



Appendix

DoD SBIR Proposal Guidance

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Background Research and the "Blackout Period"

"Who You Gonna Call?"

Ray Friesenhahn

For everyone currently working on a DoD SBIR proposal for the upcoming deadline, or planning to develop a proposal for a future DoD SBIR/STTR topic:

One of the most important things to keep in mind when developing an SBIR proposal for the Department of Defense is that DoD is NOT a "peer review" agency. Peer review agencies such as NSF send your proposal out to be reviewed by (hopefully) unbiased subject matter experts in universities or elsewhere, who will rate your proposal solely on its scientific and technical merits and/or business potential. DoD is a "line review" agency, where the person(s) who wrote the topic (Topic Authors or Technical Points of Contact – TPOCs) will be the primary reviewer(s), and generally decide who gets funded or not. The TPOCs are effectively your customer, who will be buying your product - that is, funding your project to develop that product for their team. More importantly, if they select your proposal for funding, they will be judged by their superiors on your performance, so they want to take every step possible to ensure that you can do the job well and have their (the customer's) interests foremost in your mind, and fully understand their needs.

You should also be aware that DoD is a contracting agency (not a granting agency), so their SBIR process is subject to Federal Acquisition Regulations (FARs). As a result, once the solicitation is officially "open for submissions" – the beginning of the so-called "Blackout Period" - you are prohibited from direct contact with the TPOCs "in the interests of fairness." DoD has been very helpful to small firms by actually posting contact information for the individual Topic Authors and TPOCs, so that you can talk to them or email them prior to the Blackout. This is an opportunity every proposing firm should take advantage of, and can make all the difference between winning and losing in is an increasingly tight competition.

To create a winning DoD SBIR proposal, it's essential that you demonstrate to the DoD reviewers that you understand their needs and applications, and are familiar with whatever technologies they may already be using. While discussions with the TPOC can provide some of that information, you need to find out as much relevant information as you can before you contact them, so you can ask the right questions, without wasting their time or giving a poor first impression. You don't want to come across in this initial discussion as totally naïve about the program or system being supported by this topic, its applications, or the military in general. Get started on that initial background research ASAP – as soon as you find a relevant topic, and preferably long before the Blackout Date looms near. See the "Initial Search Strategies and Internet Resources" later in this document.

After you've done that research and are ready to contact the TPOC, always keep in mind the perspective that you are trying to build a comfortable working relationship with your customer – the people in DoD who would be using your technology. You want to bring value and service to them, NOT try to "sell them something." Keeping that perspective is difficult, but important, since as technologists and inventors, we tend to be really proud of our creations, and forget that others may not see it in the same light. After a confident but brief introduction, try to listen a lot more than you talk, and you may discover that their needs are something different than you initially expected, but that you would be able to meet with some minor changes to your concept.

While you never want to give the impression that you're trying to "sell something" to the TPOCs in your phone call, you must consider that calling the TPOC, your potential Defense <u>customer</u>, really is a form of marketing. In marketing, as in other personal interactions, you make a much more favorable impression if



you show interest in and pay attention to the person you're talking to, rather than talking a lot about yourself and all the great things you (or your technology) can do. As astute observers of human nature have observed, when you have a conversation with someone, and focus on

showing considerable interest in what they have to say, drawing them out to say even more about their particular interests (in this case, the Defense program or system that the topic supports, and the needs it would solve), they'll be more impressed with you and think favorably of the discussion. Even if you end up saying little at all about yourself, they're more likely to come away thinking "What an obviously intelligent and informed person he/she is! I'll need to watch for their proposal!"

After you've gotten someone's attention in a positive manner like this, and they're reviewing your proposal, they're more likely to read it carefully, looking for the positive aspects – and reasons to fund it. If instead it's a proposal they receive "out of the blue," or if they had a memorable negative impression of you (e.g. "too pushy and kept trying to sell me on their wild idea, and never really seemed to get a firm grasp of what we actually need this for"), then they're more likely to skim your proposal looking for faults, and reasons NOT to fund it, which they're sure to find in almost any proposal!

You should also be aware of your attitude and the motivation behind your interest in a particular topic — these can have subtle effects on your discussion, but can be easily noticed by observant listeners. An analogy would be going to a bank loan officer seeking a business loan. Imagine if you went in with an attitude of "I really need the money! I don't really have a clear and defined business plan, but believe me, I know I'll be successful, and I'm good for the money!" That loan officer would immediately recognize that you're a high risk, and should not loan you the bank's money. Imagine instead a different approach: "We're doing quite well as a business, and everything's going great. Now we've uncovered this new opportunity with big growth potential, which fits quite nicely with our overall business direction and capabilities, and we'd like to be able to address it. Our plan shows that with \$150K in new capital over 24 months...."

Get the point? If you're just looking for government money, chasing after any opportunity you think you might be able to handle, regardless of whether it fits into your strategic long-term business objectives, that attitude will show itself in your discussions with the TPOC, and in your proposal, hurting your chances of winning. If instead you talk to the TPOC with the perspective and attitude of a successful company that wants to help their customer, and provide them with the best possible solution for their needs at a reasonable cost, then you'll have already put yourself well ahead of most of your competitors in the whole process.

Even if the DoD SBIR "Blackout Period" has begun, and you've (hopefully) spoken with the DoD SBIR Topic Authors or TPOCs to find out all the background information you could before the Blackout date, there are still plenty of options you can and should follow to gather critical information for your proposal. While you are developing your outline and work plan, and writing your first draft of your proposal, here are a few other things you might want to consider, to help increase your chances of winning.

A couple of key questions to keep in mind whenever talking to Defense personnel (and Defense Prime Contractors) are "Who do you know in the Defense Department that is using this technology (or would be if it were available)?" and "Who else in DoD is working on development of related technology?" If you can get some names and contact information, you may be able to find out some excellent background information, which could help you develop a much more "user-focused" and more effective proposal.

Even after entering the Blackout Period, during which "direct communication between proposers and topic authors is not allowed," that does not prohibit some other very effective and valuable communications:

• If you obtained names of other people to talk to from the TPOC, or from other sources (see below), there is (usually) no restriction on discussing technical issues with other DoD personnel during the Blackout Period. Even though they may not be covered by the restrictions, it's still a good idea just to talk about



technology and applications, without bringing up the fact that you are working on an SBIR proposal (they may not be familiar with the rules, and/or might not be comfortable talking to you in the context of SBIR). In any case, always respect their wishes if they don't want to discuss anything (they might even be a topic author for a different SBIR topic currently out).

If you are working with university researchers, they are usually not considered "proposers" or PI's in SBIR, and thus are seldom held to the same restriction as you might be. If your university research collaborator does call a TPOC, they should immediately identify themselves as university researchers. Similar caveats as above still hold for these discussions.

Initial Search Strategies and Internet Resources

Finding out who to talk to:

Here are a few ways to find more background information, and get contact information for DoD personnel and contractors who might be able to provide you with valuable insight:

- Past SBIR Topic Authors: Go to www.zyn.com/sbir and then click on "Closed SBIR/STTR Solicitation Topics" under "Search Services." Type in a few keywords, and look for past topics that appear relevant to your current proposal. Contact information for the Topic Author on DoD SBIR/STTR topics is usually included at this source.
- After you get some relevant past topics, go to the DoD SBIR/STTR web site (http://www.acq.osd.mil/osbp/sbir/) and click on "Awards" on the pull-down menu. Use the "Awards Search" to find who won for the topics you found earlier. The award data usually includes PI names and contact info. You might want to call these companies, and talk to them about their project, and/or ask the TPOC about the end results of awarded projects, especially if there was a Phase II completed (i.e., were they satisfied, or did a good technology come out of it).
- Find out about the military customers or end-users of the technology to be developed the topic often notes what systems the technology is to be used for.
- Note the source of the topic, which is often noted at the beginning of the list of topics for that DoD Component – e.g. several topics may be listed under the Armaments RD&E Center (ARDEC) in the Army SBIR list of topics, and you can follow that link to learn more about that organization. If the organization is not listed, that can often be determined from the TPOC's e-mail address, if provided: wpafb.mil is Wright Patterson AFB; navair.navy.mil is Naval Air Systems Command, etc. You can then find out more about the organization by going to their website, which is often just a simple matter of adding "www" to the domain (e.g. www.navair.navy.mil).
- Standard Web searches can also help, especially for finding relevant DoD projects or research activities. One good method of searching, using Google, for example, is to put in several keywords and phrases, and restrict your search to ".mil" domain sites. If you don't get enough "hits" this way, just reduce the number of search terms, or change some, until you find what you're looking for. A typical search of this type might be: [spectrometer FTIR CBW "anthrax spores" site:mil]. The "site:mil" (or an even more restrictive "site:army.mil") is what limits the search to those specific domain names, instead of getting hits from thousands of commercial (.com), university (.edu) or foreign (e.g. .nl) websites.



Getting copies of reference documents:

Many DoD SBIR topics cite key references or documents you should review. To get these, and other possibly valuable references, if a link is not provided, you should go to the DTIC information site:

The Defense Technical Information Center (DTIC) provides background technical information services at no cost, which can assist SBIR/STTR participants in proposal preparation, product development, marketing and networking. The DTIC web site provides many **free services** at http://www.dtic.mil/dtic/.

SITIS: Interactive question and answer forum for specific technical questions concerning DoD topics, changes, and topic reference information at http://www.dodsbir.net/sitis/. Be sure to check this site for your topic(s) regularly!

DoD Budget Materials and justifications: Assuming you're serious about becoming a Defense contractor, and plan to get involved in some specific program or technology area, it's important that you understand a bit about the planned Defense budgets for that program or technology area. The best place to start is with the President's Budget request for the Department of Defense, usually issued in February for the following Fiscal Year (FY2014 begins Oct. 1, 2013). You can download copies of these massive documents at http://comptroller.defense.gov/budget2013.html

The top-level documents provide a broad overview, but you should dig down to the individual DoD Components from here:

US Army Budget Documentation

US Navy Budget Documentation

US Air Force Budget Documentation

Defense Wide Budget Documentation (includes OSD, DARPA, MDA, SOCOM, DLA, etc.)

Within these Component sections, given that you are looking at new technology development, you should focus on the R&D documents, such as these for the Navy:

Research & Development, Navy (BA 1 - 3)

Research & Development, Navy (BA 4)

Research & Development, Navy (BA 5)

Research & Development, Navy (BA 6)

Research & Development, Navy (BA 7)

These PDF documents are searchable, so you can search for instances of specific keywords, program names, or Program Elements (PEs). Each PE will have detailed budget justifications, describing past activities, results, future plans, and past and future budget plans (which may change as a result of Congressional actions). Prime Contractors involved may sometimes be mentioned, but in any case, such detailed information and knowledge of future budgets can be invaluable when talking to a TPOC (who may not even have seen this information). See the example at the end of this document for the budget justification for PE 0604274N: Next Generation Jammer (NGJ)

While downloading the full R&D budget justifications for each of the four is preferable for thoroughness (so that you can be aware of other Services or Components working on similar technology applications), you can often find budget justifications for relevant programs just by including "RDT&E" with your search terms on a Google search (e.g. [SIGINT RDT&E] to search for program involving Signals Intelligence), although that may result in too many less relevant hits, especially from prior years.

