

## **Proposal Polishing Webinar For Developers of Current Applications**

presented by the

**SBIR Resource Center<sup>(R)</sup>**

*- When You're Serious About SBIR -*

A Webinar for Virginia's CIT

22 May 2014

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## **General Principles #1**

- **SBIR is an "economic development" program, NOT just a "research" program.**
- **ALWAYS write from the long-term point of view.**
- **Convince reviewers that commercialization is likely, if research is successful.**
- **Solve problems at, or enhance mission of, the target agency.**
- **More, intensely-detailed information is superior to less, or to general information.**

## General Principles #2

- **"Research"** is the uncovering (*realization*) of heretofore unknown knowledge.
- In "real" research, there is always a finite *chance of failure*.
- "Determining feasibility" is the DISCOVERY, for the very first time, that a concept actually works the way it was predicted in theory.
- Never make any assertion without a third party back up (*ALWAYS provide legitimizing references*).
- In SBIR/STTR frugality is valued.

## General Principles #3

- Any situation, any statement, *anything* that lets the reviewer become uncomfortable is bad.
- ALWAYS put yourself in the reviewer's position when deciding what/how to write.
- The Govt. DOES NOT write proposals to itself -- be very careful of advice from the inexperienced.
- The solicitations are put together by agency staffs, NOT the reviewers.
- Just because something is allowed, does not mean that it is a good idea (*to do / omit something*).

## COVER SHEET

- ALL data is 100% complete**  
*(human subjects/vertebrates/signatures)*
  
- Clean, neat professional appearance**
  
- E-submission "blowback" carefully checked**

## PROJECT SUMMARY

- Research offered and approach stated**
  
- A real problem/opportunity identified**
  
- A real technological *innovation* identified**
  
- Implemented results quantified**
  
- Understandable upon audible communication**

## SIGNIFICANCE OF THE PROBLEM/OPPORTUNITY

- A REAL problem exists and was defined**  
*(parameters were well quantified).*
  
- Problem/solution tied to agency's mission/needs**
  
- Assertions backed up with reliable sources**  
*(quotes and references legitimize assertions)*
  
- The expected results are well quantified**  
*(measurable change in the problem's parameters)*

## TECHNICAL OBJECTIVES

- Objectives were listed as *milestones* (outcomes like “feasibility demonstrated”) not as task descriptions.**
  
- Quantitative factor(s) to show feasibility identified**  
*(may be objective numbers subjectively collected)*
  
- Each objective presented with its indication of success**
  
- Each objective's success criteria quantified**

## RESEARCH PLAN -1

- The objectives clearly map into the work plan.**
- Enough detail was provided to allow your reviewers to perform the same research and get the same answers:**
  - each step/process was presented with a reason as to why it is necessary (*NOTE: either here or in the Objectives*)
  - each step was presented with sound, scientific reason as to why that approach was chosen
  - the final test for feasibility was fully described and characterized by a threshold measure (*a quantity*)
- Points are made logically with emphasis on key items**

## RESEARCH PLAN -2

- WHO will do WHAT, and WHEN, is clear in each step**
- Project Scope EXACTLY matches the Budget**
- Project Management acumen was well demonstrated**
- Reliable sources/references are supplied**
- Difficult or risky items were identified and mitigating activity/plans discussed (no branching, unless costed)**
- Graphics are well used**
- Proposal (*especially the Plan*) is “scannable”**

## BACKGROUND/RELATED WORK

- Prior, and current, work in the field discussed and state-of-the-art established
- Approach was well differentiated (*compare/contrast*) both the technology and application domains
- Explanation provided for why this offering is a “NEW” concept (*innovation*) and why it would be superior
- In-depth knowledge and real, hands-on experience in the field demonstrated via discussion and bibliography
- Reliable sources (*quotes and references*) were supplied
- Literature review sufficiently thorough and up-to-date

## COMMERCIALIZATION

**Commercial Probability**  
**= competitive:**  
**product/service X**  
**capability X**  
**propensity.**

***Notice the “multiplicative” nature of this equation.  
A low number on any one of these yields a low  
value on the commercial score => no award!***

