



DEPARTMENT OF THE AIR FORCE
WASHINGTON DC

OFFICE OF THE ASSISTANT SECRETARY

MEMORANDUM FOR ACQUISITION WORKFORCE

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FROM: SAF/AQ

SUBJECT: Agility Prime

Walking around the Pentagon, you're surrounded by amazing military memorabilia. One of my favorite pictures is of Army Signal Corps Generals watching the Wright Brothers fly (what would later become) the world's first military airplane. There's even a carefully preserved piece of that original 1909 Wright Model A enshrined in the frame.

From those humble cloth-and-wood planes, who could have foreseen the supersonic speeds and stealthy profiles that would decorate our Air Force hallways and conference rooms only decades later? It's a potent reminder to be always on the lookout for new breakthroughs and new opportunities, just like those Signal Corps Generals did. The next big thing may not wait.

With over 80% of our nation's R&D now commercial, most new opportunities lie in commercial markets currently evolving without Air Force influence or support. Continued absence will have far-reaching consequences that will likely imperil the dominant tech advantage we have enjoyed for over seventy years.

Consider the small drone market. The Pentagon's absence as this commercial market emerged allowed China to dominate the global supply chain; now we react to the security challenges this causes. In hindsight, proactive engagement by the military—interposing the steady demand of our market and willingness to pay a higher price for trusted systems—would likely have supported a small U.S. industry base.

Hobbyist drones are one thing, but other dual-use technologies—ones with greater potential impact on the global economy, especially intelligent automation—are in development as we speak. Like small drones, there is no guarantee they will commercialize in the U.S. first. But it is imperative our military purchasing system view the proactive acceleration of dual-use technologies as a core mission.

One particular emerging technology could rewrite how the Air Force and civil society do logistics and transportation...and we've been waiting for it since *The Jetsons* first aired in 1962. Flying cars capable of flexible, disaggregated operations could elevate both military missions and entire commercial industries into the third dimension. With numerous companies leveraging advances from hybrid and electric cars to create affordable, runway-independent electric Vertical Takeoff and Landing (eVTOL) systems, a radical future is not too farfetched nor too far away...

Especially if the Air Force helps precipitate it.

Previous transformations in aviation generated spectacular leaps in performance hand-in-hand with leaps in cost that limited quantity. eVTOL is quite the opposite. Given its mechanical simplicity and high degree of automation, costs for procurement, sustainment, and infrastructure should be an order of magnitude lower—making quantities of systems for missions like austere logistics, base security, rescue, and disaster relief affordable. Moving these missions into three dimensions would provide greater responsiveness and agility for our warfighters and a faster first use-case for the companies building them.

Finding a military product-market fit, certifying safety, and logging steady flight hours would ensure that companies capable of supporting U.S. military missions remain competitive in the commercial market while also building confidence for accelerated domestic certification and use. “Agility Prime” is our Air Force program to do just this.

The Air Force has unique resources—test infrastructure and ranges, professional test and engineering corps, and revenue-generating military use-cases—to help mitigate present commercial market and regulatory risks. Agility Prime will employ these resources to attract investors, build confidence, and hopefully expedite commercialization while providing the Air Force revolutionary flexibility for numerous missions.

Our method of partnering with industry will be a tailored challenge series. These “Air Races” will be venues for building new teams as well as competitive opportunities for industry to delineate their products, all while putting a fresh face on how fast defense acquisition can be. We will team with the most promising commercial partners on a fast-track to initial operations for the most promising military missions. In return, the Air Force will be able to evaluate these platforms without having to fund the full (if any) R&D. Because our aim is accelerating and procuring commercial-military dual-use systems, military-unique requirements will be strictly out of bounds.

As we explore new concepts for improved logistics, sustainment, mass, and maneuver, we will not lose sight of the broader ambition of creating a new industry and catalyzing a revolution in transportation. The pictures and memorabilia lining our Air Force halls attest that the “not yet” is oft mislabeled “impossible” and that visionaries write the future when labeling it “now”.

Now is the time for a new partnership model, and just maybe, a new picture for the Pentagon.

A handwritten signature in blue ink, appearing to read 'W. B. Roper, Jr.', with a stylized flourish at the end.

William B. Roper, Jr.
Assistant Secretary of the Air Force
(Acquisition, Technology & Logistics)