

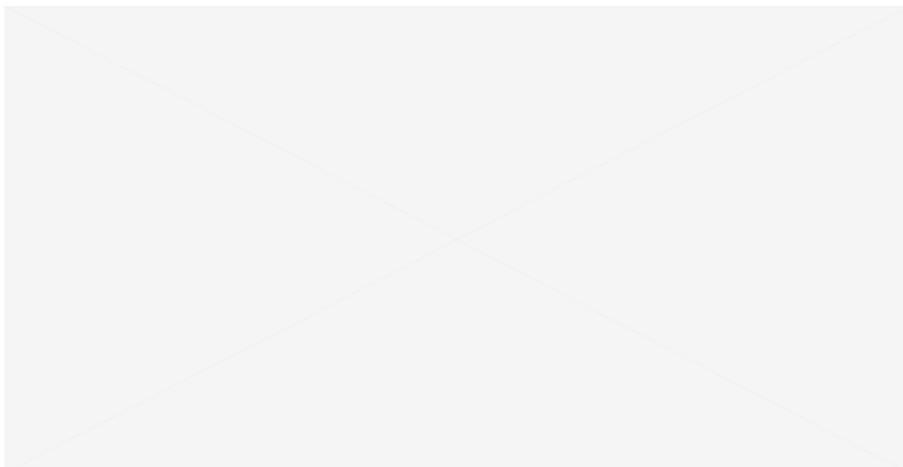
— 2020 —  
YEAR IN REVIEW

# ARMY APPLICATIONS LABORATORY

FROM PROVING NEW BUSINESS MODELS TO REDUCING BARRIERS FOR COMMERCIAL SOLVERS TO WORK WITH THE U.S. ARMY, SEE WHAT WE'VE BEEN UP TO — MUCH OF IT VIRTUALLY — DURING THE PAST 12 MONTHS.

**WE ARE FUNDAMENTALLY  
RESHAPING HOW  
THE U.S. ARMY WORKS  
WITH INDUSTRY**

We're not a laboratory in the traditional sense of the word. The Army Applications Laboratory (AAL) is the U.S. Army's innovation unit. Through our blended business models, we are evolving the Army's approach to capability development and making the Army a better business partner for untapped commercial solvers. AAL is helping the DoD diversify its industrial base to catch up – and reclaim the lead – in key technology areas.





## AAL'S 2020 HIGHLIGHTS **AT-A-GLANCE**

We spent 2020 proving the need for — and the value of — what we do.

By bringing together commercial solvers with Army stakeholders across a range of programs, we validated that an intentional collision of ideas results in better outcomes. And we codified our models for innovation so they can be adopted at scale by other Army organizations.



### **MORE NEW THINKERS**

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57% of our portfolio companies had never worked with (or had limited experience working with) the Department of Defense (DoD) before applying for an AAL opportunity.

### **MODELS THAT SCALE**

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The highest priority Cross Functional Team (CFT) uncovered 14 solutions in just 12 weeks through the AAL Cohort Program and is now applying our model to how they operate.