## COMMERCIALIZATION-1

- The business model was made clear**
- Position in/contribution to industry's "value chain" was properly articulated**
- End users/purchasers (Phase III) were identified**
- Argument was made for why end users will purchase this product/service**
- Why end users will purchase it from you, or your representatives/distribution path(s), was discussed**

## COMMERCIALIZATION-2

- Immediate customers (distribution path) clearly identified**
- Why immediate customers will purchase from you was explained (licensees???)**
- Was made clear that a business (profit) can be made out of this new concept [*profit = revenues - expenses*]**
- The funding amounts, timing and planned sources were discussed**
- Successful commercialization quantitatively related to increased jobs and / or productivity of the workforce**

## PERSONNEL

- Team clearly has ALL of the qualifications to attempt the proposed task (*every needed discipline represented*)
- PI clearly meets the employment requirements of the agency -- *handle this if at all questionable*
- PI clearly has the background and understanding of the processes involved to lead this project
- Argument made for why team is uniquely qualified
- CVs & resumes show only relevant data

## SUBCONTRACTORS

- Consultants/subcontractors are well justified (clearly fill gaps in needed disciplines/facilities, make real contributions and have real work to do)
- Offer/commitment letters contain descriptions of their work, the timing and the cost of performing it
- ALL commitment letters are legally binding offers
- Commitment letters written as "sales documents"



## FACILITIES

- Discussion limited to the equipment/resources needed\*
- The facilities/equipment were discussed in detail and shown to be adequate for your purposes
- If not owned by applicant, letter from owner was enclosed conveying exclusive control
- Third party commitment letters are legally binding AND work as sales documents

\* "facilities" generally refer to equipment, not floor space

## BUDGET/COST PROPOSAL #1

- A sound costing strategy was used
- Project scope CLOSELY matches the budget you're requesting
- A detailed analysis & cost estimate was performed and that IS clearly evident in both the budget and technical proposals
- Budget/cost proposal affords reviewers visibility into your work  
(requires detailed information to support project understanding)
- Sufficient budget/cost "justification" supplied

## BUDGET/COST PROPOSAL #2

**All potential contingencies/branches in project included**

**Indirect costs properly calculated, reasonable and clearly make sense**

**Round numbers** (*indicates guesses to reviewers*) **have been un-rounded or explained?** (*round numbers are bad -- maximum "grab" is bad*)

**NO purchases of capital equipment / facilities proposed**

*- opportunity to differentiate your offering -*

## GENERAL/OTHER #1

**Responsive to topic author's & reviewer's feedback**

**Neat, clean, professional with the largest type font possible**

**No assertions without third-party back up – NONE!**

**Proposal is scannable** (major points made without reading)

**Each graphic makes the point(s) intended -- no fluff graphics**

## GENERAL/OTHER #2

- Graphics properly placed, referenced and discussed in text
- Spell check used on every part of the document -- twice
- Every page of e-submission "blowback" checked -- twice
- Resubmissions handled thoroughly and diplomatically
- Proposal reviewed by third-party and repaired in response
- Scores well against evaluation criteria

## DoD Considerations

- **Philosophy**
  - "USER" agency
  - mission
  - evaluation approach
  - TRLs and tech insertion
- **Evaluation Criteria**
  - 1) soundness, technical merit, and innovation . . .
  - 2) qualifications of the PI and proposed team . . .
  - 3) potential for commercial application and the benefits . . .
- **Highly Valued**
  - war-fighter needs met
  - ability to deal with technology insertion

## NSF Considerations

- **Philosophy**
  - “NON-USER” agency
  - mission
  - evaluation approach
  - investment
  
- **Evaluation Criteria**
  - 1) intellectual merit - encompasses the potential to advance knowledge
  - 2) broader impacts - encompasses the potential to benefit society and contribute to the achievement of specific, desired societal outcomes
  
- **Highly Valued**
  - commercialization potential
  - true advances in math and science

