1156 15<sup>th</sup> St NW Suite 502 Washington, DC 20005 www.sbtc.org



Robert Schmidt Kevin Burns Co-Chairmen

Jere Glover Executive Director

> Larry Nannis Treasurer

Matt Oristano Mid-Atlantic Regional Chair

Ash Thakker Southeast Regional Chair

Mary Delahunty Southwest Regional Chair

Russ Farmer Mountain Regional Chair

Michael Browne Pacific Regional Chair

Roy Keller State Liaison

Paul Donovan Michael Squillante NIH Committee

Ash Thakker Phase III Committee Chair

> Russ Farmer DCAA Committee Chair

## Improving Small Business R&D at the DOD

SBTC appreciates SASC's hearing on small business R&D at DOD. Small business innovation, speed, and entrepreneurial determination to succeed provide drive that DoD needs to ensure military technology that will give us advantage over opponents. SBIR is working well, but it was never intended to be the only program for small business R&D. Success stories abound, and the overall data shows high SBIR Phase III productivity, but you are right to ask how we can do yet better. A closer look at the data will show how in many ways DoD programs have not taken advantage of the SBIR and technology opportunities presented to them, with individual departments and programs varying significantly in their skill and utilization of their small business technology potential and the rapid transition authorities granted by Congress.

### SBIR is transitioning \$2.5 billion of research to Phase III each year

First, Phase III transitions and transition productivity have been increasing in recent years:

air Ier on	SBIR Phase III new obligations (\$million)	2018	2019	2020	2021	2022	Total 2018- 2022	2022/ 2018	2022/ 2021
	DEPT OF THE NAVY	\$743	\$674	\$894	\$939	\$1,098	\$4,349	148%	117%
an	DEPT OF THE AIR FORCE	\$392	\$529	\$855	\$883	\$1,059	\$3,718	270%	120%
ite tee	DEPT OF THE ARMY	\$152	\$113	\$171	\$291	\$312	\$1,038	205%	107%
irs	<b>Big 3 Services Totals</b>	\$1,287	\$1,317	\$1,920	\$2,113	\$2,469	\$9,105	192%	117%
ker	Other (non-big 3)	\$99	\$226	\$305	\$167	\$250	\$1,046	254%	150%
tee air	DOD-Wide Totals	\$1,385	\$1,542	\$2,225	\$2,280	\$2,719	\$10,151	196%	119%

- As you can see, Phase III totals are growing, with \$10 billion in new obligations over the past five years. Each of the big three services have improved and grown. This is actually understated as it excludes prime subawards and unrecognized Phase IIIs (there is still substantial contracting officer resistance to recognizing SBIR Phase III awards).
- This is double the 2018 level and up 19% from 2021, and in aggregate now a little over the total SBIR allocation over that period.
- Navy showed the highest SBIR transition productivity, with Phase IIIs approximately double the allocation, while Air Force was around 1.4X and Army was around 1X (but increasing at 1.3 in 2021). The 2022 data is not yet completely clear as the allocation is still being quantified for that period.



• The Navy notably has become increasingly adept at figuring out how to grow SBIR Phase I/II productivity, and then at how to select and implement considered Phase III programs for rapid transition. Navy also works hard to implement Congress's direction.

## GSA Phase III has gotten technology to the Warfighter faster

Another notable driver of the increase in Phase IIIs has been the initiative that GSA has taken to create a rapid contracting vehicle for all agencies, simplifying and standardizing Phase III contracting with the result that is has done \$1.8 billion in Phase III obligations over the past 4 years, 20% of total DoD Phase IIIs. In 2022 GSA contribution rose to 30% of Phase IIIs, with \$708 million in new obligations up from \$91 million in 2019, \$356 million in 2020 and \$485 million in 2021. GSA has been so successful in this that demand for their support has grown such that GSA is currently manpower and budget-constrained for Phase IIIs.