### **BEYOND QUICK WINS**

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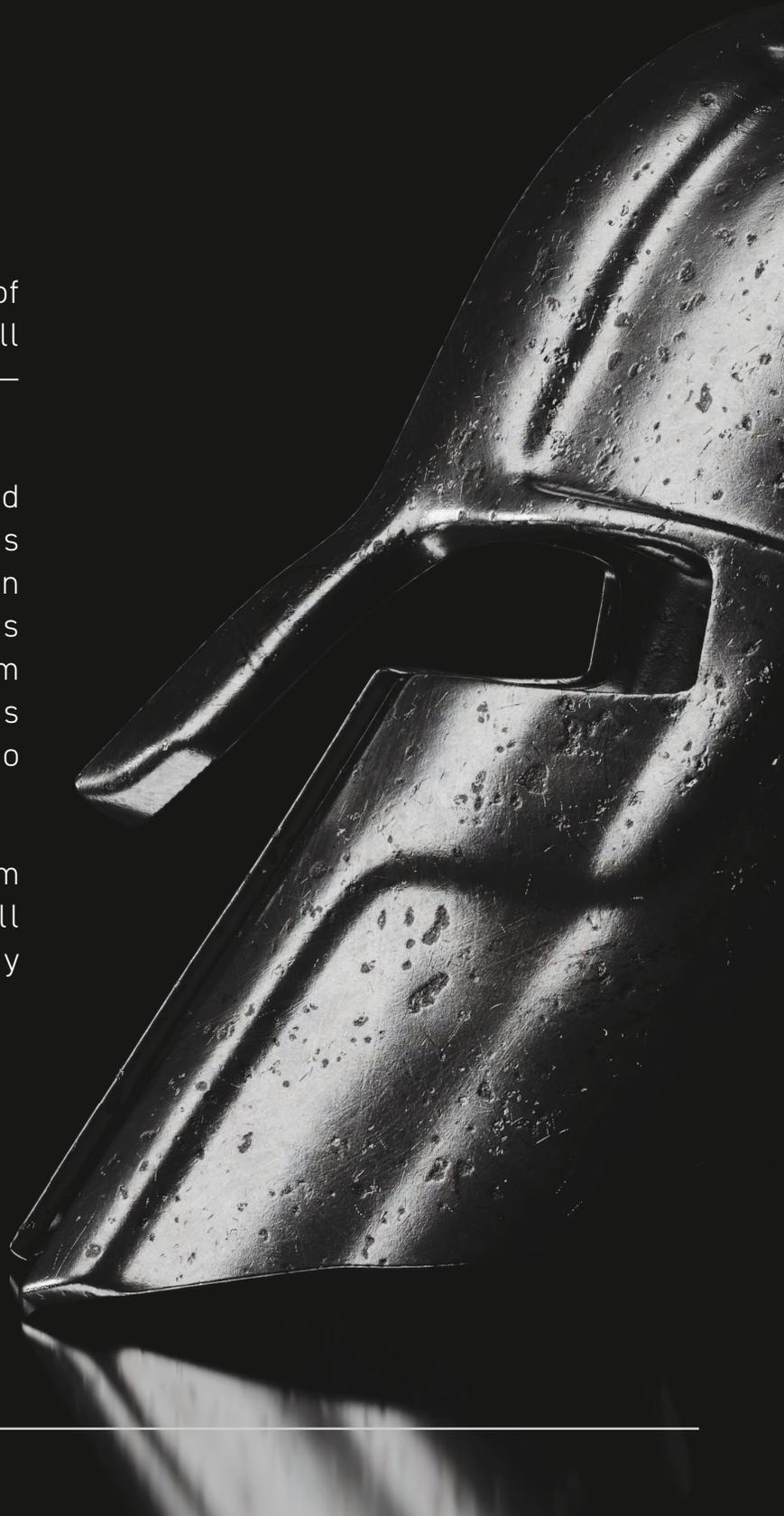
66% of AAL projects transitioned to Soldiers, offering clear paths to long-term revenue for companies, while the rest were quickly off-ramped — de-risking Army investments.

# THE SPARTN PROGRAM

In 2020, we introduced a different kind of program to the Army — and to the small businesses that want to work with us — called SPARTN.

Special Program Awards for Required Technology Needs (SPARTN) unites Army Small Business Innovation Research (SBIR) funding and AAL's business model to create a program built with solvers in mind. Problems released through SPARTN are tied to the Army's modernization priorities.

This competitive awards-based program is AAL's latest pathway to help small businesses advance their technology while supporting Army priorities.



## FIRE FASTER COHORT

15 companies were awarded contracts in less than 30 days - 88% faster than the average SBIR contract award



### What makes SPARTN different:

- Faster contracting speed, with the goal of having companies on contract as soon as possible (vs. up to 240 days)
- Ability to connect with Army stakeholders and end users (Soldiers) for deeper insight into the problem
- Potential for millions in total contract value to build a concept or prototype related to a specific problem
- Acquisition teams included early with the goal of easing transition and building new tech into Programs of Record or other funded projects

## AAL PROJECT TYPES

### COHORT CHALLENGE

#### "SYSTEM OF SYSTEMS"

When we're looking for ways to solve parts or all of complex, multi-faceted problems.

### POINT CHALLENGE

#### "WE KNOW WHAT WE WANT"

When we need a specific solution, tailored to meet a detailed problem statement.

### AREA CHALLENGE

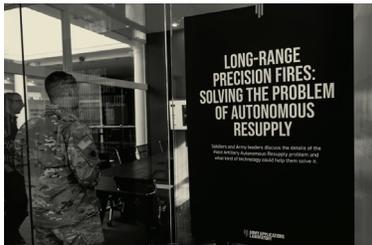
#### "UNKNOWN UNKNOWNNS"

When we need solutions in a general area for problems that may not yet exist.