## NSF Evaluation Guidance

**310 pages of discussion**

NSB/MR-11-22

National Science Foundation's  
Merit Review Criteria: Review and Revisions

December 14, 2011

<http://www.nsf.gov/nsb/publications/2011/meritreviewcriteria.pdf>

## New NSF Outline

3. **PROJECT DESCRIPTION** The project description is the core of the proposal document (*limited to 15-pages*)
- 3.a **Summary** (*no more than 1 page*)  
\* The Customer. \* The Value Proposition. \* Key differentiator(s) \* The Innovation:
- 3.b **The Market Opportunity** (*recommended length: 2 to 4 pages*)  
\* Describe the market and addressable market for the innovation.  
\* Discuss the business economics and market drivers in this industry.
- 3.c **The Innovation** (*recommended length: 1-3 pages*)  
\* Describe the innovation, challenges, risks and your focus in 6-month Phase I project?
- 3.d **The Company/Team** (*recommended length: 1-3 pages*)  
\* Describe the company founders or key participants and their level of effort  
\* Background and experience of the team (upload resumes separately)  
\* Describe your vision, existing operations, how SBIR/STTR fits, the revenue history  
\* Describe consultants or subawardees involvement.
- 3.e **Technical Discussion and R&D Plan** (*minimum 5 pages, recommend 5 to 7*)  
\* Describe the innovation the key objectives and the questions that must be answered to determine the technical AND commercial feasibility of the proposed concept.  
\* Discuss critical technical milestones and the operational R&D plan.

## WINNING PHILOSOPHY

- **Use SBIR as a strategic opportunity, NOT an income vehicle:**
  - the award amounts fit this
  - the schedules fit this
  - this best fits the intent of Congress
  - it makes a more compelling proposal story.
- **Spend the most time doing your homework and crafting a story that reflects strategic importance to you.**
- **Check out your idea with customer BEFORE the procurement package/RFP comes out.**
- **Tailor the proposal to match the culture of the agency to which you are bidding.**
- **Make sure your proposal is both responsive and COMPLIANT.**
- **"If at first you don't succeed - try, try again"**  
*[most winners report submitting several times before their win].*

## SBIR Related Learning Opportunities

- \* *SBIR Lab™ (shared consulting for application development)*
  - 24, 25 & 26 July in Annapolis, MD - for NIH 2014-2 / D2P11
  - 16, 17 & 18 Oct. in Annapolis, MD - for DoD 2014.3
- \* *How To Win SBIR Awards<sup>SM</sup> - America's BEST-IN-CLASS training*
  - 28-29 May in Columbia, MD (2-days with DoD & NSF add-ons)
  - 27-28 Aug. In Columbia, MD (2-days with DoD & DoE add-ons)
- \* *SBIR CheckList™ - competitive proposal polishing*
  - 19 June in Rockville, MD
  - 20 June in Herndon, VA
- \* *Crafting Federal Cost/Budget Proposals<sup>SM</sup>*
  - 26 June Univ. of MD in College Park, MD
- \* *R&D Project Planning, Cost Estimating & Management<sup>SM</sup>*
  - 17 July Univ. of MD in College Park, MD
- \* *National SBIR/STTR Conferences*
  - 16 to 18 June in National Harbor, MD – all agencies
  - 21 to 23 October 2014 Albuquerque, NM – NIH only

## Intelligent Pursuit of SBIR

- **Proposal Development Tools** - 23 software titles
- **Tutorial Packages** - self-paced software
- **Bid Support Services** - most at *fixed-price*
- **Training Seminars/Workshops** - *America's best*
- **Local Outreach Support Tools** - professional grade
- **Phase III, Sole-Source Marketing** - pay when funded

***ENGINEERED, TESTED & PROVEN EFFECTIVE***  
***(by hundreds of users) SINCE 1993:***



## The Intelligent Choice

### When You're Serious About SBIR

- **we** make the investments required to **stay up-to-date**
- very public, highly-visible, transparent, **top professional reputation**  
(*seminars, conference presentations, Web sites, newsletters, etc.*)
- bring **innovative tools & unique resources** to SBIR
- bring **ALL of the tools needed for full support**:
  - real C-level executive experience ( *@ several technology firms*)
  - years of hands-on research & federal marketing experience
  - extensive R&D project planning & management expertise
- offer the **only true proposal professional** in the SBIR business  
(*APMP = ongoing training, publications, certification, code of ethics, etc.*)
- **only** provider in the industry to **offer 100% satisfaction guarantees**

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## When You're Serious About SBIR

