



AFWERX
AFVENTURES

Open & Specific Topics How Do They Differ?

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Mission

DAF's Commercial Investment Group

Fund emerging technologies to rapidly transition advanced capabilities to Airmen and Guardians.



Vision

DAF's Commercial Investment Group

A transformed industrial base
that empowers Airmen and
Guardians.

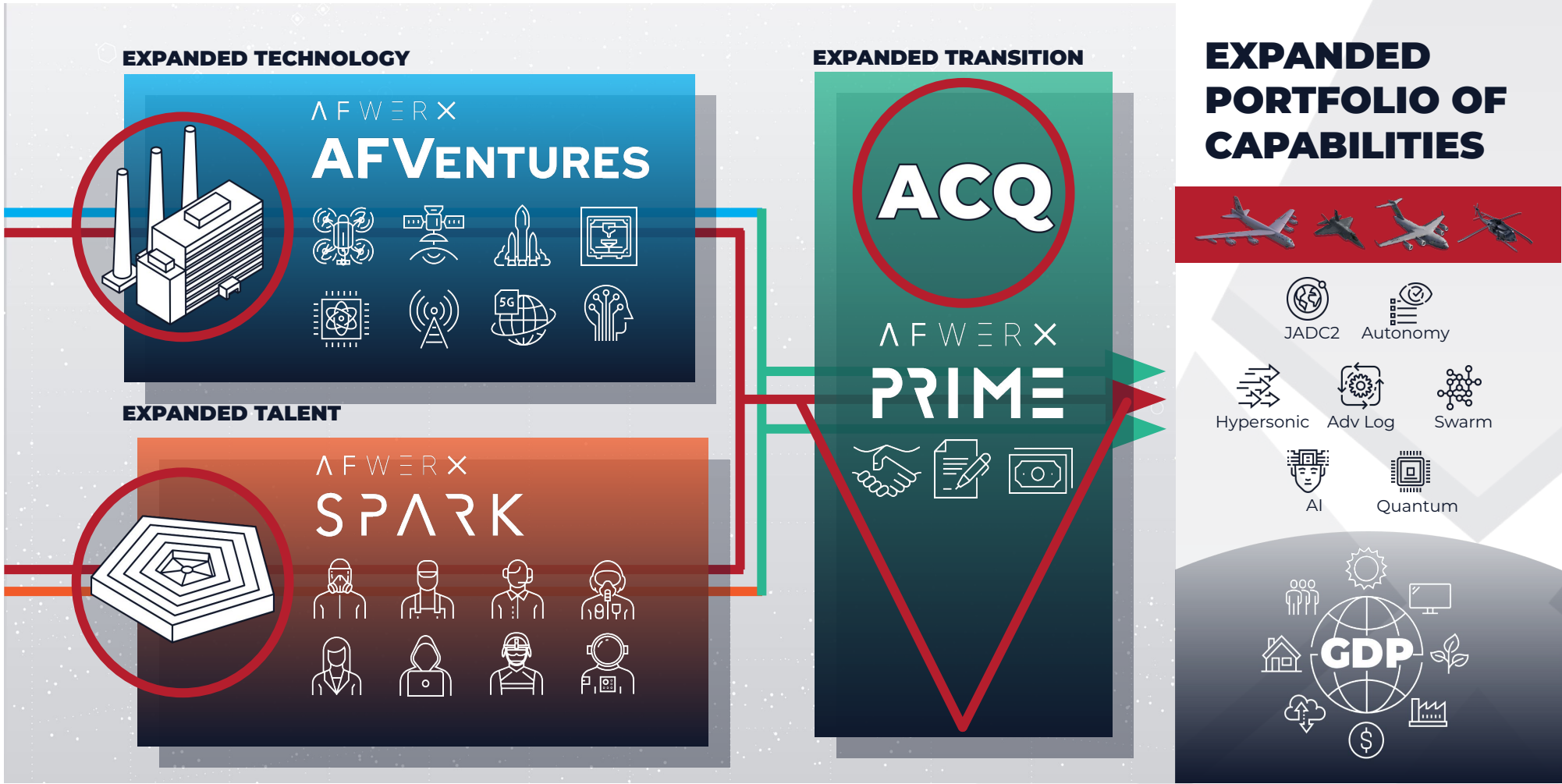


Approach

DAF's Commercial Investment Group

Incentivize private, for-profit investment in national security interests by matching emerging commercial solutions with DAF problems.

