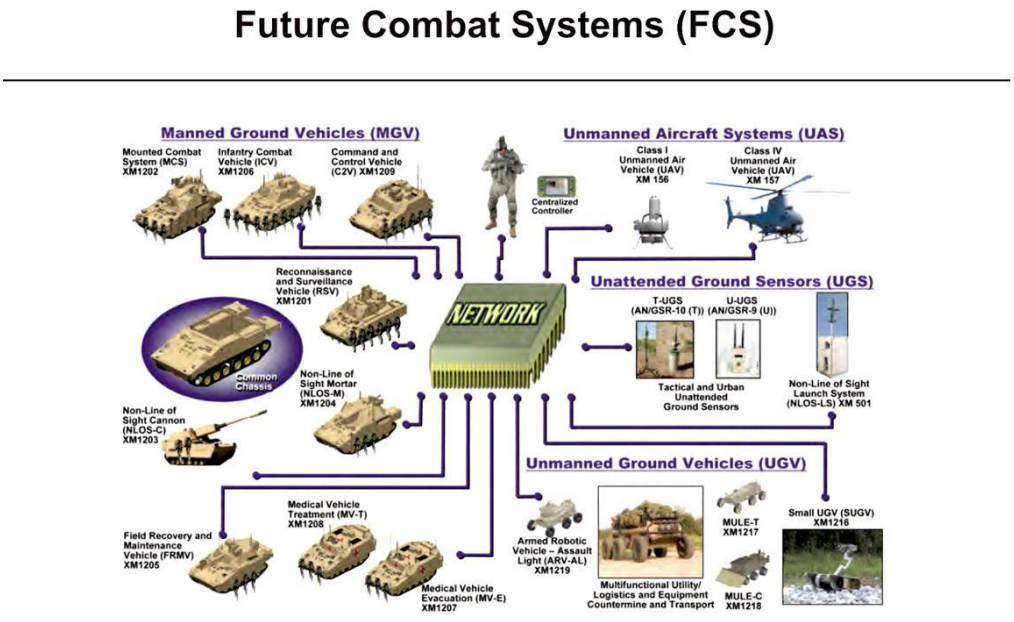
Following the Bradley's unfortunate moment in the spotlight, the Army began looking for a replacement. In 1999, it opted to make it a part of the Army's Future Combat Systems (WARNING: BEWARE OF PENTAGON PROGRAM PLURALS), envisioned as a networked **$340 billion** fleet of lightweight electrified vehicles. "The Army has been granted a lot of latitude to carry out a large program like FCS [Future Combat Systems] this far into development with relatively little demonstrated knowledge," the Government Accountability Office warned in a 2007 **report**. "To date, the FCS program has spent about $8 billion despite having significantly less knowledge—and less assurance of success—than required by best practices or DOD policy."

There was a cascade of problems common to armored ground vehicles: The quicker it needed to be sent into the fight, the lighter it had to be. But the lighter it was, the more vulnerable its cargo of young Americans would be to enemy attack. The Army originally wanted the Future Combat Systems' Manned

Combat Vehicle to weigh less than **20 tons** so it could be flown into action aboard plentiful C-130 cargo planes.

But that didn't give troops enough protection. So the Army added armor that **boosted its weight by nearly 50%**. Yet that meant they'd have to fly to war zones aboard the Air Force's bigger, but much more scarce, C-17s. "The added weight of the vehicles could have ripple effects for the designs of the engine, suspension, band track, and other subsystems," the GAO **added** ominously. But the emphasis on air travel was misplaced: There simply aren't enough big cargo planes in the military to carry sufficient armor to a major war to make a difference. Armor generally floats, not flies, to combat.

Simply put, the Future Combat Systems program was a pipe dream from the start. "The Army believed that advanced sensor technology would result in total battlefield awareness, permitting the development of lesser-armored combat vehicles and the ability to engage and destroy targets beyond the line-of-sight," the Congressional Research Service recently **noted**.



The Future Combat Systems was a spider web of technology that ensnared the Army. The Manned Combat Vehicle piece of it was supposed to replace the Bradley. *(Source: **Department of Defense**)*

In 2009, then-Defense Secretary Robert Gates killed the too-lightly-armored Future Combat Systems due to cost and complexity, after troops **complained** of their inadequate “hillbilly armor.” His decision got a kinetic kick from the roadside bombs that were killing hundreds of U.S. troops in Afghanistan and Iraq.