# PROJECT SNAPSHOT

AAL has awarded 46 contracts to date across a diverse portfolio of programs, with a total value of ~\$20M. Nearly all of this project work was planned and completed in a virtual environment, due to the realities of the COVID-19 pandemic.

## IMPACT



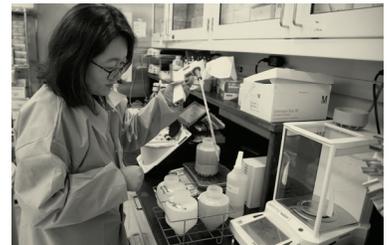
### FIELD ARTILLERY AUTONOMOUS RESUPPLY

We introduced a Cohort Program model that moves beyond requirements and allows commercial solvers and Army end users to co-develop solutions with PM buy-in from the start.



### DIRECT TO PHASE II SBIR

AAL championed the Army's adoption of the DP2 SBIR approach to speed access to more meaningful funding and incentivize new partnerships with the national industrial base.



### MEDICAL RESEARCH AND DEVELOPMENT COMMAND

AAL helped MRDC vet 1,600 commercial inquiries on COVID-related response needs, helping the Army and the companies save time by making sure there was fit and viability.

## MAKING



### ROBOTIC ARM AMMUNITION RESUPPLY

An Austin-based robotics startup, developed and demonstrated a unique robotic arm to support autonomous loading of a CAT resupply vehicle as part of project RAAR.



### AUTOMATED INVENTORY MANAGEMENT SYSTEM

The AIMS project focused on translating computer vision technology that can recognize active shooters, created by a NY-based startup, and applying it to artillery resupply needs.