Planning for Long-term Success

If you really want to succeed with DoD SBIR/STTR, then you are really making the commitment to become a Defense Contractor, rather than just a company winning money for technology development. To do so, you will need to make an extended effort to get to know your customers (Defense Program Managers and



Prime Contractors) and build relationships with those customers through extensive business and personal contacts. Among the best ways to get started in doing that is through Defense trade shows and meetings, many sponsored by Defense industry associations, such as NDIA (National

Defense Industry Association – <u>www.ndia.org</u>), which sponsors numerous focused Defense trade shows and conferences.

You should also look into specific DoD laboratories which may be working on related technology areas or applications – building a formal relationship with the right DoD laboratory can help you in your long-term technology development and business success. For example, a Cooperative R&D Agreement (CRADA) is an investment of your time, and cannot directly provide you with any money from the lab or agency, but the research resources you leverage, and the relationships you build, can result in major opportunities down the line. To find a DoD laboratory, or any federal agency laboratory in your area, or working on specific technology of interest, the Federal Laboratory Consortium (FLC) has a searchable database of federal labs at http://www.federallabs.org/labs/. You can learn about specific methods of collaborating with federal labs, including CRADAs, at http://www.federallabs.org/education/t2-mechanisms/matrix-mechanism/. Most federal labs have a Technology Transfer (T2) manager or specialist, often referred to as an ORTA (Office of Research and Technology Applications) who can help you in establishing any kind of collaboration with that lab (but not contracting – that would be handled typically by their Small Business Office).

Note: Current SBIR rules allow companies to fund a CRADA or other federal laboratory R&D using SBIR or STTR funding, subject to the percentage subcontracting limits, and guidance regarding perceived conflicts of interest as described in the current SBA SBIR and STTR Program Policy Directives (August 6, 2012). Some labs (especially DOE labs) are defined as FFRDCs (Federally Funded R&D Centers), if listed at http://www.nsf.gov/statistics/ffrdclist/, the Master Government List of Federally Funded R&D Centers, and so can qualify as the Research Institution for an STTR.

If you are interested in collaborating with a DoD laboratory (leveraging unique R&D capabilities, while building strategic Defense organizational relationships), or if you are seeking technology available from a DoD laboratory for possible licensing and future commercial use, please contact TechLink for free assistance.

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Navy

DATE: February 2012

APPROPRIATION/BUDGET ACTIVITY

R-1 ITEM NOMENCLATURE

1319: Research, Development, Test & Evaluation, Navy

PE 0604274N: Next Generation Jammer (NGJ)

BA 5: Development & Demonstration (SDD)

COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	FY 2017	Cost To Complete	Total Cost
Total Program Element	83.948	170.910	187.024	-	187.024	269.916	321.817	429.390	528.777	1.954	1,993.736
0557: Next Generation Jammer	83.948	170.910	187.024	-	187.024	269.916	321.817	429.390	528.777	1.954	1,993.736

A. Mission Description and Budget Item Justification

This project develops new technology in a Next Generation Jammer (NGJ) capability system, with increased electronic radiation power generation to replace the existing ALQ-99 Tactical Jamming System. NGJ is required to keep pace with threat weapons systems advances and continuous expansion of the Airborne Electronic Attack (AEA) mission area. NGJ capabilities will address AEA capability gaps, AEA sufficiency gaps, and address ALQ-99 shortfalls in scalability, supportability, interoperability, availability, and capability. NGJ will utilize an adaptable, modular, and open architecture philosophy to combat the increasing capability gap and enable future growth at a reduced operational and sustainment cost.

B. Program Change Summary (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total
Previous President's Budget	120.602	189.919	337.712	-	337.712
Current President's Budget	83.948	170.910	187.024	-	187.024
Total Adjustments	-36.654	-19.009	-150.688	-	-150.688
 Congressional General Reductions 	-	-0.009			
 Congressional Directed Reductions 	-	-19.000			
 Congressional Rescissions 	-	-			
 Congressional Adds 	-	-			
 Congressional Directed Transfers 	-	-			
 Reprogrammings 	-3.527	-			
SBIR/STTR Transfer	-2.659	-			
 Program Adjustments 	-	-	-150.733	-	-150.733
 Rate/Misc Adjustments 	-	-	0.045	-	0.045
 Congressional General Reductions 	-0.468	-	-	-	-
Adjustments					
 Congressional Directed Reductions 	-30.000	-	-	-	-
Adjustments					

Change Summary Explanation

Technical: Not applicable.

Schedule: Since the previous President's Budget, Next Generation Jammer transitioned to a Block approach for development, changed their Acquisition Strategy, and OPNAV rephased program funding in POM 13, resulting in the following schedule changes: Milestone A moved from 2nd QTR 2012 to 3rd QTR 2013.

PE 0604274N: Next Generation Jammer (NGJ)

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Navy

Exhibit R-2, RDT&E Budget Item Justification: PB 2013 Navy		DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	
1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)	PE 0604274N: Next Generation Jammer (N	,
Technology Development (Block 1) contract award moved 3rd QTR 2014. Technology Development (Block 2) was at 1) Award moved from 1st QTR 2015 to 3rd QTR 2015. Int QTR 2017. EMD (Block 2) added in 2nd QTR 2017. First ladded in 4th QTR 2017. Milestone C moved from 4th QTR	dded in 2nd QTR 2015. Milestone B (Block 1) moved egrated Testing start moved from 1st QTR 2016 to 3 EDM Delivery moved from 4th QTR 2016 to 4th QTF	d from 1st QTR 2015 to 3rd QTR 2015. EMD (Block Brd QTR 2016. Milestone B (Block 2) added in 1st

PE 0604274N: Next Generation Jammer (NGJ) Navy UNCLASSIFIED Page 2 of 8

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Exhibit K-ZA, KDT&L FTOJECT Just	ilication. F	2013 Ivavy							DAIL. I GOI	uary 2012			
1319: Research, Development, Test	APPROPRIATION/BUDGET ACTIVITY 1319: Research, Development, Test & Evaluation, Navy BA 5: Development & Demonstration (SDD)				I OMENCLA 4N: <i>Next Ge</i>	_		PROJECT 0557: Next	Generation Jammer				
COST (\$ in Millions)	FY 2011	FY 2012	FY 2013 Base	FY 2013 OCO	FY 2013 Total	FY 2014	FY 2015	FY 2016	Cost To Complete	Total Cost			
0557: Next Generation Jammer	83.948	170.910	187.024	-	187.024	269.916	321.817	429.390	528.777	1.954	1,993.736		
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0				

A. Mission Description and Budget Item Justification

Exhibit R-24 RDT&F Project Justification: PR 2013 Navy

This project develops new technology in a Next Generation Jammer (NGJ) capability required to replace the existing ALQ-99 Tactical Jamming System. NGJ is required to keep pace with threat weapons systems advances and continuous expansion of the Airborne Electronic Attack (AEA) mission area. NGJ capabilities will address AEA capability gaps, AEA sufficiency gaps and address ALQ-99 shortfalls in scalability, flexibility, supportability, interoperability, availability, and capability. NGJ will utilize an adaptable, modular, and open architecture philosophy to combat the increasing capability gap and enable future growth at a reduced operational sustainment cost.

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
Title: Next Generation Jammer	81.948	169.810	186.374
Articles:	0	0	(
FY 2011 Accomplishments: Continue technology maturation analysis/studies and initiate NGJ technology development activities to reduce technological risk and determine appropriate set of technologies for use in NGJ.			
FY 2012 Plans: Continue technology maturation efforts, release Technology Develoopment Request for Proposal, and develop products in support of Milestone A decision.			
FY 2013 Plans: Complete Technology Maturation efforts and Milestone A decision. Award Technology Development contracts.			
Title: Capability Development Document (CDD)	2.000	1.100	0.650
Articles:	0	0	(
FY 2011 Accomplishments: Finalization of CDD and initial routing through Joint Capabilities Integration Development System process for Milestone A.			
FY 2012 Plans: Update CDD and continue routing through Joint Capabilities Integration Development System process.			
	1		

PE 0604274N: Next Generation Jammer (NGJ)

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DATE: February 2012

Exhibit R-2A, RDT&E Project Justification: PB 2013 Navy			DATE: February 2012
APPROPRIATION/BUDGET ACTIVITY	R-1 ITEM NOMENCLATURE	PROJECT	
1319: Research, Development, Test & Evaluation, Navy	PE 0604274N: Next Generation Jammer (NGJ)	0557: Next	Generation Jammer
BA 5: Development & Demonstration (SDD)			

B. Accomplishments/Planned Programs (\$ in Millions, Article Quantities in Each)	FY 2011	FY 2012	FY 2013
Obtain CDD approval.			
Accomplishments/Planned Programs Subtotals	83.948	170.910	187.024

C. Other Program Funding Summary (\$ in Millions)

N/A

D. Acquisition Strategy

Next Generation Jammer is designated a Pre-Major Defense Acquisition Program (MDAP), with Pre-MDAP Program Number 445, and activity will focus on technology maturation to include technology development strategies in preparation for Milestone A in FY13 and Milestone B in FY15.

E. Performance Metrics

To obtain sufficient technology maturation and technology demonstration to obtain favorable Milestone A and Milestone B decisions for continued program development.

PE 0604274N: *Next Generation Jammer (NGJ)* Navy

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Navy

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy

BA 5: Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0604274N: Next Generation Jammer (NGJ) 0557: Next Generation Jammer

PROJECT

DATE: February 2012

Product Development	Product Development (\$ in Millions)			FY 2	2012	FY 2 Ba	2013 se		2013 CO				
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Primary Hardware Development	TBD	Various:Various	-	-		123.895	Apr 2013	-		123.895	Continuing	Continuing	Continuing
Primary Hardware Development	C/CPFF	ITT:Clifton, NJ	40.522	30.750	Apr 2012	3.375	Nov 2012	-		3.375	0.000	74.647	74.647
Primary Hardware Development	C/CPFF	BAE:Nashua, NH	40.128	30.750	Apr 2012	3.375	Nov 2012	-		3.375	0.000	74.253	74.253
Primary Hardware Development	C/CPFF	Raytheon:Goleta, CA	40.253	30.750	Apr 2012	3.375	Nov 2012	-		3.375	0.000	74.378	74.378
Primary Hardware Development	C/CPFF	Northrop Grumman:Baltimore, MD	40.247	30.750	Apr 2012	3.375	Nov 2012	-		3.375	0.000	74.372	74.372
Primary Hardware Development	SS/CPFF	Sparta, Inc.:Lake Forest, CA	1.245	-		-		-		-	0.000	1.245	1.245
Primary Hardware Development	SS/CPFF	Northrop Grumman Space & Mission Systems Corp.:Herndon, VA	1.765	-		-		-		-	0.000	1.765	1.765
Studies & Analysis (Non-FFRDC)	SS/CPFF	Mantech Systems Engineering Corp.:Fairfax, VA	1.571	-		0.750	Dec 2012	-		0.750	0.000	2.321	2.321
Studies & Analysis (Non-FFRDC)	Various	Various:Various	1.541	1.612	Dec 2011	2.070	Nov 2012	-		2.070	Continuing	Continuing	Continuing
Systems Engineering	WR	NAWCAD:Patuxent River, MD	9.050	15.702	Nov 2011	20.137	Nov 2012	-		20.137	Continuing	Continuing	Continuing
Systems Engineering	WR	NAWCWD:Pt. Mugu, CA	3.472	10.374	Nov 2011	8.609	Nov 2012	-		8.609	Continuing	Continuing	Continuing
Systems Engineering	WR	NSWC Crane:Crane, IN	3.023	4.754	Dec 2011	4.157	Nov 2012	-		4.157	Continuing	Continuing	Continuing
Systems Engineering	SS/CPFF	Johns Hopkins University Applied Physics Lab:Laurel, MD	2.760	4.652	Dec 2011	3.653	Dec 2012	-		3.653	Continuing	Continuing	Continuing
Systems Engineering	Various	Various:Various	2.708	7.172	Dec 2011	7.388	Dec 2012	-		7.388	Continuing	Continuing	Continuing
		Subtotal	188.285	167.266		184.159		-		184.159			