# Results by Customer Agency (May 2018-Dec 2022)

Customer Agency	Contract Awards	Task Order Awards	Obligations (\$)	Obligations (% of total program obs)	Total Value (\$)	<b>Total Value</b> (% of total program value)
Civilian	3	5	\$81,425,490	4.50%	\$372,262,274	3.98%
Air Force	43	132	\$912,466,002	50.45%	\$4,514,986,940	48.25%
Army	5	33	\$76,675,917	4.24%	\$282,362,000	3.02%
Navy/Marine Corps	31	78	\$594,509,541	32.87%	\$3,153,990,418	33.71%
Other DoD	10	15	\$143,586,391	7.94%	\$1,033,289,884	11.04%
Totals	92	263	\$1,808,663,340	100.00%	\$9,356,891,515	100.00%

The departments get varying results because they vary in the degree to which they are taking advantage of their SBIR opportunity and authorities, and in the degree to which they follow Congressional requirements for the SBIR program. We believe DoD can do yet much better with SBIR. If DoD works to truly leverage their SBIR opportunities, the number of Phase IIIs will rise yet further with faster transitions of more technology advantage to the Warfighter.



### What More Can Be done

- DoD should implement Congress's Pilot Program to Accelerate DoD SBIR/STTR awards (see attached), including:
- Simplification and Streamlining: For proposals this has barely been tapped, and in fact most proposal processes have gotten much more complex with less applicant support, and contracting is still slowed by lack of standardized Phase I, II and III contract vehicles. GSA has done so and the Services should. (GAO reported that the DOD was not reporting because the Law mentioned DOD and that changes would have to be made by the Services. See GAO-22-104677 pg 28) Expediting Procurement: Contracting a Phase II can take a year, and Contracting has often taken inordinately long, communications with small business have increasingly been solely by email, and many awards selections have been opaquely delayed without effective communications.
- Substantive reporting on Phase IIIs. Agencies are already performing more Phase III than they realize. Improved reporting of Phase III will result in a better understanding of how this vehicle is helping provide cutting edge technology to the warfighter
- Phase III transition authority is still unevenly understood by most programs, and too rarely used as a primary strategy to speed transition. Except for the Navy, neither DoD nor its Services have sent out of Stackley-type memo to communicate top-level support for SBIR and SBIR transitions.
- Implement Secretary Austin's commitment at the Reagan Library a year ago to "double down on SBIR". DOD and the Services should voluntarily increase SBIR setasides
  - DOD and the Services should do more to broadly increase the use of small business in the R&D area. The original SBIR law 40 years ago required agencies to set goals for small business participation in R&D not just SBIR. The law never intended that SBIR be the only small business R&D program.
  - Voluntarily increase the allocation of funds to SBIR/STTR. Law sets a floor not a ceiling
  - DoD and the Services are doing specifically, and in terms of results, to get prime contractors involved in transitioning SBIR technology? The law requires this for all awards over \$100 million. The data provided above on Phase IIIs actually are understated in that it doesn't include subcontracts through Primes, which can be substantial. But we don't actually know because there is no program to implement SBIR through the Primes or reporting on such plans or data gathering to assess the degree of success.



- The DOD and Services should do more to encourage and require prime contractors to use small business R&D.
- They should use incentives to drive R&D subcontracting with small business
- DOD and the services should require primes to report on their use of small business and especially SBIR.

## What can Congress do?

Congress could go further in asking for more specific program reporting and metrics on how DOD departments are accelerating SBIR transition, meeting Congressional requirements, and otherwise taking action to more fully utilize SBIR technologies for benefit of the Warfighter

- Ask DOD to embrace SBIR and small business transition productivity at a higher level.
- Require DOD and the Services to report on what DOD and the Services are doing to comply with provisions already in the law to improve small business technology transition.
- Require DOD and the individual Services and agencies to set goals for the use of small business as a percentage of DOD and the Services R&D expenditures. According to a recent GAO study, DOD claims they can't comply with a requirement to establish a pilot program to streamline contracts DOD-wide because of the different approaches taken by different contracting authorities (see GAO excerpt in attachment) Requiring each individual SBIR office to comply would resolve this difficulty
- And of course increase the allocation and make SBIR permanent.