Capability Development (AFWERX)



AFVentures/AFWERX Concept Formed in support of 2018 National Defense Strategy (NDS)

New commercial technology will change society and, ultimately, the character of war. The fact that many technological developments will come from the commercial sector means that state competitors and non-state actors will also have access to them, a fact that risks eroding the conventional overmatch to which our Nation has grown accustomed. **Maintaining the Department's technological advantage will require changes to industry culture, investment sources, and protection across the National Security Innovation Base.**



Small Business Innovation Research and Small Business Technology Transfer

- **The SBIR program**, established by Congress in 1982 as a three-phased process, solicits proposals and awards funding to small business for federal research and development, production, services, or any combination of these, to meet agency needs and missions.
- **The STTR program** was established in 1992 with a similar statutory purpose. The major difference is that the STTR program requires a research partner consisting of one of the following:
 - University
 - Federally funded R&D center
 - Qualified non-profit research institution

SBIR v STTR

STTR is similar to SBIR

- Three phase commercialization program codified in statute: Discover (P1) – Prototype (P2) – Transition (P3)
- Results in sole-source justification for use by *all US federal agencies*

BUT

STTR has unique qualities based on its research focus

- Requires **one** qualifying research partner to perform **30% - 60%** of work (e.g. university, non-profit, or FFRDC)
- Principle Investigator may be primarily employed by research entity (e.g. professor) OR the small business
- Leverages close ties with both federal R&D AND operational communities

Eligibility

The non-negotiables: company must

- Have 500 or fewer employees
- Be for-profit. 501(c)(3) designation is not eligible, but may be considered subcontractor or consultant to applicant
- Primarily U.S. owned, at least 51% ownership by U.S. citizens and/or permanent resident aliens
- Additional considerations for venture-backed companies
- Principal Investigator (PI) must be “primarily employed” by the applicant small business during SBIR award period

Be sure to read the full eligibility requirements on [SBA.gov](https://www.sba.gov)

DAF SBIR/STTR Program Changes since 2018

AFWERX Launches “Open Topic”

First Open Topic released, focusing on expanding DAF access to new ideas as proposed by industry.

AFWERX 2.0 creates “AFVentures”

AFVentures created to support Open Topic and related initiatives. Combined with “Prime” and “Spark” Divisions in AFWERX 2.0. STRATFI program begins.

AFVentures = DAF SBIR/STTR

AFVentures, previously the Division executing the Open Topic and STRATFI/TACFI programs, absorbed the Specific Topic, Pitch Day, and Legacy program responsibilities.



DAF SBIR/STTR CoE starts

DAF SBIR/STTR “Center of Excellence” centralizes contracting & finance activities to increase timeliness and expand DAF SBIR/STTR expertise.

SBIR CoE Merged w/ AFWERX

SECAF appoints AFWERX Director as DAF Chief Commercialization Officer and moves SBIR/STTR Program within AFWERX. This also re-aligns SBIR/STTR with DAF Acquisition (SAF/AQ).

Strategy: Capital as a Capability

Restructure nests Open Topic, Specific Topic, and the STRATFI/TACFI programs all under the management of AFVentures. The three programs are:

Open Topic:

Technology-agnostic solicitation which encourages commercial industry to submit dual-use technology solutions without necessarily having a known end-user. It is used as a means to capture the best capabilities and emerging technologies that can impact our Airmen and Guardians and have industry bring solutions to the DAF.

Specific Topic:

The Specific Topic Program seeks innovative solutions for a particular problem set defined by a DAF end user or customer. Many times, the topics and requirements are not a dual-use capability and are specific to the DoD; but overall, these topics have clearly-defined requirements and a known DAF customer built in to the topic solicitation.

STRATFI/TACFI:

STRATFI (Strategic Funding Increase Program) and TACFI (Tactical Funding Increase Program) awards help scale Phase II efforts to the level needed to achieve better technology transitions and de-risks development through syndication with multiple transition-focused partners and leveraging outside investment.