PE 0604274N: Next Generation Jammer (NGJ) Navy

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2013 Navy

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy

BA 5: Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0604274N: Next Generation Jammer (NGJ) 0557: Next Generation Jammer

PROJECT

DATE: February 2012

Support (\$ in Millions)	Support (\$ in Millions)			FY 2	2012	FY 2 Ba	2013 se		2013 CO	FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Eng& Tech Srvc (Non FFRDC)	SS/FFP	NSMA:Arlington, VA	2.821	1.434	Dec 2011	0.850	Dec 2012	-		0.850	Continuing	Continuing	Continuing
Eng& Tech Srvc (Non FFRDC)	Various	Various:Various	4.419	2.010	Dec 2011	1.809	Dec 2012	-		1.809	Continuing	Continuing	Continuing
		Subtotal	7.240	3.444		2.659		-		2.659			

Management Services	Management Services (\$ in Millions)					FY 2 Ba	2013 se		2013 CO	FY 2013 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Program Management Support	WR	Various:Various	0.200	0.200	Dec 2011	0.206	Dec 2012	-		0.206	Continuing	Continuing	Continuing
		Subtotal	0.200	0.200		0.206		-		0.206			

	Total Prior										Target
	Years			FY 2	013	FY 2	2013	FY 2013	Cost To		Value of
	Cost	FY 20 ⁻	12	Bas	se	00	o	Total	Complete	Total Cost	Contract
Project Cost Totals	195.725	170.910		187.024		-		187.024			

Remarks

PE 0604274N: Next Generation Jammer (NGJ) Navy

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Exhibit R-4, RDT&E Schedule Profile: PB 2013 Navy

1319: Research, Development, Test & Evaluation, Navy

R-1 ITEM NOMENCLATURE

DATE: February 2012

APPROPRIATION/BUDGET ACTIVITY

BA 5: Development & Demonstration (SDD)

PE 0604274N: Next Generation Jammer (NGJ) 0557: Next Generation Jammer

PROJECT

Next Generation Jammer	F	Y 2	2011	ı	F	FY 2	2012	2		F١	2013			F	Y 2014			FY 2	015			FY	201	6		FY 20	017	
	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	20	3(40	1Q	2Q	3Q	4Q
Acquisition Milestones			Ţ										1									ļ						
Milestones											MS A ▲								MS B (BLK 1)						MS B (BLK 2)			
Systems Development		Π	-	П		П						Π	1	-								Γ	7	7	1	1		
Hardware Development															Pro	ototyp												EDN (Qty ▼
Reviews	R3B	8																										
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Contract Awards											TD Award (BLK 1)							TD Award (BLK 2)	EMD Award (BLK 1)							EMD Award (BLK 2)		TD Awai (BLI 3)

2013PB - 0604274N - 0557

PE 0604274N: *Next Generation Jammer (NGJ)* Navy

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R-1 Line #103

Exhibit R-4A, RDT&E Schedule Details: PB 2013 Navy

APPROPRIATION/BUDGET ACTIVITY

1319: Research, Development, Test & Evaluation, Navy

BA 5: Development & Demonstration (SDD)

R-1 ITEM NOMENCLATURE

PE 0604274N: Next Generation Jammer (NGJ) 0557: Next Generation Jammer

PROJECT

DATE: February 2012

Schedule Details

	Start Quarter Year		Eı	nd
Events by Sub Project	Quarter	Year	Quarter	Year
Next Generation Jammer				
Acquisition Milestones: Milestone A	3	2013	3	2013
Acquisition Milestones: Milestone B (Block 1)	3	2015	3	2015
Acquisition Milestones: Milestone B (Block 2)	1	2017	1	2017
Systems Development: Hardware Development: Prototype Demonstration	3	2014	1	2015
Systems Development: Hardware Development: Engineering Development Model (EDM) Deliveries	4	2017	4	2017
Systems Development: Reviews: Resource Requirements Review Board (R3B)	1	2011	1	2011
Test & Evaluation: Technical Evaluation: NGJ Test & Evaluation Master Plan (TEMP)	3	2014	3	2014
Test & Evaluation: Technical Evaluation: Integrated Testing	3	2016	4	2017
Production Milestones: Contract Awards: Technology Development (TD) Contract Award (Block 1)	3	2013	3	2013
Production Milestones: Contract Awards: Technology Development (TD) Contract Award (Block 2)	2	2015	2	2015
Production Milestones: Contract Awards: Technology Development (TD) Contract Award (Block 3)	4	2017	4	2017
Production Milestones: Contract Awards: Engineering & Manufacturing Development (EMD) Contract Award (Block 2)	2	2017	2	2017
Production Milestones: Contract Awards: Engineering & Manufacturing Development (EMD) Contract Award (Block 1)	3	2015	3	2015

PE 0604274N: Next Generation Jammer (NGJ) Navy

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R-1 Line #103

Annotated Air Force SBIR Phase I Proposal Instructions (from the 2013.1 solicitation)

Notes: Black is general DoD instructions for all DoD Components (for 2013.1);

Blue is Air Force-specific instructions; Red is added comments usually applicable to all DoD Components.

For the AF, the contract period of performance for Phase I is 9 months, and the award shall not exceed \$150,000.

The Phase I award winners must accomplish the majority of their primary research during the first six months of the 9-month contract. The last three months of the nine-month Phase I contract will provide project continuity for all Phase II award winners so no modification to the Phase I contract should be necessary. [Note: You should plan to have some of your most important results, which verify that the project is really feasible, done within the first four (4) months, and reported in your four-month report. Typically, the PM will use the results in that four-month report (along with relationship and optimism you have generated up until that point) to decide if you should submit a Phase II proposal. The invitation to submit Phase II usually comes at month five, and would be due 30 days after that. Technically, you no longer need to receive an invitation to submit a Phase II proposal, but if your TPOC does not provide some significant interest in receiving a Phase II proposal, it would mean your chances of getting a Phase II are slim.]

Phase I technical proposals have a 20-page-limit (excluding the Cost Proposal, Cost Proposal Itemized Listing (a-j), and Company Commercialization Report) (no type smaller than 10-point on standard 8-1/2" x 11" paper with one (1) inch margins.

Proposal Cover Sheets: The first two (2) pages of the proposal will count as the Cover Sheets no matter how they print out. This will count toward the 20 page total limit. [Note: The Abstract is critical, as it sets the stage for whether the busy reviewer wants to spend time reviewing the proposal carefully, with an optimistic eye for good aspects, or gets a less-than-inspiring sense and then just scans the proposal for reasons NOT to fund it. There have been lots of cases where the reviewer doesn't even read the proposal based on the reaction to the Abstract. You have just 200 words to make a strong impact, convincing the reviewer that you really understand their issues, their perspective of the problem, have a competent team to tackle the issues effectively, and have a great idea for a solution that will meet all their needs, as well as having other value for other markets. First and foremost are meeting the Air Force's needs.

The "Anticipated Benefits/Potential Commercial Applications" technically does not have any length limit, and I have even seen one that went on for over 5 pages. You should try to be brief (roughly two paragraphs) and succinct, emphasizing first of all benefits to the Air Force, along with other military applications, then talk about other markets (e.g. civilian applications) in such a way that they will be convinced that you are looking out for the warfighters' needs first of all, but that you will be a successful company not dependent on government contracts, so you'll be around a long time to be able to supply the product when they need it, and be able to keep improving it and reducing cost, due to broad applications and dual use.

Don't leave these for the end, as an afterthought, but draft these up as a means of focusing your thoughts and approach, then go back to them again later and keep refining these sections as the proposal itself develops, as they are critically important items]

<u>Technical Proposal</u>: The Technical Proposal should include all graphics and attachments but should not include the Cover Sheet or Company Commercialization Report (as these items are completed separately). Most proposals will be printed out on black and white printers so make sure all graphics are distinguishable in black and white.

c. Content of the Technical Volume (Volume Two)

The Technical Volume should cover the following items in the order given below.

(1) **Identification and Significance of the Problem or Opportunity**. Define the specific technical problem or opportunity addressed and its importance. [Note: This is typically about 2 pages. Don't start off talking about your technology, but describe the Air Force's problem in a way that indicates you understand the issue, especially their perspective on the issue. Describe the overall opportunity that results from having a real solution, then briefly describe how your technology solves that problem and addresses those opportunities.]

- (2) **Phase I Technical Objectives**. Enumerate the specific objectives of the Phase I work, including the questions the research and development effort will try to answer to determine the feasibility of the proposed approach. [Note: Don't try to include too many Objectives about 5 8 is reasonable. Don't forget to include questions for each Objective that you expect your research efforts to answer which would result in proving the feasibility of your concept. Note, for example, "What is Your Phase I Feasibility Question?" This section should typically be about 1 ½ 2 pages]
- (3) Phase I Statement of Work (including Subcontractors' Efforts).
 - (a) Provide an explicit, detailed description of the Phase I approach. If a Phase I option is required or allowed by the Component, describe appropriate research activities which would commence at the end of Phase I should the Component elect to exercise the option. The Statement of Work should indicate what tasks are planned, how and where the work will be conducted, a schedule of major events, and the final product(s) to be delivered. The Phase I effort should attempt to determine the technical feasibility of the proposed concept. The methods planned to achieve each objective or task should be discussed explicitly and in detail. This section should be a substantial portion of the Technical Volume section.
 - (b) This solicitation may contain topics that have been identified by the Program Manager as research or activities involving Human /Animal Subjects and/or Recombinant DNA. In the event that Phase I performance includes performance of these kinds of research or activities, please identify the applicable protocols and how those protocols will be followed during Phase I. Please note that funds cannot be released or used on any portion of the project involving human/animal subjects or recombinant DNA research or activities until all of the proper approvals have been obtained. (see Sections 4.7 4.9).
- [Note: This SOW is to be "a substantial portion of the Technical Volume," so plan on it being about 6 8 pages total. You should include a Gantt Chart showing what Tasks will be done when, and include labels showing who (key person) will be doing it. Tasks should relate to the Technical Objectives, and should be described in enough detail that a skilled person could essentially follow along and replicate your work. Such detail should NOT be included in the Work Plan Outline.]

<u>Air Force Instructions - Phase I Work Plan Outline</u> [Note: This Work Plan Outline should be roughly one page long, and will serve as your <u>contractual</u> Statement of Work (SOW) – i.e. the Contracting Officer will cut and paste this into your contract, should you win. Since you are required to do what is in your contract, don't go into a lot of details on this.]