We think the idea of showing what SASC and Congress has done in the past to try and get DOD and the Services to do better with getting small business more R&D dollars and a bigger role is a great way to focus the hearing. We appreciate what has been done to date to improve technology insertion and use of Phase III but given the competitive situation from China, a lot more can and should be done. Congress has tried, but DOD has failed to implement Congressional mandates already in the Law.



## Attachment

## SBIR provision that have not been complied with

From FY2013 NDAA

#### (hh) Timing of release of funding

(2)PILOT PROGRAM TO ACCELERATE DEPARTMENT OF DEFENSE <u>SBIR</u> AND <u>STTR</u> AWARDS

(A)In general, not later than 1 year after August 13, 2018, the Under Secretary of

Defense for <u>Research</u> and Engineering, acting through the <u>Director</u> of Defense Procurement and Acquisition Policy of the Department of Defense, shall establish a <u>pilot program</u> to reduce the time for awards under the <u>SBIR</u> and <u>STTR</u> programs of the Department of Defense, under which the Department of Defense shall—

(i) <mark>develop simplified and standardized procedures and model contracts throughout the Department of</mark> Defense for<u>Phase I, Phase II,</u> and<u>Phase III </u>SBIR awards;

(ii) for <u>Phase I SBIR</u> and <u>STTR</u> awards, reduce the amount of time between solicitation closure and award;
 (iii) for <u>Phase II SBIR</u> and <u>STTR</u> awards, reduce the amount of time between the end of a <u>Phase I</u> award and the start of the <u>Phase II</u> award;

(iv) for <u>Phase II SBIR</u> and <u>STTR</u> awards that skip <u>Phase I</u>, reduce the amount of time between solicitation closure and award;

(v) for sequential <u>Phase II SBIR</u> and <u>STTR</u> awards, reduce the amount of time between <u>Phase II</u> awards; and

(vi) reduce the award times described in clauses (ii), (iii), (iv), and (v) to be as close to 90 days as possible. (B)Consultation

In carrying out the <u>pilot program</u> under subparagraph (A), the <u>Director</u> of Defense Procurement and Acquisition Policy of the Department of Defense shall consult with the <u>Director</u> of the Office of Small Business Programs of the Department of Defense.

(kk)PHASE III REPORTINGThe annual <u>SBIR</u> or <u>STTR</u> report to Congress by the <u>Administration</u> under subsection (b)(7) shall include, for each <u>Phase III</u> award—

- (1) the name of the agency or component of the agency or the non-Federal source of capital making the <u>Phase III</u> award;
- (2) the name of the small business concern or individual receiving the Phase III award; and
- (3) the dollar amount of the Phase III award.

#### From original SBIR law:

- (h)ESTABLISHMENT OF GOALS FOR FUNDING AGREEMENTS FOR RESEARCH OR RESEARCH AND DEVELOPMENT TO SMALL BUSINESS CONCERNS BY AGENCIES HAVING BUDGETS FOR RESEARCH AND DEVELOPMENT
- In addition to the requirements of subsection (f), each <u>Federal agency</u> which has a budget for <u>research</u> or <u>research and development</u> in excess of \$20,000,000 for any fiscal year beginning with fiscal year 1983 or subsequent fiscal year shall establish goals specifically for <u>funding</u> <u>agreements</u> for <u>research</u> or <u>research and development</u> to <u>small business concerns</u>, and no goal established under this subsection shall be less than the percentage of the agency's <u>research</u> or <u>research and development</u> budget expended under <u>funding</u> <u>agreements</u> with <u>small business concerns</u> in the immediately preceding fiscal year.