Franz Gayl, a Marine veteran and civilian science adviser to the corps, **had been pressing** for better armor for the troops since 2006. While Gayl was initially suspended, reprimanded, and lost security clearances for his effort, Gates shared his concern.

“Every delay of a single day costs one or more of our kids his limbs or his life,” Gates remembers telling the Joint Chiefs of Staff and other Pentagon brass. He was thunderstruck by their inertia, he **said** in his 2014 memoir, driven in part by the desire not to funnel funds away from their favored futuristic armored programs to buy need-it-right-now Mine-Resistant Ambush-Protected vehicles (MRAPs). “To my chagrin,” Gates said, “not a single senior official, civilian or military, supported my proposal for a crash program to buy thousands of these vehicles." So he **ordered** the Pentagon to build 24,000 MRAPs, costing nearly $50 billion, and ship them off to the wars. (Most have **since** been scrapped, sold, or mothballed.)

Ambition had gotten in the way of progress, and of keeping troops alive. “There are significant unanswered questions concerning the FCS vehicle design strategy,” Gates **said** when he killed the program. “Further, I am troubled by the terms of the contract,” he added, “particularly in its very unattractive fee structure that gives the government little leverage to promote cost efficiency.”

Defense News **put it** more bluntly: “Contributing to the program problems was what is now widely considered a toxic contractor-government constellation: an industry consortium led by Boeing and SAIC was effectively put in charge of overseeing its own performance.” Todd Harrison, a defense-budget guru at the Center for Strategic and International Studies, added that more than money

was wasted: “I think this program single-handedly set the Army back a generation in vehicle technology.”

What added even more risk was the use of **“other transaction authority,”** a mechanism that further decreases transparency and oversight. Not that those risks are impeding the Pentagon, which is likely to spend **$12 billion** utilizing such relaxed procurement rules this year.

The service had turned into a one-trick pony. “The Army’s new concepts for operating during this period of time were monolithic and without alternatives,” a 2012 Rand Corp. **autopsy** of the program concluded. “Concepts such as strategic and operational maneuverability—‘see first, decide first, act first’—which led to a tradeoff of armor protection for intelligence and decision-making, suggest that the Army did not have a clear grasp of which technologies were feasible and which were necessary and satisfactory to meet the needs of the future.”

The Ground Combat Vehicle

After Gates put the Future Combat System out of its misery, the Army began work on the Ground Combat Vehicle (GCV) to replace the Bradley. It “would be relevant across the entire spectrum of Army operations and would incorporate combat lessons from Iraq and Afghanistan,” the Congressional Research Service **said** in a 2014 report.

But, in prototypical Army fashion, the Army overreacted to the FCS fiasco by **proposing** a 56-ton GCV. It would be the Swiss Army knife of Army armor: The Ground Combat Vehicle would “have greater lethality and ballistic protection than a Bradley, greater IED and mine protection than an MRAP and the cross country mobility of an [M1] Abrams,” the Army **pledged** in 2010.

Yet outsiders had their doubts. “It would rival the M1 Abrams tank in size and weight and be twice as heavy as the Bradley Infantry Fighting Vehicle, the

current infantry fighting vehicle," the Congressional Budget Office said in a 2012 report. Some versions would tip the scales at 84 tons. "Even at that weight," it added, "the GCV would still need to employ new electromechanical active protection systems to meet the Army's survivability goal."

New lighter armor is the holy grail for armor architects, but money has to be traded for weight. Ceramic and other exotic forms of armor could be used to strip eight tons off the GCV, but that would cost nearly $1 million. Per ton. Per vehicle.

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The Army was also having trouble figuring out what kind of war it would fight, which made it impossible to buy armor. "The history of Army acquisition over the last twenty plus years is littered with failed attempts to define, develop and build new armored fighting vehicles and tanks," Dan Gouré of the Lexington Institute wrote in January 2014. The problem, he suggested, is its fuzzy focus on what its next war will look like. "The Army," he said, "has radically changed its views on land warfare at least three times over the past decade."

Then-Defense Secretary Chuck Hagel put the Ground Combat Vehicle out of its misery a month later. The one-time Army sergeant, who received two Purple Hearts in Vietnam, said it "had become too heavy and needed an infusion of new technology."