At the beginning of your proposal work plan section, include an outline of the work plan in the following format:

- 1) Scope List the major requirements and specifications of the effort.
- 2) <u>Task Outline</u> Provide a brief outline of the work to be accomplished over the span of the Phase I effort.
- 3) Milestone Schedule
- 4) Deliverables
 - a. Kickoff meeting within 30 days of contract start [Note: budget for travel]
 - b. Progress reports
 - c. Technical review within 6 months [Note: budget for travel]
 - d. Final report with SF 298
- (4) **Related Work**. Describe significant activities directly related to the proposed effort, including any conducted by the principal investigator, the proposing firm, consultants, or others. Describe how these activities interface with the proposed project and discuss any planned coordination with outside sources. The technical volume must persuade reviewers of the proposer's awareness of the state-of-the-art in the specific topic. Describe previous work not directly related to the proposed effort but similar. Provide the following: (1) short description, (2) client for which work was performed (including individual to be contacted and phone number), and (3) date of completion. [Note: This is both to apprise the reviewers of your teams' past relevant work, as well as to show you know the state-of-the-art (SOA). If you have past work in this area, mention it briefly, perhaps in more descriptive detail if it directly relates to this effort. If you have a well-recognized published scientist on your team, mention a couple of the more relevant works, then refer to their bio in the Key Personnel section for more detail. You should search DTIC, try to find Air Force publications, especially any by the TPOC, in describing the current SOA. Try to keep this section between ½ and 1 page long.]

(5) Relationship with Future Research or Research and Development.

- (a) State the anticipated results of the proposed approach if the project is successful.
- (b) Discuss the significance of the Phase I effort in providing a foundation for Phase II research or research and development effort. [Note: This is a brief, but relatively important part, as you need to clearly indicate you know what the Phase I and Phase II project will lead to, and how you're going to get there in Phase II]
- (c) Identify the applicable clearances, certifications and approvals required to conduct Phase II testing and outline the plan for ensuring timely completion of said authorizations in support of Phase II research or research and development effort.
- (6) Commercialization Strategy. Describe in approximately one page your company's strategy for commercializing this technology in DoD, other Federal Agencies, and/or private sector markets. Provide specific information on the market need the technology will address and the size of the market. Also include a schedule showing the quantitative commercialization results from this SBIR project that your company expects to achieve. [Note: "Commercialization" first and foremost in a DoD SBIR means how you get a final product into use by the warfighter. In many cases, this will mean in use by a Prime Contractor, such as Boeing, Lockheed, etc. You need to be convincing that you have at least the beginnings of such relationships set up, that you know the appropriate path to take to get your technology there, and you have all the various resources lined up to make the technological journey smooth and direct (even if you haven't convinced yourself yet). They also like to see clear estimates of market sizes and value, and perhaps brief descriptions of key players in the market. If you have potential relationships with other commercial (non-military) firms, play those up!]
- (7) **Key Personnel**. Identify key personnel who will be involved in the Phase I effort including information on directly related education and experience. A concise technical resume of the principal investigator, including a list of relevant publications (if any), must be included (Please do not include Privacy Act Information). <u>All resumes will count toward the applicable page limitation.</u>
 - Air Force Instructions Key Personnel: Identify in the Technical Proposal all key personnel who will be involved in this project; include information on directly related education, experience, and citizenship. A technical resume of the principle investigator, including a list of publications, if any, must be part of that information. Concise technical resumes for subcontractors and consultants, if any, are also useful. You must identify all U.S. permanent residents to be involved in the project as direct employees, subcontractors, or consultants. You must also identify all non-U.S. citizens expected to be involved in the project as direct employees, subcontractors, or consultants. For these individuals, in addition to technical resumes, please provide countries of origin, the type of visa or work permit under which they are performing and an explanation of their anticipated level of involvement on this project. You may be asked to provide additional information during negotiations in order to verify the foreign citizen's eligibility to participate on a contract issued as a result of this solicitation. [Note: It helps to have an intro paragraph summarizing the key team strengths and what they bring together that makes this a strong team for the specific project. For PI and other very key personnel (e.g. university consultant), try to keep total to about 1/2-page or less for each. For a key scientific consultant with lots of publications and patents, abbreviate the list by stating some to the effect: Dr. Smith has 6 patents and 72 published papers, including the following five recent publications most relevant to this project:..." Other key individuals should get about a paragraph each. Try to keep this section total to about two pages, 3 pages max.]
- (8) **Foreign Citizens**. Identify any foreign citizens or individuals holding dual citizenship expected to be involved on this project as a direct employee, subcontractor, or consultant. For these individuals, please specify their country of origin, the type of visa or work permit under which they are performing and an explanation of their anticipated level of involvement on this project. You may be asked to provide additional information during negotiations in order to verify the foreign citizen's eligibility to participate on a SBIR contract. Supplemental information provided in response to this paragraph will be protected in accordance with the Privacy Act (5 U.S.C. 552a), if applicable, and the Freedom of Information Act (5 U.S.C. 552(b)(6)).
- (9) **Facilities/Equipment**. Describe available instrumentation and physical facilities necessary to carry out the Phase I effort. Justify equipment purchases in this section and include detailed pricing information in the cost

volume. State whether or not the facilities where the proposed work will be performed meet environmental laws and regulations of federal, state (name), and local Governments for, but not limited to, the following groupings: airborne emissions, waterborne effluents, external radiation levels, outdoor noise, solid and bulk waste disposal practices, and handling and storage of toxic and hazardous materials.

- (10) **Subcontractors/Consultants**. Involvement of a university or other subcontractors or consultants in the project may be appropriate. If such involvement is intended, it should be identified and described according to the <u>Cost Breakdown Guidance</u>. A minimum of <u>two-thirds</u> of the research and/or analytical work in Phase I, as measured by direct and indirect costs, must be carried out by the proposing firm, unless otherwise approved in writing by the Contracting Officer. SBIR efforts may include subcontracts with Federal Laboratories and Federally Funded Research and Development Centers (FFRDCs). A waiver is no longer required for the use of federal laboratories and FFRDCs; however, proposers must certify their use of such facilities on the Cover Sheet of the proposal. Subcontracts with other federal organizations are not permitted.
- (11) Prior, Current, or Pending Support of Similar Proposals or Awards.

If a proposal submitted in response to this solicitation is substantially the same as another proposal that was funded, is now being funded, or is pending with another Federal Agency, or another or the same DoD Component, you must reveal this on the Proposal Cover Sheet and provide the following information:

- (a) Name and address of the Federal Agency(s) or DoD Component to which a proposal was submitted, will be submitted, or from which an award is expected or has been received.
- (b) Date of proposal submission or date of award.
- (c) Title of proposal.
- (d) Name and title of principal investigator for each proposal submitted or award received.
- (e) Title, number, and date of solicitation(s) under which the proposal was submitted, will be submitted, or under which award is expected or has been received.
- (f) If award was received, state contract number.
- (g) Specify the applicable topics for each SBIR proposal submitted or award received.

Note: If this does not apply, state in the proposal "No prior, current, or pending support for proposed work."

- d. Content of the Cost Volume (Volume Three). Complete the Cost Volume in the format shown in the Cost Breakdown Guidance by using the on-line cost volume form on the DoD Electronic Submission Web site. Some items in the Cost Breakdown Guidance may not apply to the proposed project. If that is the case, there is no need to provide information on each and every item. What matters is that enough information be provided to allow us to understand how you plan to use the requested funds if a contract is awarded.
 - (1) List all key personnel by name as well as by number of hours dedicated to the project as direct labor.
 - (2) While special tooling and test equipment and material cost may be included under Phases I, the inclusion of equipment and material will be carefully reviewed relative to need and appropriateness for the work proposed. The purchase of special tooling and test equipment must, in the opinion of the Contracting Officer, be advantageous to the Government and should be related directly to the specific topic. These may include such items as innovative instrumentation or automatic test equipment. Title to property furnished by the Government or acquired with Government funds will be vested with the DoD Component, unless it is determined that transfer of title to the contractor would be more cost effective than recovery of the equipment by the DoD Component.
 - (3) Cost for travel funds must be justified and related to the needs of the project.
 - (4) Cost sharing is permitted for proposals under this solicitation; however, cost sharing is not required nor will it be an evaluation factor in the consideration of a Phase I proposal.
 - (5) A Phase I Option (if applicable) should be fully costed separately from the Phase I (base) approach. Additional cost volume information may be required at the end of your technical volume (see Component Instructions, Section 12.0).
 - (6) All subcontractor costs and consultant costs must be detailed at the same level as prime contractor costs in regards to labor, travel, equipment, etc. Provide detailed substantiation of subcontractor costs in your cost proposal. Enter this information in the Explanatory Material section of the on-line cost proposal form.

When a proposal is selected for award, you must be prepared to submit further documentation to the DoD Contracting Officer to substantiate costs (e.g., an explanation of cost estimates for equipment, materials, and consultants or subcontractors). For more information about cost proposals and accounting standards, see the DCAA publication called "Information for Contractors" available at www.dcaa.mil.

Air Force Instructions – Cost Proposal

Cost Proposal

Cost proposal information should be provided by completing the on-line Cost Proposal form and including the Cost Proposal Itemized Listing (a-j) specified below. The Cost Proposal detail must be adequate to enable Air Force personnel to determine the purpose, necessity and reasonability of each cost element. Provide sufficient information (a-j below) on how funds will be used if the contract is awarded. The on-line Cost Proposal, and Itemized Cost Proposal Information (a-j) will not count against the 20-page limit. The itemized listing may be placed in the "Explanatory Material" section of the on-line Cost Proposal form (if enough room), or as the last page(s) of the Technical Proposal Upload. (Note: Only one file can be uploaded to the DoD Submission Site). Ensure that this file includes your complete Technical Proposal and the Cost Proposal Itemized Listing (a-j) information.

- a. Special Tooling and Test Equipment and Material: The inclusion of equipment and materials will be carefully reviewed relative to need and appropriateness of the work proposed. The purchase of special tooling and test equipment must, in the opinion of the Contracting Officer, be advantageous to the Government and relate directly to the specific effort. They may include such items as innovative instrumentation and/or automatic test equipment.
- b. Direct Cost Materials: Justify costs for materials, parts, and supplies with an itemized list containing types, quantities, and price and where appropriate, purposes.
- c. Other Direct Costs: This category of costs includes specialized services such as machining or milling, special testing or analysis, costs incurred in obtaining temporary use of specialized equipment. Proposals, which include leased hardware, must provide an adequate lease vs. purchase justification or rational.
- d. Direct Labor: Identify key personnel by name if possible or by labor category if specific names are not available. The number of hours, labor overhead and/or fringe benefits and actual hourly rates for each individual are also necessary.
- e. Travel: Travel costs must relate to the needs of the project. Break out travel cost by trip, with the number of travelers, airfare, per diem, lodging, etc. The number of trips required, as well as the destination and purpose of each trip should be reflected. Recommend budgeting at least one (1) trip to the Air Force location managing the contract.
- f. Cost Sharing: Cost sharing is permitted. However, cost sharing is not required nor will it be an evaluation factor in the consideration of a proposal. Please note that cost share contracts do not allow fees. NOTE: Subcontract arrangements involving provision of Independent Research and Development (IRAD) support are prohibited in accordance with Under Secretary of Defense (USD) memorandum "Contractor Cost Share", dated 16 May 2001, as implemented by SAF/AQ memorandum, same title, dated 11 Jul 2001.
- g. Subcontracts: Involvement of university or other consultants in the planning and/or research stages of the project may be appropriate. If the offeror intends such involvement, describe in detail and include information in the cost proposal. The proposed total of all consultant fees, facility leases or usage fees, and other subcontract or purchase agreements may not exceed one-third of the total contract price or cost, unless otherwise approved in writing by the Contracting Officer.
- Support subcontract costs with copies of the subcontract agreements. The supporting agreement documents must adequately describe the work to be performed (i.e. Cost Proposal). At a minimum, an offeror must include a Statement of Work (SOW) with a corresponding detailed cost proposal for each planned subcontract.
- h. Consultants: Provide a separate agreement letter for each consultant. The letter should briefly state what service or assistance will be provided, the number of hours required and hourly rate.

