By: Joe Gould | January 28, 2019

## How the Pentagon's fear of risk is stifling innovation

WESTLAKE VILLAGE, Calif. — To Trae Stephens, a partner at the Silicon Valley venture capital firm Founders Fund and the chairman of tech company <u>Anduril Industries</u>, risk-averse leaders at the Pentagon — for sticking to their "go slow" approach — are like "dumb gamblers."

"You bet on the Patriots in 2007 and, by gosh, in 2037 you're still going to bet on the Patriots. And eventually you just go bankrupt, you lose all your money," Stephens, a past critic of Pentagon innovation efforts, said at a Defense News-hosted roundtable in November.

"The reality is that the decisions that we're making today ... are actually the riskiest possible decisions. It's not that we're doing the safe things," he added. "It's actually less risky to take the more contrarian positions."

The discussion highlighted the challenge for Congress amid the widely held perception that rigid regulations and a risk-averse culture within the Pentagon and on Capitol Hill have hindered innovation in American weapons programs — just as Pentagon leaders worry about America losing its technological edge to Russia and China.

National Defense Industrial Association CEO Hawk Carlisle, a former Air Force general, says Congress' emphasis on accountability in its oversight of Pentagon acquisitions has been well-intentioned, but it's also created a disincentive for taking risks.

"All they do is go back and go: 'We spent an extra hundred thousand dollars on something that didn't pan out. What do you think? And that's tax-payer money,' " Carlisle said. "That's all important, but it's hard to change the mentality of the department when they know that the oversight is going to continuously be there. I have been, many times, dragged in front of Congress for testimony about how I messed up because I didn't fully vet something as long as they thought I should've."

That's not to say Congress is sitting on its hands. Through the fiscal 2019 National Defense Authorization Act, Congress assembled a group of experts, called the Section 809 Panel, to tackle the issues rankling Silicon Valley and beyond — and the panel <u>issued</u> its third and last of its far-reaching reports in January.

Texas Republican Rep. Mac Thornberry, the former House Armed Services Committee chairman, said his annual acquisition reform legislation over each of the last four years has received near-unanimous support. As ranking member this year, he was optimistic HASC would do more.

"We've started a number of things that have not been implemented, and last year we initiated a complete rewrite of the acquisition code, which needs to take the next step this year," he told reporters at the Capitol on Jan. 8.

"One of the things I did last fall was take visits to Boston, Austin, Silicon Valley, focused on how the high-tech industries have challenges doing business with the Department of Defense," Thornberry said. "I think there is a lot that can still be accomplished on the innovation side of acquisition, as well as simplifying, streamlining and other things we've done so far."

The Pentagon's Defense Innovation Unit has been pressing Congress to build on some of the flexible acquisition authorities lawmakers have granted the Pentagon in recent years, and provide new budget flexibility so that investment can keep pace with innovation. There's a question of whether lawmakers, without tons of technical know-how, can make leaps of faith.

"It does not require rule changes, it just requires a different mindset and comfort levels," said Raj Shah, the DIU's former managing director. "How's technology built, right? If you know [what] software looks like at the start of it, you've already got it wrong."

While it seems the Pentagon's being more risk-averse, rendering tough judgements on its thin portfolio of innovative technologies means it's actually accepting more risk, said Defense Innovation Board Executive Director Josh Marcuse. By his reckoning, "we substitute meaningful accountability for accountability theater."

"A factory that shifts risk to the war fighter: That is what we have," Marcuse said. "We do not have risk reduction. We have risk displacement. The status quo is a system that is not reducing risk, it is actually multiplying risk everywhere you look."

"Whereas if the Defense Innovation Unit wants to do something iterative and experimental at speed and buy down the risk of a failure and fail small and inexpensively quickly, that's held for maximum accountability, you have hearings for that," Marcuse said. "That's nuts.

"We said it's OK to fail, you just have to fail very slowly, you have to fail very expensively and you have to fail with a high degree of documentation."

How does that get changed?

One move involves meeting skittish leaders halfway. Siobhan McFeeney, vice president for transformation at tech firm Pivotal, says there is a middle-ground option to present high-level decision-makers to make them more comfortable with speedy innovation: "fast with brakes." In other words, implement test-driven development or continuous integration techniques.

"When we talk about fast but with brakes, you can pivot, and you can control it, their level of stress goes way, way down," she said.

Another route identifies and groups leaders. Shah said what he's seen work is teamwork among a senior leader, like a defense secretary who "gets it," a staff director or chair of one of the congressional Appropriations committees, and the "young Turks" in an organization who can do the actual work.

"I think, again, you can't change everything all at once — and, again, it's if the department says they want to do it, and we can find one or two leaders in Congress that want to step up [and] say: 'This is the thing that I want to make real,' " Shah said. "Those conversations have been had. ... It's just putting it together on a specific, actionable thing."