Yet as bad as this news was, by another measure it counted as progress: It took the Pentagon a decade to kill the Future Combat System, but only five

years to kill the Ground Combat Vehicle.

A Pentagon review fingered all the usual suspects. The Ground Combat Vehicle "relied on too many immature technologies, had too many performance requirements, and was required by Army leadership to have too many capabilities to make it affordable," a Congressional Research Service summary of the internal inquiry **said**.

The Optionally Manned Fighting Vehicle

In June 2018 the Army **launched** the Next Generation Combat Vehicle, which it renamed the Optionally Manned Fighting Vehicle four months later (the Next Generation Combat Vehicle name stuck to an expanded program that included the OMFV as well as four other new combat vehicles). Confused yet?

But contractors complained that the Army's desire for an existing—but modified—vehicle with about a hundred requirements **could not be finished by** the Army's 15-month deadline. First, contractor BAE Systems declared in June 2019 that the Army scheme "did not align with our current focus or developmental priorities." Four months later, the Army disqualified a Raytheon candidate because the company failed to get a prototype to Maryland's Aberdeen Proving Grounds in time for tests. That left General Dynamics Land Systems as the lone candidate. But even the sole contender **couldn't meet** the Army requirement to squeeze a pair of vehicles on to one of the Air Force's hulking C-17 cargo planes.

Given all these challenges, the Army did what it knows how to do best: It canceled the $45 billion program on January 16, after less than two years of work. "If you fail," Army undersecretary Ryan McCarthy **said** back in 2018, "we'd like you to fail early and fail cheap." He's now the Army's No. 1 civilian.

Even Wall Street, which tends to embrace dubious defense programs, grumbled. "The Army went into this latest competition demanding a future-

proof vehicle eventually capable of driving autonomously, while on a breakneck schedule that would see the winner in the field as early as 2026," the Motley Fool investors' website **commented**.

Today the Bradleys are getting increasingly creaky. "By some accounts, M-2 Bradleys during OIF [Operation Iraqi Freedom] routinely had to turn off certain electronic systems to gain enough power for anti-roadside-bomb jammers," the Congressional Research Service warned in a recent **report**. Armor seems to have reached a point of diminishing returns, CRS added, warning that a new vehicle could be "just a costly marginal improvement over the current system."

What's Next?

By now, the Army is running out of names for its Bradley replacement. "Combat," used. "Fighting," used. "Manned," used. "Optionally manned," used. So it has simply retooled its Optionally Manned Fighting Vehicle program. Let's call it **OMFV 2.0**. On February 7, the Army **issued** guidelines (instead of requirements) for the resurrected OMFV. It has agreed to shift more of the revamped program's costs from contractors to—surprise!—taxpayers.

"In the prior approach, there was a much deeper dependency on the industry's cost sharing," Jette, the Army weapons czar, **told reporters** as the service unveiled its latest procurement plan in early February. This time around, "generally we'll be funding the development of the vehicle." The original 2026 fielding deadline has disappeared, as has the requirement to squeeze a pair of vehicles into a C-17.

But after nearly a half-century, the bottom line is obvious: All this armor isn't designed to protect engines, treads, or ammo. It's designed to protect the soldiers inside. Even the Army gets that. "Robots have the potential to revolutionize the way we conduct ground combat operations," Army Brigadier General Ross Coffman **said** when the service awarded a pair of contracts to develop smaller "Robotic Combat Vehicles" in January. "We envision these

vehicles providing commanders more time and space for decisions," Coffman said, "and reducing risk to Soldiers."

Speaking of time and space for decisions, the Army **begins meeting** with contractors in March to start drafting blueprints for its latest Bradley replacement.

Maybe the fourth time will be the charm.

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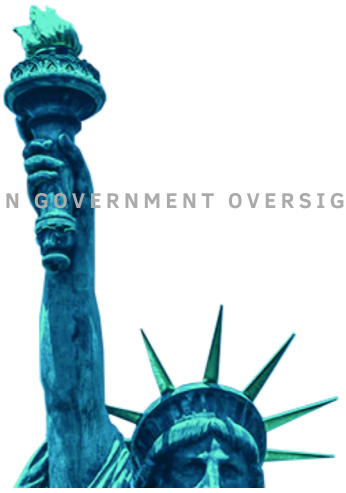

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