- i. Any exceptions to the model Phase I purchase order (P.O.) found at https://www.afsbirsttr.com/Proposals/Default.aspx (see "NOTE" within "Phase I Proposal Submission Checklist" section, p. AF-5).
- j. DD Form 2345: For proposals submitted under ITAR-restricted Topics, a copy of the certified DD Form 2345, Militarily Critical Technical Data Agreement, must be included. The form, instructions, and FAQs may be found at the United States/Canada Joint Certification Program website, http://www.dlis.dla.mil/jcp/.
- e. Company Commercialization Report (Volume Four). The Company Commercialization Report is the fourth section of a complete proposal package. The Company Commercialization Report is prepared through the DoD Electronic Submission Web site (www.dodsbir.net/submission). A Company Commercialization Report is required even if the proposing firm has not previously received SBIR or STTR awards. Follow the instructions on the web site and enter the quantitative commercialization results of your firm's prior Phase II projects. Include the items listed below as well as other information relative to your firm's commercialization track record.
 - a. Sales revenue from new products and non-R&D services resulting from Phase II technology;
 - b. Additional investment from sources other than the federal SBIR/STTR Program in activities that further the development and/or commercialization of Phase II technology;
 - c. Whether the Phase II technology has been used in a fielded DoD system or acquisition program and, if so, which system or program;
 - d. The number of patents resulting from the contractor's participation in the SBIR/STTR Program;
 - e. Growth in number of firm employees; and
 - f. Whether the firm has completed a stock IPO resulting, in part, from a Phase II project.

All prior DoD and non-DoD Phase II projects must be reported, regardless of whether the project has any commercialization to date.

The Web site will compare these results to the historical averages for the DoD SBIR Program to calculate a Commercialization Achievement Index (CAI) value. Only firms with four or more Phase II projects that were awarded at least two years prior to this solicitation will receive a CAI score; otherwise the CAI is not applicable (see the Company Commercialization Report section of the DoD Submission Web site for more details). Firms with a CAI at the 20th percentile or below will be rated no higher than "Marginal" for this factor. This report shall only be prepared once and submitted with all your proposals for this solicitation. A report showing that a firm has received no prior Phase II awards will not affect the firm's ability to obtain an SBIR award.

Additional explanatory material relating to the firm's record of commercializing its prior SBIR or STTR projects may be included in the Commercialization Track Record Narrative section of the Company Commercialization Report. Examples of the additional information include: commercialization successes in government or private sector markets that are not fully captured in the quantitative results (e.g. commercialization resulting from your firm's prior Phase I projects); any mitigating factors that could account for low commercialization; and recent changes in the firm's organization or personnel designed to increase the firm's commercialization success.

[Note: For companies without prior Phase II awards, you are only required to fill out basic company information. However, you will want to add information that will help convince reviewers that you can be successful in commercializing the results. On the CCR web page, there is a button labeled "Add a Brief Narrative," where you can add up to 5 pages of text describing any past relevant experience, even for the individuals involved in the company, if the company itself does not have much of a trak record. This can be a good supplement to the Commercialization Strategy, and help convince reviewers you have the experience, resources, and/or connections to be successful in commercialization. The CCR page does not lock down when the submission site locks down, so your brief narrative can be updated any time. In practice, the CCR is typically printed out and bundled with the proposal to be distributed to reviewers, perhaps a few days after submission deadline, so even if you did not have time to write up a good narrative before deadline, you may still have some time afterwards to get this piece polished up. However, don't count on that, and try to include a brief narrative section in the CCR long before the proposal due date. This really should be reviewed by an outside reviewer, just as with the proposal itself.]

DOD SBIR COST PROPOSAL BREAKDOWN ITEMS GUIDANCE

Offerors should indicate the following terms, as appropriate, in their proposal, following the instructions in Section 3.5(c) of this solicitation.

Cost Breakdown Items (in this order, as appropriate):

- 1. Name of offeror
- 2. Home office address
- 3. Location where work will be performed
- 4. Title of proposed effort
- 5. Company's taxpayer identification number and CAGE code. (Note: Offerors that do not yet have these items -- e.g., because the company does not yet exist at the time of proposal submission -- should so indicate in the cost proposal. Such offerors, if selected for award, should talk with their DoD contracting officer about obtaining these items, both of which are required before a contract can be awarded.)
- 6. Topic number and topic title from DoD Solicitation Brochure
- 7. Total dollar amount of the proposal
- 8. Direct material costs
 - a. Purchased parts (dollars)
 - b. Subcontracted items (dollars)
 - c. Other
 - (1) Raw material (dollars)
 - (2) Your standard commercial items (dollars)
 - (3) Interdivisional transfers (at other than cost dollars)
 - d. Total direct material (dollars)
- 9. Material overhead (rate_____%) x total direct material = dollars
- 10. Direct labor (specify)
 - a. Type of labor, estimated hours, rate per hour and dollar cost for each type (e.g., "computer programmer, 40 hours, \$26 per hour, \$1040 cost") Include the <u>name</u> as well as hours, etc. of all <u>key</u> personnel.
 - b. Total estimated direct labor (dollars)
- 11. Labor overhead
 - a. Identify overhead rate, the hour base and dollar cost
 - b. Total estimated labor overhead (dollars)
- 12. Special testing (include field work at government installations)
 - a. Provide dollar cost for each item of special testing
 - b. Estimated total special testing (dollars)
- 13. Special equipment
 - a. If direct charge, specify each item and cost of each
 - b. Estimated total special equipment (dollars)
- 14. Travel (if direct charge)
 - a. Transportation (detailed breakdown and dollars)
 - b. Per diem or subsistence (details and dollars)
 - c. Estimated total travel (dollars)
- 15. Subcontracts (e.g., consultants)
 - a. Identify each, with purpose, and dollar rates
 - b. Total estimated subcontracts costs (dollars)
- 16. Other direct costs (specify)
 - a. Total estimated direct cost and overhead (dollars)
- 17. General and administrative expense
 - a. Percentage rate applied
 - b. Total estimated cost of G&A expense (dollars)
- 18. Royalties (specify)
 - a. Estimated cost (dollars)
- 19. Fee or profit (dollars)
- 20. Total estimate cost and fee or profit (dollars)
- 21. The cost breakdown portion of a proposal must be signed by a responsible official, and the person signing must have typed name and title and date of signature must be indicated.
- 22. On the following items offeror must provide a yes or no answer to each question.
 - a. Has any executive agency of the United States Government performed any review of your accounts or records in connection with any other government prime contract or subcontract within the past twelve months? If yes, provide the name and address of the reviewing office, name of the individual and telephone extension.
 - b. Will you require the use of any government property in the performance of this proposal? If yes, identify.
 - c. Do you require government contract financing to perform this proposed contract? If yes, then specify type as advanced payments or progress payments.
- 23. Type of contract proposed, either cost-plus-fixed-fee or firm-fixed price.

Understanding Cost Volume Terms

Proposers should follow the instructions in the solicitation and comply with Cost Principles and Procedures at FAR Part 31 (see www.acquisition.gov/far/current/html/FARTOCP31.html#wp253693) and Chapter 3 of the DCAA Publication entitled "Information to Contractors" (see www.dcaa.mil). Below is a brief description of cost volume terms to get you started and examples of how to calculate indirect rates. A sample cost volume using the figures from the indirect rate example is also available on this site.

Direct Cost - Any cost that is associated specifically to the project (i.e. labor, travel, material, etc.) being proposed. A direct cost is an expense (cost) that is incurred to support a specific contract, job, or project. Without that specific contract, the expense would not normally be incurred. These costs are billed directly to the contract and are generally increased by application of a multiplier intended to recover a firm's operating costs (Indirect Costs).

Indirect Cost - All other expenses or costs incurred during the course of doing business, which are not directly related to a project or contract (i.e. office rent, employee benefits, utilities, insurance, furniture and equipment, accounting and legal expenses etc.). These costs may be referred to as Operating Costs, Fringe Benefits Costs, Overhead Costs and/or General and Administrative Costs. A Firm recovers its Indirect Costs under contract by "loading" or "burdening" the Direct Costs with a share of the Indirect Costs. This is normally handled by applying pre-determined multiplier(s) to the Direct Costs, which are created by the firm to recover its Indirect Costs by fair distribution over all projects. An indirect cost shall not be allocated to a contract if other cost incurred for the same purpose in like circumstances have been included as a direct cost of that or any other contract. The intent is to have every contract recover its "share" of the cost to run a business.

EXAMPLE - Direct or Indirect?: Office rent - normally considered an Indirect Cost. An exception might be if the office space was only utilized during contract performance or was a specific requirement of the project.

Direct Labor - All labor hours directly associated with the performance of the project being proposed.

Indirect Labor - Any labor hours not directly related to the project. This would be personnel assigned to tasks not directly related to a specific project or contract.

Direct Materials/Other Direct Costs - Materials and other purchases (including travel) required specifically for performance of a project. These costs can be traced directly to the project.

Indirect Materials/Costs - Materials, purchases, and supplies (including travel) required for the operation of a business. These costs are not directly associated with a specific contract or project.

Cost Pools - A company may choose to apportion its Indirect Cost dollars (or "pool") by the amount utilized to support specific business functions. Splitting up the total Indirect Cost pool may be considered a better way to fairly distribute costs over individual contracts. For instance, it may be determined that X% of all Indirect Costs are related to the administration of the company's business functions. In order to recover the associated dollars, the company my decide that X% for G&A recovery must be applied to all Direct Costs OR only Direct Materials Costs, or etc., on all/some/certain contracts. [Sorry, there's no simple guidance on how a company might choose to apply its Indirect Costs to its contracts!] The following outlines some standard cost pools. Not all companies will utilize multiple cost pools:

G&A Cost Pool - A portion of a company's Indirect Costs identified with the administration of the business. This is generally a percentage of all Indirect Cost dollars, but can also be calculated by using specific costs items if deemed appropriate. G&A may also be referred to as Handling.

Overhead Cost Pool - "Overhead" (O/H) can identify ALL Indirect Costs of a company or only a portion of that cost, depending on corporate structure. Some companies have several Overhead pools. This pool may be the balance of all Indirect Cost dollars not identified in other pools.