How the Program Works

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PHASE I

Feasibility Study

Open & Specific Topics

OPEN TOPIC

- Up to \$75K per award
- 3 month period of performance
- ~700 awards per year
- "Open door for innovation"

SPECIFIC TOPIC

- Up to \$150K per award
- 9 month period of performance
- ~300 awards per year
- Built in Air Force Customer
- Includes Pitch Day opportunities

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PHASE II

Prototype

Open, Specific & Direct to Phase II (D2P2) Topics

OPEN TOPIC

- Up to \$1.25M per initial award
- Up to 21 month period of performance
- ~300 awards per year
- Customer Memorandum required
- Matched funding encouraged
- D2P2 opportunity if customer is already known and Customer Memorandum is signed

SPECIFIC TOPIC

- Up to \$1.25M per initial award (\$1.7M for STTR)
- Up to 27 month period of performance
- ~200 awards per year
- Built in Air Force Customer
- Includes Pitch Day opportunities
- D2P2 opportunities

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STRATFI/TACFI

Strategic Funding Increase (STRATFI) and Tactical Funding Increase (TACFI) Program

- Notice of Opportunity
- TACFI - \$375K - 1.8M SBIR/STTR funds
- STRATFI - \$3M - \$15M SBIR/STTR funds
- ~100 TACFI and ~15 STRATFI awards per year
- Defense only or dual use matching options
- Private Investor Opportunities

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PHASE III

Transition

- Continuation, derivation, or extension of SBIR/STTR Phase I, II or STRATFI/TACFI work
- Contract with partnering US Government customer
- Utilizes non-SBIR funds

The background of the slide is a dark, blue-tinted photograph of an aircraft carrier's deck. Several personnel in flight suits are visible, some standing near the edge of the deck. In the background, the silhouettes of fighter jets are parked. The overall atmosphere is professional and military-oriented.

Open Topic

Dual-use problem solving

SBIR/STTR Phase I “Open Topic” Intent

Objective: Conduct feasibility-related experimental or theoretical research/R&D related to agency’s requirements to determine the scientific and technical merit and feasibility of the proposed effort and the quality of performance of the offeror.

In other words **find the fit between the non-defense commercial product and the Air Force Market.**

- Shorter Period of Performance: **3 months**
- A maximum award of **\$75K**
- On contract to conduct **Technical Feasibility**
- Two deliverables (preliminary & final reports)
- Prepare for Phase II application
- **Work to get a DAF Customer & End User to sign a Customer Memorandum for Phase II proposal**

What Happens After a Phase I Award?

Work to find a DAF customer and end-user that are interested in and have a need for your technology. Determine the feasibility of the tech development & integration.

If you find a match between your product and an Air Force end-user, you can apply for a Phase II award by submitting a proposal.

- a) Need a signed Customer Memorandum with:
 - i) **Customer** - The org that can execute future efforts with funding & contracting resources... often an Acquisitions/Program Management Office or HQ
 - ii) **End user** - The org primarily using or benefiting from the solution
 - iii) **Technical POC** - DAF member acting as the on-site manager and solving tactical level barriers; day-to-day primary DAF contact for company.
- b) Phase II is the demonstration or prototype stage with your identified DAF customer and end-user.

SBIR/STTR Phase II “Open Topic” Intent

Objective: Continue the research/R&D effort from the completed Phase I OR from a Direct-to-Phase II award where the proposal has sufficient scientific and technical feasibility and merit despite the lack of a Phase I award.

In other words, validate the fit between the non-defense commercial product and the Air Force Market.

Typical

- Medium Period of Performance: Up to 21-months
- A maximum award of \$1.25M
- Milestone Deliverables IAW Proposal Milestone Schedule
- Work with the AF Customer & End User who signed the Customer Memorandum

Direct-to-Phase II (D2P2)

- Longer Period of Performance: Up to 21-months
- A maximum award of \$1.25M
- SBIR only (not STTR)
- Milestone Deliverables IAW Proposal Milestone Schedule
- Work with the AF Customer & End User who signed the Customer Memorandum AND must demonstrate prior technical feasibility efforts not funded by SBIR.

What Happens After a Phase II Award?

You already have a prototype and an engaged Customer & End User, but you need more time or money to finish it. Options are:

- **STRATFI/TACFI**

- Am I eligible?
- What do I need to bring to the table?
- Where do I go for more info?