#### From FY2013 NDAA



(y) Commercialization Readiness Program

(5)For any contract with a value of not less than \$100,000,000, the Secretary of Defense is authorized to—
 (A) establish goals for the transition of <u>Phase III</u> technologies in subcontracting plans; and
 (B) require a <u>prime contractor</u> on such a contract to report the number and dollar amount of contracts entered into by that <u>prime contractor</u> for <u>Phase III</u> SBIR or <u>STTR</u> projects.

(6) GOAL FOR SBIR AND STTR TECHNOLOGY INSERTION THE Secretary of Defense shall—

(A) set a goal to increase the number of <u>Phase II SBIR</u> contracts and the number of <u>Phase II STTR</u> contracts awarded by the Secretary that lead to technology transition into programs of record or fielded systems;
(B) use incentives in effect on December 31, 2011, or create new incentives, to encourage agency program managers and <u>prime contractors</u> to meet the goal under subparagraph (A); and
(C)submit to the <u>Administrator</u> for inclusion in the annual report under subsection (b)(7)—
(i) the number and percentage of <u>Phase II SBIR</u> and <u>STTR</u> contracts awarded by the Secretary that led to technology transition into programs of record or fielded systems;

(ii) information on the status of each project that received funding through

the <u>Commercialization</u> Readiness Program and efforts to transition those projects into programs of record or fielded systems; and

(iii) a description of each incentive that has been used by the Secretary under subparagraph (B) and the effectiveness of that incentive with respect to meeting the goal under subparagraph (A).

#### Congressional language asking for incentives to encourage SBIR goal achievement:

#### (y) Commercialization Readiness Program

(B) use incentives in effect on December 31, 2011, or create new incentives, to encourage agency program managers and <u>prime contractors</u> to meet the goal under subparagraph (A); and (C) submit to the <u>Administrator</u> for inclusion in the annual report under subsection (b)(7)—



GAO: SMALL BUSINESS RESEARCH PROGRAMS Agencies Should Further Improve Award Timeliness GAO-22-104677 Pg 28 https://www.gao.gov/assets/720/717092.pdf

The FY 2019 NDAA included a requirement for DOD's OUSD R&E to establish a pilot program to improve the timeliness of DOD's SBIR and STTR awards, though OUSD R&E has not done so. Specifically, the FY 2019 NDAA requires OUSD R&E acting through the Director of Defense Pricing and Contracting office (DPC) to establish a pilot program by August 13, 2019, to reduce the time for awards under DOD's SBIR and STTR programs, and to:

- Develop simplified and standardized procedures and model contracts
- Specifically reduce the amount of time to be as close to 90 days as possible: (1) to issue phase I awards; (2) between phase I and phase II awards; (3) to issue direct to phase II awards; and (4) between phase II awards
- Consult with the DOD's Office of Small Business Programs in carrying out the pilot program. Based on our interviews with DOD agency officials and our review of agency documents and the FY 2019 NDAA, we found:

OUSD R&E activities do not meet pilot program requirements. The FY 2019 NDAA specifically calls for OUSD R&E, acting through DPC, to establish a pilot program, and it has not done so. According to OUSD R&E and DPC officials, it is not feasible for them to establish a formal DOD-wide pilot program, and they are unable to implement all the elements specifically required by the statute due to significant challenges. For example, these officials explained that standardizing and providing DOD-wide contracting guidance would be difficult and too prescriptive and would stifle innovation given the wide variation and autonomous nature of the contracting authorities and practices among the DOD participating agencies. As a result, DOD has not established standardized procedures and model contracts for SBIR phase I, II, or III awards in accordance with the statute. However, OUSD R&E has undertaken some activities that may contribute to award timeliness. For example, according to officials, OUSD R&E established the Contracting Officers Working Group and SBIR/STTR Program Managers meetings to discuss and share best practices across the DOD participating agencies.