Fringe/Employee Benefits Cost Pool - A portion of a company's Indirect Costs identified specifically as employee-related costs for Direct Labor staff (indirect labor benefits would be included within the associated indirect pool). This pool generally contains specific cost items in the total Indirect Cost pool, since they are easily identifiable. Items included in the Fringe Pool might be health care insurance, disability insurance, employer FICA, unemployment insurance, retirement funds, etc.

"Other" Cost Pool(s) - The above titles of cost pools are common in the Defense Contracting industry. Since all companies are not alike, a firm should set up its Indirect Rate structure based on their own business type and philosophies. HOWEVER, since many DoD procurements are set around this standard format, it is probably advisable to stick within these <u>titles</u> whenever possible, even if it doesn't exactly fit the pool (what the firm considers to be the appropriate pool title might be identified as a subtitle for internal identification).

Indirect Rate Calculations/Determinations - After individual Indirect Cost Pools are identified, the Indirect Rates can be calculated. The Indirect Rates are the multipliers applied to a Direct Cost to recover Indirect Costs. One way to project or predict Indirect Rates is by working from a Budget for the upcoming year. Another would be to base the rates on prior experience (year-end or quarterly financials).

Examples of how Indirect Rates may be created.

THIS IS ONLY AN EXAMPLE. THIS MAY NOT REFLECT YOUR BUSINESS STRUCTURE. THE DOLLARS AND RATES USED IN THE EXAMPLE ARE RANDOM AND DO NOT REFLECT ANY SORT OF INDUSTRY STANDARD. THIS IS INTENDED FOR GUIDANCE PURPOSES ONLY.

Example 1:

Company A Budget for 2003

Total Direct Cost = \$60K

Direct Labor = \$50K

Direct Materials = \$10K

Total Indirect Cost = \$75K

Fringe Pool = \$25K

Overhead Pool = \$35K

G&A Pool = \$15K

Fringe Rate - Generally calculated by dividing total Fringe Pool by Total Direct Labor. Example:

25K / 50K = 50% Fringe Rate

Labor Overhead Rate - Generally calculated by taking the total Overhead pool dollars, divided by total Direct Labor dollars (if a Fringe Pool is being used, as in our Sample, then Fringe and Direct Labor might be added together). Example:

\$35K / (\$50K + \$25K) = 46.7% overhead rate

G&A Rate - [this example assumes costs within this pool are applicable to all company costs] Generally calculated by taking total G&A pool dollars, divided by all other costs.

Example:

15K / (50K + 10K + 25K + 35K) = 12.5% G&A rate

Using the above Rates, bid Labor might look like this:

\$50K direct labor * 1.50 fringe * 1.467 O/H * 1.125 G&A = ◆ \$123,778 (before profit)

And bid ODCs might look like this:

\$10K ODCs * 1.125 G&A = \$11,250 (before profit)

Example 2:

Material Overhead Rate - A separate pool may be identified for Material Handling. In that case, X% of the Overhead Pool may be called Material Overhead and applied only to ODCs. If \$5K of the Sample Overhead Pool were moved to Material Overhead pool, then the numbers might work like this:

Company A Budget for 2003

Total Direct Cost = \$60K

Direct Labor = \$50K

Direct Materials = \$10K

Total Indirect Cost = \$75K

Fringe Pool = \$25K

Overhead Pool = \$30K

Material Overhead Pool = \$5K

G&A Pool = \$15K

Fringe: \$25K / \$50K = 50%

Labor Overhead: \$30K / (\$50K + \$25K) = 40%

Material Overhead: \$5K / \$10K = 50%

G&A: \$15K / (50+10+25+30+5) = 12.5%

Using this example, bid Labor might look like this:

\$50K direct labor * 1.50 fringe * 1.40 O/H * 1.125 G&A = \$118,125 (before profit)

And bid ODCs might look like this:

\$10K ODCs * 1.50 Material O/H *1.125 G&A = \$16,875 (before profit)

Fee or Profit - Amount applied to all proposed costs (if allowable on all costs) which will (hopefully) be realized as a profit for the firm. For DoD contracts, the profit/fee calculation is usually based on the record of weighted guidelines method focused on four profit factors: performance risk, contract type risk, facilities capital employed, and cost efficiency. See Paragraph E of Part VII of the SBIR Desk Reference at www.acq.osd.mil/osbp/sbir/sb/resources/deskreference/07_nego.shtml for more details.

TechLink, Bozeman, MT

SBIR PROPOSAL COVER SHEET - Navy (2013.1)

Knowingly and willfully making any false, fictitious, or fraudulent statements or representations may be a felony under the Federal Criminal False Statement Act (18 USC Sec 1001), punishable by a fine of up to \$10,000, up to five years in prison, or both.

Proposal Num	ıber: N131-	013-0847										
Agency Informa	ıtion											
Agency Name:	NAVY	Command: NAVSEA										
Topic Number:												
Proposal Title:	J.	Detection and Evaluation of Incipient Composite Heat Damage										
	(Use the de	efault title or edit the title field to create your own)										
Firm Informatio	n											
Firm Name:	TechLink	Website Address: www.montana.edu/techlink										
Mail Address: 900 Technology Blvd., Ste. A												
City:	Bozeman	State: Zip: 59718										
DUNS:	08-385-28	CAGE:										
Does your firm a	allow for the	e release of its contact information to Economic Development Organizations? Yes No										
Business Inform	nation											
No Number of er	mployees inc	as described in paragraph 3.12? Yes Cluding all affiliates (average for preceding 12										
months):												
3. Is your firm a If yes, pleas	affiliated as s se provide in	set forth in 13 CFR 121.103? Yes No No No No No No No No No No No No No										
Affi	liate Firm:											
Affiliate Mai	1 Address:											
Affi	iliate City:											
Affi	liate State:	or Province:										
	Zip:											
	e Country:											
	Employees f Affiliate:											
•	•	nomically disadvantaged small business?										
Yes O	No											
		small business? Yes No										
6. Are you a cer	rtified HUBZ	Zone small business concern? Yes No										
7. Are you a ser	rvice-disable	d veteran-owned small business? Yes										

⊙ No										
8. Are you a <u>veteran-owned</u> small business? Yes No										
9. Is 50% or more of your firm owned or managed by a <u>corporate entity</u> ? Yes No										
10. Are you more than 50% owned by a single VCOC, hedge fund, or private										
equity firm? Yes No										
11. Are you more than 50% owned by multiple business concerns that are										
VCOCs, hedge funds, or private equity firms? Yes No										
12. Has your firm been convicted of a fraud-related crime involving SBIR and/or STTR funds or found civilly liable for a fraud-related violation involving										
Federal funds? Yes No										
If yes, provide the name of the associated company:										
13. Has the Defense Contracting Audit Agency (DCAA) or other agreed upon										
agency, performed a review of your accounts or records in connection with										
government contracts or subcontracts within the past 12 months? Yes										
No No										
If yes, please provide the following information:										
Agency Name:										
Address:										
City:										
State:										
Zip Code:										
Auditor:										
Phone: (Ext:										
Email:										
Agency for which the review was performed:										
If no, please provide the date for when such a review was last performed:										
or if never reviewed, check here										
of it hevel reviewed, eneck here										
Proposal Information										
Proposed										
Cost: 80000 Must not exceed 80,000 Phase: Duration: 6 Must not exceed 6 Months										
Option Cost: 70000 Must not exceed 70,000 Option Duration: 6 Must not exceed 6 Months										
For any purpose other than to evaluate the proposal, this data except proposal cover sheets shall not be disclosed outside the Government and shall not be duplicated, used or disclosed in whole or in part, provided that if a contract is awarded to this proposer as a result of or in connection with the submission of this data, the Government shall have the right to duplicate, use or disclose the data to the extent provided in the funding agreement. This restriction does not limit the Government's right to use information contained in the data if it is obtained from another source without restriction. The data subject to this restriction is contained on the pages of the proposal listed on the line below.										
Proprietary Information (list page numbers):										

		ly equivalent work been submit	ted to other US government agenc	ies or DoD components?
Yes O		1	1'(CDIDCTTD 1'T'.)	To all the land to the control to the
If yes, I	ist the name(s) of	the agency or DoD component	and if SBIR or STTR, list Topic 1	number in the space below.
2. Is your co	ompany (either dire	ectly or as a subcontractor) perf	forming work for a Navy activity of	outside of SBIR or STTR
funded work	? O Yes O	No		
	please indicate the Conflict of Interes		ode in which this work is perform	ed in the space below. Click here for a
3. Has a con	ntract been awarded	d for any of the proposals listed	above? Yes No	
	please provide the			
		ns in accordance with DFARS		
and assertion	is use, release, or d	lisclosure restriction"?	es No	
Technical A	bstract (Limit you	ar abstract to 200 words with no	classified or proprietary information	tion)
THis is a tes		lad this been an actual proposal, it c	ould possibly be as	
good do you				
			▼	
Anticipated information)		l Commercial Applications of	the Research or Development.	(No classified or proprietary
Shifts the pa	aradigm of contingend	cy applications to intrinsic value prop	ositions.	
			_	
List a maxin	num of 8 Key Wo	ords or phrases, separated by	commas, that describe the Proje	ect.
Experiments	s, transition, application	ons	_	
<u> </u>			<u>JY</u>	
Project Team	n Information			
1. Are teami	ing nartners or sub	contractors proposed? Y	es No	
	all that apply:	Econductors proposed.		
	University	Name:	POC:	
	HBCU/MI	Name:	POC:	
	☐ FFRDC	Name:	POC:	
	Nonprofit	🗆		
Institution		Name:	POC:	
	Federal	Name:	POC:	

Laborato	ry									
Facility		Other Federal	Name:			POC:				
Business		Small	Name:			POC:				
Business		Large	Name:			POC:				
		Other	Name:			POC:				
2. Are you proposing to use foreign nationals as defined in <u>paragraph 3.4</u> for work under the proposed effort? Yes										
3. Are yo	ou prop	osing research th	hat utilizes hui	man/animal	subjects or recombinant	nt DNA as described in paragraph 3.9, paragraph				
3.10, and	paragra	aph 3.11?	Yes No)						
				ch and/or a	nalytical work in Phase	I be carried out by your small business as				
described	in <u>para</u>	ngraph 4.2? 🖸	Yes N	o						
 Is printed as a pr	Principal Investigator (PI)/Corporate Official (CO) Information 1. Is primary employment of the principal investigator (identified below) with your firm as described in paragraph 4.2? Yes No 2. What is the percentage of effort of the principal investigator on the project? Yes 3. Is the principal investigator with your firm (identified below) a woman? Yes No 4. Is the principal investigator with your firm (identified below) socially/economically disadvantaged? Yes No									
			er, a faculty m	ember or st	tudent of an institution of	of higher				
		Yes No								
					fraud-related crime invol ted violation involving F					
_	Ye		•							
	s, prov	ide the individua	al's name (Firs	st, Middle,	Last):					
]	First:		Middle:		Last:					
Project Manager/Principal Investigator Corporate Official (Business)										
Name:	Ray	Friesenhahn		Name:	Gordon Stroh					
Title:	Techr	nical Manager		Title:	Contracts Manager					
Phone:	(406	994 7726	Ext:	Phone:	(406) 994 7700 E	Ext:				
Fax:	(406	994 7701		Fax:	(406) 994 7701					
E-Mail:	rayf@	montana.edu		E-Mail:	gstroh@montana.com					

 $Navy\ SBIR\ COST\ VOLUME$ Offerors should indicate the following terms, as appropriate, in their proposal, following the instructions in Section 5.4(d) of this solicitation.