- **Phase III**

- This occurs outside AFWERX with non-SBIR/STTR funding
- Customer provides their own funding, contract & program management
- After PI or PII completion, PIIs can be rapidly awarded under a “sole source” justification
- Considered the final stage and a successful transition of a SBIR/STTR prototype

What is a Focus Area?

The [Open Topic Program](#) is different from the traditional SBIR/STTR program. It is 'open' to any technology, customer, or application. It operates on a single solicitation that is an open call for all solutions.

- Solution & technology agnostic
- Shows us solutions we may not have considered
- Must still be RDT&E, and potentially solve a clear DAF mission need

Government users can publish a [Focus Area](#) specific to their mission needs.

- Define user needs & use cases
- Provide a POC to that government need
- Technology agnostic...but what would a solution offer the warfighter?

Why are they important?

- Owners are encouraged to [reach out to small businesses they have worked with](#) to connect to their focus areas
- Owners are [invited to colliders and other collaboration events](#)
- Focus Areas are [searchable so business owners can understand who their potential government customer might be](#) in the DAF



Specific Topic

Defense-focused problem solving

What is a Specific Topic?

The Specific Topic seeks innovative solutions for a very particular problem set that is **defined by an Air Force end user or customer**.

These topics have **clearly-defined requirements** and a known Air Force customer built into the topic solicitation. Small businesses are able to **directly propose solutions to specific DAF needs**, and upon award for a Phase I, Phase II, or D2P2, will work with that specified end user to address the capability gap or problem statement put forth in the solicitation.

Specific Topics are generally solicited in the DoD SBIR/STTR BAA solicitation cycles hosted on DSIP.

SBIR/STTR Phase I “Specific Topic” Intent

Objective: Conduct feasibility-related experimental or theoretical research/R&D related to agency’s requirements to determine the scientific and technical merit and feasibility of the proposed effort and the quality of performance of the offeror. **The Specific Topic seeks innovative solutions for a very particular problem set that is defined by an Air Force end user or customer.** The contracting details are typically:

Typical

- Period of Performance: **9 months**
- Cost Base Max: **\$150K**
- On contract to conduct: **Technical Feasibility**
- Two deliverables (preliminary & final reports)
- Prepare for Phase II application
- **Conduct technical feasibility study but not required to find a new Customer & End User, baked in with requirements definition**
- Contracts & project management comes from the authoring organization

*Contracting details may vary per topic and solicitation. Please see the solicitation instructions for more information.

PHASE I Awards

During a PI

- Small Businesses work directly with the Specific Topic's identified end-user & TPOC
- Small businesses complete their feasibility study & reporting requirements per the contract

After a PI

- All PI Awardees will receive the opportunity to submit a proposal for a PII after receiving a request for proposal (RFP) from the managing organization

SBIR/STTR Phase II “Specific Topic” Intent

Objective: Continue the research/R&D effort from the completed Phase I OR from a Direct-to-Phase II award where the proposal has sufficient scientific and technical feasibility and merit despite the lack of a Phase I award. Specific Topic frequently results in development of a prototype.

Typical

- Period of Performance: Up to 24-months
- Cost Base Max \$1.25M (\$1.7M for STTR)
- Milestone Deliverables IAW Proposal Milestone Schedule
- Work with the AF Customer & End User who created the Topic

Direct-to-Phase II (D2P2 Only SBIR)

- Period of Performance: Up to 24-months
- Cost Base Max \$1.25M
- Milestone Deliverables IAW Proposal Milestone Schedule
- Work with the AF Customer & End User who created the Topic & must demonstrate that the small business concern (SBC) has met the feasibility requirements of a PI

PHASE II Awards

During a PII

- Small businesses work directly with the specific topic's identified end-user & TPOC
- Small businesses complete their prototyping & reporting requirements per the contract

After a PII

If you need more time or money to finish your PII, your options are:

- STRATFI/TACFI
 - Am I eligible?
 - What do I need to bring to the table?
 - Where do I go for more info?
- Phase III
 - This occurs outside AFWERX with non-SBIR/STTR funding
 - Customer provides their own funding, contract & program management
 - After PI or PII completion, PIIs can be rapidly awarded under a “sole source” justification
 - Considered the final stage and a successful transition of a SBIR/STTR prototype



