# SBIR Proposal Writing Basics: The Times They Are a-Changin’

Gail & Jim Greenwood, Greenwood Consulting Group, Inc.

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Some of you may recall the original lyrics are from a song by Bob Dylan. Others of you probably too young to know who Bob Dylan is. But it doesn’t matter—the point is that the SBIR/STTR programs are dynamic, and ever changing. Generally, they change for the better, and we want to highlight two recent positive changes of which you should be aware.

First, National Science Foundation (NSF) has elected to piggyback on its very successful I-Corps program with a “boot camp” for Phase I SBIR/STTR recipients. I-Corps was initiated by NSF (now other agencies including NIH, DOE and NASA have versions of it), in which a team consisting of a technologist (often a university faculty member), a budding entrepreneur (often a student or post doc of that faculty member), and a commercialization-savvy mentor undertake an extensive customer discovery process in which they interview dozens of potential customers and users of their proposed product/service. Those interviews often lead the team to the realization that they don’t really understand the customer and his/her priorities and needs; the successful I-Corps teams either pivot to provide a different/revamped product that meets the customer’s expectations or they fold their tent and decide they don’t have a business opportunity because the customer’s needs and the team’s proposed product don’t mesh.

To date, many I-Corps graduates have gone on to prepare Phase I SBIR/STTR proposals to fund the launch and growth of their emerging businesses. The boot camp that NSF is now providing is like a barebones I-Corp effort for Phase I applicants that either have not gone through I-Corps, or that feel they would benefit from additional customer interaction and discovery. To this end, NSF is allowing Phase I applicants to request $10-$20k as a direct cost on their Phase I project to participate in the boot camp. The boot camp is not mandatory, but NSF is recommending it to Phase I applicants, so it would be a good idea for you to include it in your Phase I NSF budget unless you are convinced (and can convince the NSF and its reviewers) that you have done all the customer discovery that is needed. We are guessing that could be a tough sell, especially when NSF obviously thinks most Phase I applicants can benefit from the boot camp.

Overall, we think the boot camp is a good idea for many companies applying for NSF Phase I grants. Most SBIR/STTR Phase I applicants really don’t understand or know their customer, so customer discovery is an important and eye-opening exercise. The downside of the NSF boot camp is (a) it takes $10-$20k out of the money that could be used in the Phase I feasibility study (thus requiring some scaling back in the Phase I effort), and (b) it will require the small business to redirect some of its time and attention away from performing the Phase I technical work so that it can devote resources to the boot camp and customer interviews during the same time period.

Second, the US Air Force (USAF) is becoming the lead innovator among the Dept of Defense (DoD) components that have SBIR/STTR programs. The latest USAF innovation is a series of 6 “special” topics in the DOD’s FY18.2 SBIR solicitation. These special topics are limited to 60 day, $50k Phase I projects (plus 30 days, after proof of feasibility, to do the final report), followed by condensed (15 month), $750k Phase II efforts. Five of the special topics are based on interesting things like weather forecasting, logistics and supply chain issues, and counter-drone technologies. The sixth topic is a broad “other” topic, in which USAF asks the SBIR community to propose something that isn’t in Military’s customarily narrow SBIR topics—it is about as close as you will ever get to the DoD asking “do you have any ideas for things the US Military should be doing?”

Benefits of the USAF special topics appear to be (a) a willingness to consider quick-and-dirty projects that are outside the agency’s norms and (b) an opportunity to submit an idea without having to go through the tedious process of trying to convince USAF to write a specific topic on that idea. The down sides are (a) severe limits on what you can accomplish with $50k and 60 days of technical effort, and (b) the question of whether there will be much of a Phase II or III appetite at USAF for a project that doesn’t originate from (and get championed by) an internal TPOC or Phase III customer in the Air Force.

We think both of these initiatives deserve your attention and consideration. We also applaud NSF and USAF for trying things that are outside the box of what the SBIR/STTR agencies customarily do, in an effort to make these small business programs more successful for their agencies and the small businesses submitting SBIR/STTR applications. Not all such agency initiatives will prove to be successful and a good idea (NSF’s streamlined budget pilot process a few years ago is a good example of a disastrous initiative), but it makes a lot of sense to us that the agencies try to be innovative in how they use their Small Business Innovation Research programs. If you decide to pursue the NSF boot camp or USAF special topics, please share with us the good, bad and ugly of your experience so we can pass it along to other folks.