Please click here for further explaination regarding <u>Cost Volume Definition</u> and <u>Understanding Cost Volume Terms</u>.

irm:		chLink	ology Dlyd - C	to A			
ddress:			iology Blvd., S [.] MT 59718	le. A			
ocation Where Work Will Be							
roposal #: N131-013-0847	Title of Proposed Effo	rt:	Detection	and Evaluation	of Incipient Composit	te Heat Dama	ige
irm's Taxpayer ID*:			CAGE C	ode*	DUNS	<u>5</u> * 08-3	385-28
NOTE: Offerors that do not yet dicate in "explanatory material an be awarded.	have these items e.g., b " (below). Such offerors, if	ecause selecte	the company d for award, si	does not yet exishould obtain thes	st at the time of the p se items, all of which	oroposal subn are required	nission sho before a cor
opic Number: N131-013	Topic Title:	Det	ection and Eva	aluation of Incipi	ent Composite Heat	Damage	
RECT LABOR:			Phase I		C	ption	
ategory and/or Individual:	Rate/	/Hour:	Est. Hours:	Cost:	Rate/Hour:	Est. Hours:	Cost:
	<u> </u>						
	· -		\vdash				
	_						
btotal Direct Labor (DL):							
nge Benefits, if not included in	Overhead,						
rate %) x DL =							
	%) x (DL + Fringe) =		, , , , , , , , , , , , , , , , , , ,			<u></u>	
tal Direct Labor (TDL):							
RECT MATERIAL COSTS:				Phase I			Option
			<u> </u>				
			Ë			Ë	
ibtotal Direct Materials Cost	s (DM):						
aterial Overhead (rate	%) x DM:						
ateriai Overrieau (Iate -	— %) х Ым. Г DM):		_			_	

Option Phase I

OTHER DIRECT COSTS: Subtotal Other Direct Costs (ODC): Direct Cost Overhead (rate %) x ODC **Total Other Direct Costs (TODC):** Phase I Option General&Administrative (rate %) x (base): Total Cost: Fee or Profit (rate %): TOTAL ESTIMATED COST: Explanatory material relating to the cost volume: (including substantiation/breakout of subcontractor costs) Firm's official responsible for the cost breakdown: Name: Title: >>If the Defense Contracting Audit Agency (DCAA) has performed a review of your projects within the past 12 months, please provide the following: Reviewing Office: Phone: Individual: Address: >>Will you require the use of any government property in the performance of this proposal? YES NO If Yes, identify:

>>Specify the type of payment desired:

(a) partial payments (monthly) as work progresses (recommended)

(b) progress payments

Knowingly and willfully making any false, fictitious, or fraudulent statements or representations may be a felony under the Federal Criminal False Statement Act (18 USC Sec 1001), punishable by a fine of up to \$10,000, up to five years in prison, or both.

Air Force SBIR PROPOSAL COVER SHEET (2013.1)

Knowingly and willfully making any false, fictitious, or fraudulent statements or representations may be a felony under the Federal Criminal False Statement Act (18 USC Sec 1001), punishable by a fine of up to \$10,000, up to five years in prison, or both.

Agency Informati	tion					
Agency Name:	Air Force					
Topic Number:	AF131-118					
Proposal Title:	Innovative Methodology for	Composite Structure All	lowables and Analytica	al Validation		
	(Use the default title or	edit the title field to	create your own)			
Firm Information	1					
Firm Name:	TechLink	Website Address:	www.montana.edu	techlink/		
Mail Address:	900 Technology Blvd., Ste. A	4				
City:	Bozeman	State:	Zip: 59718			
DUNS:	08-385-28	CAGE:				
Does your firm a	allow for the release of its	contact information	n to <u>Economic De</u>	evelopment Organ	nizations?	Yes No
Business Informa	ation					
No No	all business as described		Yes preceding 12			
months):						
3. Is your firm a If yes, please	ffiliated as set forth in 13 e provide information bel	CFR 121.103? Cow:	Yes No			
Affiliate Firm:						
Affiliate Mail Address:]			
Affiliate City:		State:	Zip:			
Number						
of Employees						
of Affiliate:						
4. Are you a soc	ially or economically dis	advantaged small b	usiness?			
5. Are you a wo	man-owned small busine	ss? D Yes D	No			
6. Are you a <u>cer</u>	tified HUBZone small bu	siness concern?	Yes No			

7. Are you a <u>service-disabled veteran-owned</u> small business? Yes No
 8. Are you a <u>veteran-owned</u> small business? Yes No 9. Is 50% or more of your firm owned or managed by a <u>corporate entity</u>? Yes No
10. Are you more than 50% owned by a single VCOC, hedge fund, or private
equity firm? Yes No
VCOCs, hedge funds, or private equity firms? Yes No
12. Has your firm been convicted of a fraud-related crime involving SBIR and/or STTR funds or found civilly liable for a fraud-related violation involving
Federal funds? Yes No If yes, provide the name of the associated company:
13. Has the Defense Contracting Audit Agency (DCAA) or other agreed upon agency, performed a review of your accounts or records in connection with
government contracts or subcontracts within the past 12 months? Yes No If yes, please provide the following information:
Agency Name:
Address:
Address.
City: State:
Zip Code:
Auditor:
Phone: Ext:
Email:
Agency for which the review was performed:
If no, please provide the date for when such a review was last performed: (mm/dd/yyyy)
or if never reviewed, check here
Proposal Information
Proposed Must not exceed 150,000 Phase: I Duration: Must not exceed 9 Months
For any purpose other than to evaluate the proposal, this data except proposal cover sheets shall not be disclosed outside the Government and shall not be duplicated, used or disclosed in whole or in part, provided that if a contract is awarded to this proposer as a result of or in connection with the submission of this data, the Government shall have the right to duplicate, use or disclose the data to the extent provided in the funding agreement. This restriction does not limit the Government's right to use information contained in the data if it is obtained monther source without restriction. The data subject to this restriction is contained on the pages of the proposal listed on the line below.
Proprietary Information (list page numbers):

		lly equivalent v	work been submitted to ot	ther U	S governm	nent agencies or DoD components?
	No	C (1	D.D 1'66	DID .	GTTD 1	The North North and a standard second by the
If yes,	, list the name(s) of	the agency or	Dod component and if S	BIK 0	r 511K, 11	st Topic Number in the space below.
2. Has a co	ntract been awarde	ed for any of the	e proposals listed above?		Yes 🗀	No
If yes,	, please provide the	e contract numb	per:			
			ice with DFARS 252.227 disclosure restriction"?	-7017		
	No	use, rerease, or	disclosure restriction .			
Technical A	Abstract (Limit yo	our abstract to 2	200 words with no classifi	ied or	proprietary	y information)
					_	
				_	▼	
Anticipated information		al Commercia	I Applications of the Re	search	or Devel	opment. (No classified or proprietary
					_	
					▼	
List a maxi	imum of 8 Key W	ords or phrase	es, separated by comma	s, that	describe	the Project.
					_	
					▽	
Project Tea	m Information					
		bcontractors pro	oposed? Yes	No		
Check	all that apply:					
	University	Name:			P(OC:
	HBCU/MI	Name:			PO	DC:
	FFRDC	Name:			PO	OC:
	Nonprofit					
Institution	E	Name:			P(OC:
Lohouster	Federal	Name:			PO	OC:
Laboratory	_					
Facility	Other Feder	Name:			PC	OC:
	Small Busin	ness Name:			PO	OC:

Large Business Name: POC:									
Large Business Name: POC:									
Other Name: POC:									
2. Are you proposing to use foreign nationals as defined in <u>paragraph 3.4</u> for work under the proposed effort? Yes									
No 3. Are you proposing research that utilizes human/animal subjects or recombinant DNA as described in paragraph 3.9, paragraph									
3.10, and paragraph 3.11? Yes No									
4. At a minimum, will two-thirds of the research and/or analytical work in Phase I be carried out by your small business as									
described in paragraph 4.2? Yes No									
Principal Investigator (PI)/Corporate Official (CO) Information									
1. Is primary employment of the principal investigator (identified below) with your firm as									
described in paragraph 4.2? Yes No									
2. What is the percentage of effort of the principal investigator on the project?									
3. Is the principal investigator with your firm (identified below) a woman? Yes No									
4. Is the principal investigator with your firm (identified below) socially/economically									
disadvantaged? Yes No									
5. Is your firm's PI, CO, or owner, a faculty member or student of an institution of higher									
education? Yes No									
6. Has your firm's PI, CO, or owner been convicted of a fraud-related crime involving SBIR and/or STTR funds or found civilly liable for a fraud-related violation involving Federal									
funds? Yes No									
If yes, provide the individual's name (First, Middle, Last):									
First: Last:									
Project Manager/Principal Investigator Corporate Official (Business)									
Name: Name:									
Title: Title:									
Phone: () Phone: () Ext:									
Fax: () Fax: ()									
E-Mail: E-Mail:									

Air Force SBIR COST VOLUME (2013.1)

Offerors should indicate the following terms, as appropriate, in their proposal, following the instructions in $\underline{\text{Section } 5.4(d)}$ of this solicitation.

Please click here for further explanation regarding <u>Cost Volume Definition</u> and <u>Understanding Cost Volume Terms</u>.

Firm: Address:	TechLink 900 Technology Blvd., Ste. A					
ridarooo.	Bozeman, MT 59718					
Location Where Wo	rk Will Be Performed:					
Proposal #:	F131-118-0349 Title of Pro	posed Effort:	Innovative	Methodology for Composite	Structure Allowab	les and Analytical Validation
Firm's Taxpayer ID*	81-6010045		CAGE Code*		DUNS*	08-385-28
	at do not yet have these items e.g. al" (below). Such offerors, if selected					
Topic Number:	AF131-118 Topic 1	Γitle: Ini	novative Methodology f	for Composite Structure Allow	ables and Analyti	cal Validation
DIRECT LABOR:						
Category and/or Ind	lividual:	Rate/Hour:	Est. Hours:			Ph I Cost:
Subtotal Direct Lal	bor (DL):					
		_				
Fringe Benefits, if no	ot included in Overhead, (rate	%) x DL =				
Labor Overhead (ra	te %) x (DL + Fringe) =					
Total Direct Labor	(TDL):					
						-
DIRECT MATERIAL	L COSTS:					Ph I Cost:
				_		
						<u> </u>
Subtotal Direct Ma	terials Costs (DM):					
						-
Material Overhead (rate %) x DM =					

Total Direct Materials Costs (TDM):	
OTHER DIRECT COSTS:	Ph I Cost:
Subtotal Other Direct Costs (ODC):	
Direct Cost Overhead (rate %) x ODC = Total Other Direct Costs (TODC):	
General &Administrative (rate %) x (base:)	
Total Cost:	
Fee or Profit (rate %)	
TOTAL ESTIMATED COST:	
Explanatory material relating to the cost volume (including substantiation/breakout of subcontractor costs):	
▼ ▼	
Firm's official responsible for the cost breakdown:	
Name: Title:	
>>If the Defense Contracting Audit Agency (DCAA) has performed a review of your projects within the past 12 months, please provide the following:	
Reviewing Office:	
Individual: Phone:	
Address:	
>>Will you require the use of any government property in the performance of this proposal? YES NO	
If Yes, identify:	

>>Specify the type of payment desired:

Knowingly and willfully making any false, fictitious, or fraudulent statements or representations may be a felony under the Federal Criminal False Statement Act (18 USC Sec 1001), punishable by a fine of up to \$10,000, up to five years in prison, or both.