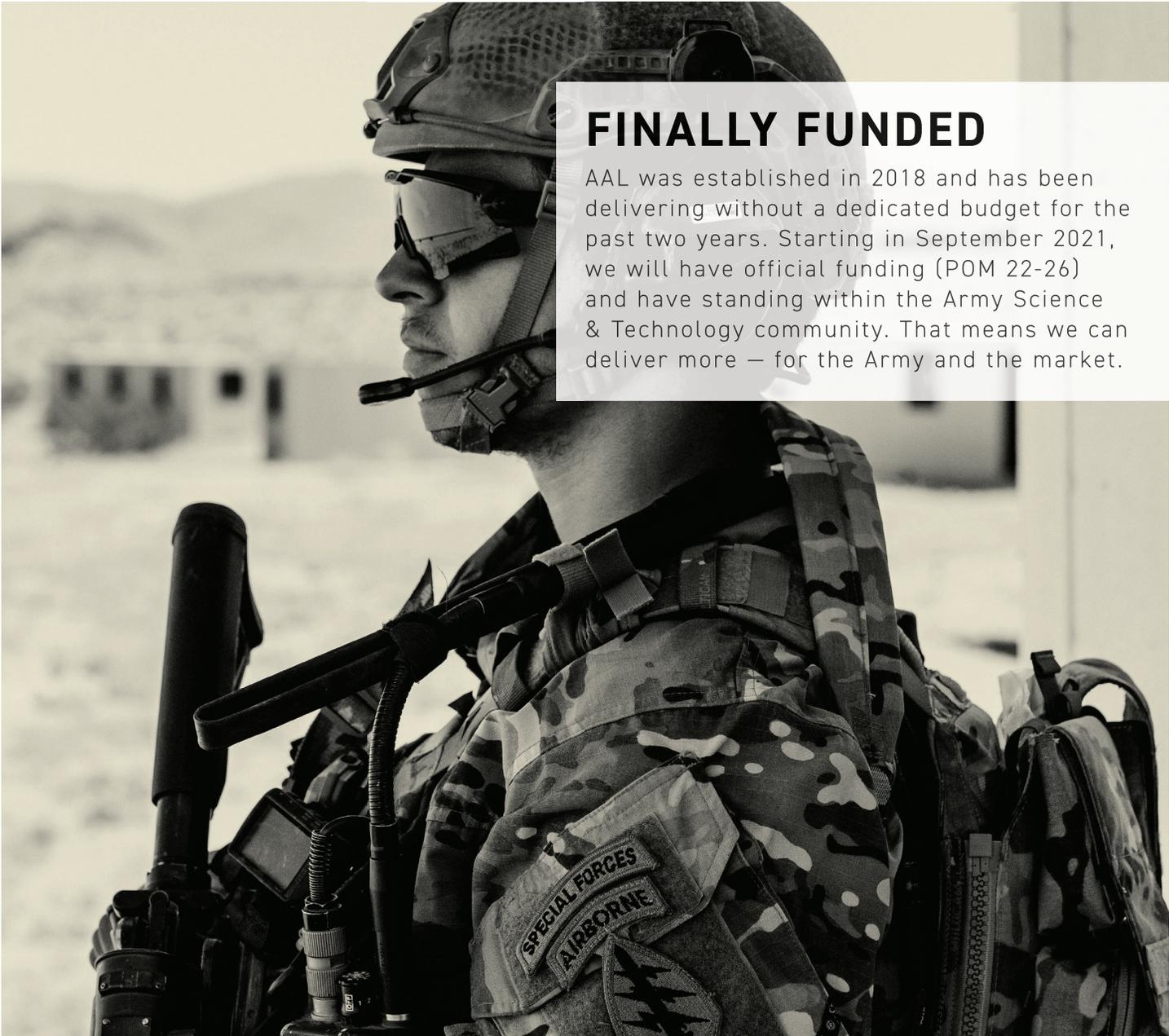
### CANNON AMMUNITION MANAGEMENT SYSTEM

AAL partnered with a Pittsburgh-based small business on CAMS for real-time ammunition inventory visibility that tracks and syncs with existing systems of record.

## A LOOK AT 2021 — AND BEYOND

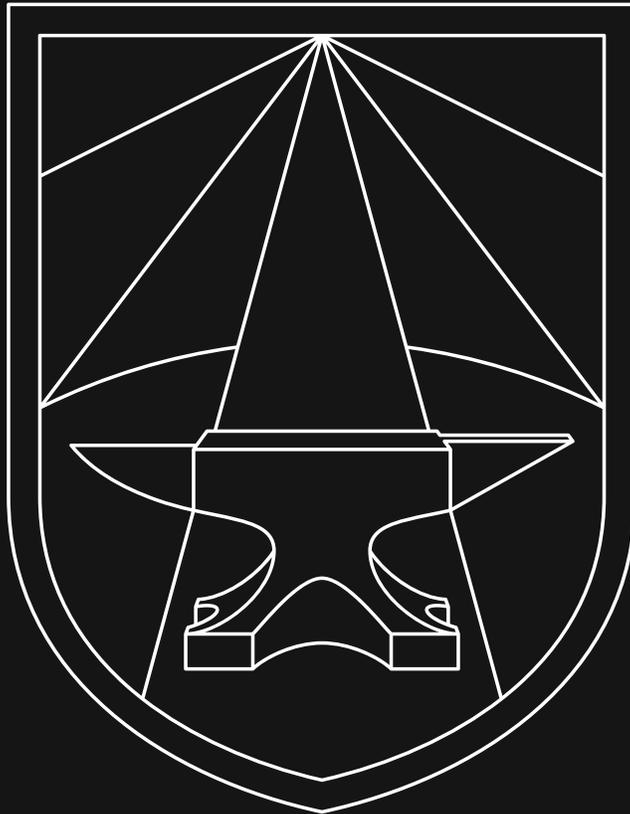
We're proud of what we did in 2020, and we're already making strides in 2021. We've proven what works, and we've seen it adopted. Now, it's just a matter of doing more of it. We've had an impact at the project and program levels. This year, we want to gain enough momentum to reshape the Army's culture of innovation. That means building partnerships with new mission partners and bringing even more untapped solvers into the Army creation space.

We're going to continue to evolve — and help the Army do the same. Together, we will discover what's possible when we question *why* and deliver *what if*.



## FINALLY FUNDED

AAL was established in 2018 and has been delivering without a dedicated budget for the past two years. Starting in September 2021, we will have official funding (POM 22-26) and have standing within the Army Science & Technology community. That means we can deliver more — for the Army and the market.



Based at the Capital Factory in downtown Austin, TX, the Army Applications Laboratory (AAL) was established in 2018 with the creation of the Army Futures Command (AFC).

For more information, visit [armyfuturescommand.com/aal](https://armyfuturescommand.com/aal).