Similarities & Differences

Two sides of the same coin

Open & Specific Topics: Similarities

- **Open** and **Specific** Topics both carry the same weight for SBIR/STTR risk reduction, satisfaction of non-competitive/sole source process
- Both receive the **same** amount of DAF SBIR/STTR budget **(40/40/20)**
- **Two sides of the same coin**, representing objective toolsets to help solicit technology capabilities from Industry by DAF users with different needs
 - Open: open door for innovation, dual-use focused, & technology agnostic
 - Specific: particular, defense-focused problem solving & requirements development
- **All proposals are submitted by small businesses through DSIP**
- **In some cases, Phase I SBIR/STTR awardees may also receive a Phase III contract award, bypassing a Phase II**
- **If a Phase II proposal is deemed selectable/not funded, a small business Phase II proposal is eligible for cross-agency transfer**

Open & Specific Topic: Differences

- Different evaluation criteria (BAA or CSO, specified in solicitation instructions on DSIP)
- Different level of involvement of DAF customers/end users at the earliest stages of SBC involvement (SBIR/STTR Phase I)
- Different amounts of money & periods of performance
- Different contract executors (Open = centralized; Specific = distributed)
- Focus Areas found here: <https://afwerx.com/focus-areas/>
- Specific Topics are found within each SBIR/STTR DoDs BAA Solicitation instruction package on DSIP:
<https://www.dodsbirsttr.mil/submissions/baa-schedule/active-baa-announcements>

How to Participate

Open Topic Program

- Broad opportunity for industry to tell the Air Force what it doesn't know & propose dual use solutions
 - Industry submit solicitations under “open door for innovation” - visit [DSIP](#) to read solicitations & apply
 - DAF users can sign up as Open Topic evaluation, finance, or contracting augmentee
 - DAF users can submit Focus Areas for inclusion in next Open Topic call: focus.areas@afwerx.af.mil or view other focus areas here: <https://afwerx.com/focus-areas/>
 - DAF users should check out what's already in [the portfolio](#) & sign a customer MOU (D2P2 application) or find something to fund via Phase III transition
 - Apply for STRATFI/TACFI funding to help finalize your Phase II prototype

Specific Topic Program

- Toolset to solicit defense-focused capabilities based on predefined requirements & customer needs
 - Industry submit capabilities based on specific topic criteria - visit [DSIP](#) to read solicitations & apply
 - DAF programs submit a problem statement to discover solutions to a specific problem/risk/issue/opportunity & define requirements - AF.SBIR.STTR.Workflow@us.af.mil
 - DAF users should check out what's already in [the portfolio](#) to find something to fund via Phase III transition, or reach out to previous awardees to scope out new projects
 - Apply for STRATFI/TACFI funding to help finalize your Phase II prototype

OSD 4/D Annual “Out of Cycle”

OSD hosts an annual 4/D cycle that can receive multiple "out of cycle" (not 1/A, 2/B, or 3/C) solicitation packages throughout each calendar year (January - December). Each 4/D solicitation package submitted within the year will have different Open/Close dates that will be outlined explicitly in the solicitation instructions.

These "out of cycle" 4/D solicitations can contain Open or Specific topics, which can be submitted with either BAA or CSO criteria.

Specific Topic Schedule

Dates & participation are subject to change.