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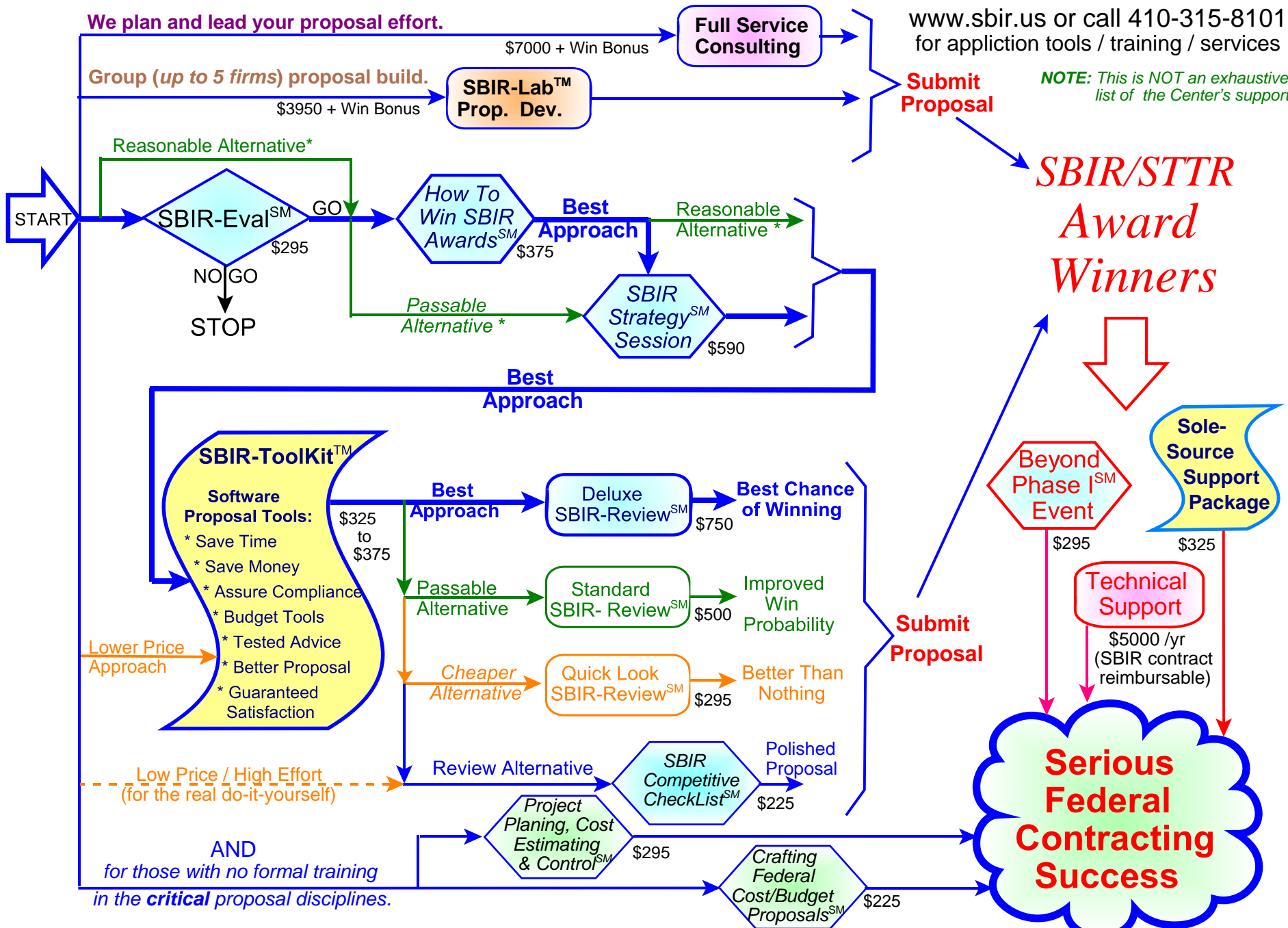
# Intelligent Pursuit Alternatives

<typical client spends under \$2000 for all the help they can stand >

## SBIR Resource Center<sup>(R)</sup> (when you're serious)

www.sbir.us or call 410-315-8101  
for application tools / training / services

**Submit Proposal** *NOTE: This is NOT an exhaustive list of the Center's supports.*



\* How To Win training and Strategy Sessions are reasonable alternatives for each other (best to employ both)