Proposal Num	nber: A131-011-0964				
Agency Informat	ution				
Agency Name:					
-	Topic Number: A13-011				
Proposal Title:					
	(Use the default title or edit the title field to create your own)				
Firm Information	n				
Firm Name:	TechLink Website Address: www.montana.edu/techlink				
Mail Address:	900 Technology Blvd., Ste. A				
City:	Bozeman State: Zip: 59718				
•	08-385-28 CAGE:				
Does your firm a	allow for the release of its contact information to Economic Development Organizations? Yes No				
If yes, please	affiliated as set forth in 13 CFR 121.103? Yes No se provide information below: Affiliate Firm:				
	Affiliate City:				
A	Affiliate State: or Province:				
	Zip:				
Affili	liate Country:				
Number of	f Employees of Affiliate:				
o No	cially or economically disadvantaged small business? Yes				
5. Are you a wo	oman-owned small business? Yes No				
6. Are you a <u>cer</u>	rtified HUBZone small business concern? Yes No				

7. Are you a <u>service-disabled veteran-owned</u> small business? Yes No
8. Are you a <u>veteran-owned</u> small business? Yes No
9. Is 50% or more of your firm owned or managed by a <u>corporate entity</u> ? Yes No
10. Are you more than 50% owned by a single VCOC, hedge fund, or private equity
firm? Yes No
11. Are you more than 50% owned by multiple business concerns that are VCOCs,
hedge funds, or private equity firms? Yes No
12. Has your firm been convicted of a fraud-related crime involving SBIR and/or STTR funds or found civilly liable for a fraud-related violation involving Federal funds? Ves No
Yes No If yes, provide the name of the associated company:
If yes, provide the name of the associated company.
13. Has the Defense Contracting Audit Agency (DCAA) or other agreed upon agency, performed a review of your accounts or records in connection with government contracts or subcontracts within the past 12 months? Yes No
or subcontracts within the past 12 months? Yes No If yes, please provide the following information:
Agency Name:
Address:
City:
State:
Zip Code:
Auditor:
Phone: (Ext.
Email:
Agency for which the review was performed:
If no, please provide the date for when such a review was last performed:
(mm/dd/yyyy)
or if never reviewed, check here
of it flevel feviewed, effect field
Proposal Information
Proposed Cost: Must not exceed 100,000 Phase: I Duration: 6 Must not exceed 6 Months
Option Cost: 50000 Must not exceed Option Duration: 4 Must not exceed 4 Months
For any purpose other than to evaluate the proposal, this data except proposal cover sheets shall not be disclosed outside the Government and shall not be duplicated, used or disclosed in whole or in part, provided that if a contract is awarded to this proposer as a result of or in connection with the submission of this data, the Government shall have the right to duplicate, use or disclose that provided in the funding agreement. This restriction does not limit the Government's right to use information contained in the data if it is obtained from another source without restriction. The data subject to this restriction is contained on the pages of the proposal listed on the line below.
Proprietary Information (list page numbers):
1. Has a proposal for <u>essentially equivalent work</u> been submitted to other US government agencies or DoD components? Yes No

If yes, list the na	ame(s) of the ager	ncy or DoD component and if S	BIR or STTR,	list Topic Number in the space below.	
If yes, please pro	ovide the contract	y of the proposals listed above? t number: cordance with DFARS 252.227 use, or disclosure restriction"?	-7017	No	
echnical Abstract (Limit your abstra	ct to 200 words with no classif	ed or propriet	ary information)	
This is a test. This i spent a lot more time		this been an actual proposal, we	e certainly woul	d have	
			search or Dev	velopment. (No classified or proprietary inform	ation)
This gives us typing	experience and fa	amiliarity with the process.			
ist a maximum of 8	Key Words or j	phrases, separated by comma	s, that describ	be the Project.	
Processes, stuff, exp	perience				
oject Team Informa	ntion				
-	ers or subcontract	ors proposed? Yes •	No		
Un	iversity	Name:		POC:	
□ _{HB}	BCU/MI	Name:		POC:	
FF	RDC	Name:		POC:	
No nstitution	nprofit	Name:		POC:	
Fec aboratory	deral	Name:		POC:	
	her Federal	Name:		POC:	
Sm	nall Business	Name:		POC:	
Lai	rge Business	Name:		POC:	
Oth	her	Name:		POC:	

2. Are you proposing to use foreign nationals as defined in paragraph 3.4 for work under the proposed effort? Yes No
3. Are you proposing research that utilizes human/animal subjects or recombinant DNA as described in paragraph 3.9, paragraph 3.10, and
paragraph 3.11? Yes Ves No
4. At a minimum, will two-thirds of the research and/or analytical work in Phase I be carried out by your small business as described in
paragraph 4.2? • Yes No
Principal Investigator (PI)/Corporate Official (CO) Information
1. Is primary employment of the principal investigator (identified below) with your firm as
described in paragraph 4.2? Yes No
_
2. What is the percentage of effort of the principal investigator on the project? 17 %
3. Is the principal investigator with your firm (identified below) a woman? Yes No
4. Is the principal investigator with your firm (identified below) socially/economically
disadvantaged? Yes No
5. Is your firm's PI, CO, or owner, a faculty member or student of an institution of higher
education? Yes No
6. Has your firm's PI, CO, or owner been convicted of a fraud-related crime involving SBIR and/or
STTR funds or found civilly liable for a fraud-related violation involving Federal funds? Yes
No If yes, provide the individual's name (First, Middle, Last):
First: Last: Last:
Project Manager/Principal Investigator Corporate Official (Business)
Name: Ray Friesenhahn Name: Gordon Stroh
Title: Technical Manager Title: Contracts Manager
Phone: (406) 994 7726 Ext: Phone: (406) 994 7700 Ext:

994

Fax: (406)

E-Mail: gstroh@montana.com

7701

rayf@montana.edu

Fax:

E-Mail:

OTHER DIRECT COSTS:

Offerors should indicate the following terms, as appropriate, in their proposal, following the instructions in Section 5.4(d) of this solicitation.

Please click here for further explaination regarding Cost Volume Definition and <u>Understanding Cost Volume Terms</u>.

Firm: Address:	TechLink 900 Technology B Bozeman, MT 597					
Location Where Work Will Be Performed:						
Proposal #: A131-011-0964 Title of Proposed B	Effort: Ad	vanced hybrid g	raphitic materials	s for enhanced energetic	applications	
Firm's Taxpayer ID*: 81-6010045		CAGE Cod	<u>le</u> *	<u>DUNS</u> '	08-3	85-28
*NOTE: Offerors that do not yet have these items e.g "explanatory material" (below). Such offerors, if selecte	d for award, should o	btain these item	s, all of which ar	re required before a contra	act can be awai	indicate in ded.
Topic Number: A13-011 Topic	Title: Adva	inced hybrid gra	phitic materials f	or enhanced energetic ap	plications	
DIRECT LABOR:		Phase I		Oį	otion	
Category and/or Individual:	Rate/Hour:	Est. Hours:	Cost:	Rate/Hour:	Est. Hours:	Cost:
					\vdash	
Subtotal Direct Labor (DL):						
Fringe Benefits, if not included in Overhead,						
(rate %) x DL =					_	
Labor Overhead (rate %) x (DL + Fringe) =						
Total Direct Labor (TDL):						
DIRECT MATERIAL COSTS:			Phase I			Option
		_				
					<u> </u>	
Subtotal Direct Materials Costs (DM):						
Material Overhead (rate %) x DM:						
Total Direct Materials Costs (TDM):						
		-			-	

Phase I

Option

Subtatal Other Direct Costs (ODC):		
Subtotal Other Direct Costs (ODC):		
N. 10 10 1 1/1		
Direct Cost Overhead (rate %) x ODC		
Total Other Direct Costs (TODC):		
	Phase I	Option
General&Administrative (rate \(\bigwedge \) x (base):		
Total Cost:		
Fee or Profit (rate %):		
TOTAL ESTIMATED COST:		
4		
Finals official assessmentals for the country of the second		
Firm's official responsible for the cost breakdown:		
Name:	Title:	
	rmed a review of your projects within the past 12 months, please	provide the following:
Reviewing Office:		
Individual:	Phone:	
individual.	rilolic.	
Address:		
,		
I		
>>Will you require the use of any government property in the	performance of this proposal?	
	performance of this proposal:	
YES NO		
If Yes, identify:		
ii 100, idonaty.		
>>Specify the type of payment desired:		
(a) partial payments (monthly) as work progresses	(recommended)	
	•	
(b) progress payments		

CCR: COMPANY COMMERCIALIZATION

Company Commercialization Report:

- On 1/14/2013 5:33:25 PM, your firm acknowledged that in accordance with subsections (k)(2)(B) and (k)(2)(F) of the Small Business Act (15 U.S.C. 638), all commercialization information that is collected via the DoD SBIR/STTR Company Commercialization Report will be provided to the Small Business Administration (SBA) to be used solely for program evaluation purposes by the Federal government.
- A Company Commercialization Report is required for Phase I and Phase II submissions.
- Regardless of the number of proposals submitted, only one report needs to be prepared per solicitation.
- Please read <u>Guidance</u> for completing the Company Commercialization Report.

Directions:

 $\ensuremath{\mathsf{STEP}}$ 1. If you have never had a Phase II award, skip to step 3 of the instructions below.

If you have Phase II awards, update each project listed above by clicking on the blue **Add New Project Entry** for each Phase II award your firm contract number of has to date (from any Federal agency), not already listed above. Firm Information STEP 2. Update for any changes in your firm's number of awards, employees or revenues. **Enter Firm Point of Contact** STEP 3. who will be accountable for the upkeep and validity of your commercialization information. Add a Brief Narrative STEP 4. Optional on your firm's commercialization track record. View STEP 5. the Company Commercialization Report and print a copy off of your web browser for your own records. If submitting to an agency that requires a hardcopy, then attach a copy to your proposal. The Company Commercialization Report does not count toward the proposal page count.

To submit an annual Phase II Project Update:

1. Click on the Contract Number of the particular Phase II project requiring the annual commercialization update. (If the Phase II project is not listed,

Number of entries: 0

Page: 0 of 0

2. Update Firm Information

Verify These Items
for the update.

Questions? Call 866-SBIRHLP (724-7457) or email

Note: The DoD updates historical data on the SBIR/STTR programs used to calculate the Commercialization Achievement Index annually. It was last updated December 17, 2012. Your firm's Index may now differ from the Index calculated in previous reports. The CAI is only calculated for proposers that have received at least 4 phase II awards in years up to and including 2010.