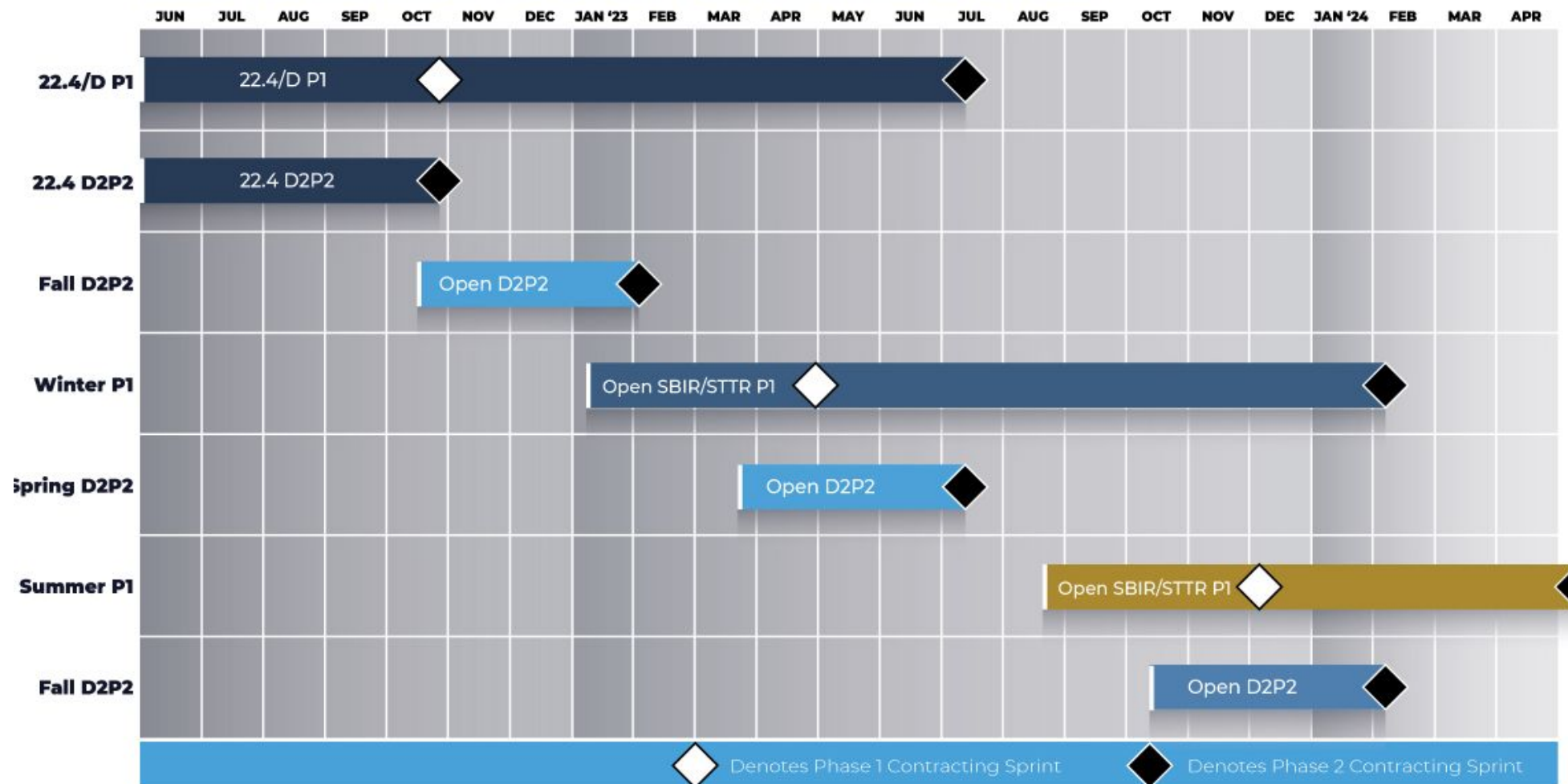
While the Specific Topic BAA intends to submit in-cycle (1/A, 2/B or 3/C) solicitation packages, the opportunity to submit within the annual 4/D throughout each calendar year is a possibility.

Most recently, 22.3/C was canceled & the Specific Topics were submitted into a new 22.4/D solicitation package.

22.4/D Specific Topic Cycle:

- Pre-Release: 11 August
- Open: 1 September
- Close: 29 September

2022 TRANSITION TO OPEN TOPIC ANNUAL CYCLE



Resources

MAJCOM Focus Areas - submit Focus Area ideas to:

focus.areas@afwerx.af.mil

Open Topic Company Portfolio:

<https://app.kitesrm.com/share/57cc444c79a47e964e89e15fd3c29482/reports/2020/views/6509-overview>

Weekly Webinar Series:

<https://afwerx.com/afventures-weekly-webinar-series/>

AFWERX.com:

<https://afwerx.com>



AFWERX ADVENTURES **Questions?**

Please type your questions in the Q&A section or email:
ENGAGEMENTS@AFWERX.AF.MIL