Setting the Path Early

By Richard Powers

Continuing our series about the changing defense electronics industry, we will tackle the earliest industry phase, competitive pre-proposal and proposal positioning to win and execute. While the saying, "first you must win," is an absolute truth, it's also important to recognize that winning and being able to execute within your bid cost and schedule is the challenge. We will examine some of the feedback as to why programs get into trouble because of decisions made long before the RFP hits the street. Obviously, a discussion about the government's process to create an RFP is a much-needed topic, but we are still accumulating information from you – government and industry – on that subject.

A Business Development 101 class will tell you the proposal phase must start long before the RFP is issued, perhaps a year or two in advance of the RFP, if you want to win. Many of us have seen someone come running in with a draft RFP found on the web wanting to bid it because it "fits us perfectly" and "we can do this." True, perhaps, but the realist in the room has to break the news to the excited individual that he is a year or two too late. The time to start is well before the draft RFP is even written, working with the customer community to create something that meets operational needs but also fits within their budget. This requires regular interactions, bringing trade studies or assisting in the analysis of alternatives to find an achievable, affordable solution. Of course, you also want to ensure this favors your capabilities but your competitors (those truly in the race) are doing the same thing. Nevertheless, starting early and having frequent technical and programmatic interaction is the only way to win and ensure the bid is executable; gladhanding visits are not enough.

According to your feedback for this column, here is where we also plant the seeds of program execution disaster: not doing rigorous work to perform real trades and assess relative costs of various solutions, instead just telling the customer what we think he wants to hear. Feedback says:

- "We start late and don't do AoAs (Analysis of Alternatives), so we are quickly locked into a solution that may not be executable. We don't know what 'good enough' is to satisfy the RFP."
- "Bid and Proposal money is always tight, and we wait until the RFP is near to start spending."
- "Staffing, specifically qualified people for the particular proposal, comes late in the process."
- "We are not willing to walk away from what becomes a losing situation and instead spend the money for something we can win."

The last comment is interesting in that stories of companies starting early and perhaps doing all the right BD process steps – spending as much as $10 million to chase a big program – end up losing badly and being told so, politely but firmly, in the debrief, or worse, in response to a protest. Stretching to enter an adjacent market is necessary to grow, but you must also listen to the customer community feedback along the journey, however subtle, and get out if probability of win is going down below your acceptable threshold, regardless of the sunk cost. Notice the word "community." Often, a loss stems from focusing on just one or two people in the customer's organization (usually the ones who always take our call) and not get a broad enough perspective from more of the people and organizations involved in a proposal evaluation. Feedback also says the impact to company morale is serious, because other product lines suffered from lack of investment to fund this big proposal. Glossing over it by saying "they did not understand our proposal," with the implication that the customer was not smart enough to see your brilliance, is not learning from your mistakes. Every organization seems to have a story that sounds like this.

Shifting our discussion to a win that goes bad in execution, often a root cause is the capture and proposal process started late. Lack of tradeoffs to arrive at a workable solution is a major feedback theme. A good proposal writing team of "repair specialists," using engineers who did not do the design, can take a poor design and poorly written red team volume, and turn it into a winning proposal. However, this does not make it executable. Often, this kind of proposal is priced at the "price to win" figure set by Business Development and outside consultants, and the cost rationale is written to fit the bid price.

Cost rationale is highly flexible, and reasonable rationales can be built from history and scaled "similar to" examples that are cherry picked for each LRU and WBS element [Line-Replaceable Unit and Work Breakdown Schedule] to get to a price to win. This is done without any deliberate intent to deceive or

get around TINA [Truth in Negotiation] requirements. People can legitimately cite various histories and sources for reasonable bids that can differ widely, depending on one's point of view, experience, subjective reading of requirements, and risk tolerance. The key factor is ultimately risk tolerance. While one would like to be able to bid everything with low risk, competitive pressure, especially price to win, dictates that one take risks. The question is: do you really know your risks? In other words, how much risk is too much, and do you know when you've crossed that very gray threshold?

Feedback here is consistent: A culture of openness about risk is critical, and if that culture is lacking, or even suppressed, bad history is likely to repeat. Everyone needs to have a voice in creating an honest technical and programmatic risks and opportunities register, with realistic probabilities, as well as cost and schedule impacts. While consensus may be impossible, the various points of view should be recorded along with rationale for choosing particular paths. Dissenting opinions should not be discarded; they must be shared with management and should be held for future reference to assist in early identification of problems and potential solutions. Senior management needs to understand the risks, not just the ones filtered by the people charged with winning the program, and make informed decisions as to price, their risk tolerance, and any provisioning for absorbing or reducing some of the risk.

Suggested solutions from our respondents include the obvious advice of starting early and extend to:

- Require an AoA, including ROM costs, with independent reviews, well in advanced of beginning the proposal.
- Require, if possible, two cost estimates independently arrived at for the proposed solution – one perhaps based on metrics and the other on "similar-to."
- Require, if possible, when "similar-to" estimating is used that it is based on a program or closely related programs that are truly similar-to what is being bid and avoid cherry-picking rationale from all across the enterprise.
- Improve and enforce the collection of performance metrics for every function across a related set of products; keeping rolling averages to ensure the data is current and relevant to derive good cost bid metrics.
- Establish a clear definition of your organization's "standard" risk tolerance for CP and FP bids and enforce rigor and consistency in developing risks and opportunities registers, including recording dissenting opinions.
- If a more aggressive bid is needed to win, ensure management is fully aware of the risks and has the opportunity to provision for these in a manner appropriate to the situation.
- Management: follow through on your commitments to provide provisions to mitigate or reduce risk.
- Listen to your naysayers and attempt to address their concerns without damaging your chance to win; easier said than done, but the naysayers are often trying to be helpful (so don't shoot the messenger).

We also heard interesting feedback about the need for shoring up an organization's traditional, repeated weaknesses, whatever they are, by recognizing the cultural source of that weakness and providing extra attention. One person cited, as an example, that mission equipment was addressed in far more detail than test planning and test equipment engineering requirements. This essentially kicks the "testing can" down the road to be addressed after program PDR or CDR, resulting in significant underbidding and large schedule impacts. In this example the cultural problem was that the organization did not value test engineering as much as mission equipment engineering, and the people providing the test equipment engineering were seen as (and as a result were) less capable than those doing the mission equipment engineering. In competing organizations, it was subsequently learned, test engineering was highly valued and outcomes were vastly different.

Our Approach

We solicit your individual, private thoughts about this topic for future columns, or on any topic of interest to improve the performance of our community, which can be submitted to the author at richard.l.powers08@gmail.com. We commit to deep background anonymity: I will pool your comments with others, and any identifying information will be removed. Government and corporate entities that wish to contribute their input in writing or via interview are most welcome and will be acknowledged and quoted only if they wish; otherwise information will be treated as deep background.

About the Author: ***Richard L. Powers, MSEE***, joined Sanders Associates in Nashua, NH in 1978, serving in various EW and SIGINT engineering, business development, and general management roles, retiring from BAE Systems in 2021. Rich had the distinct opportunity at Sanders/BAE Systems to work in a variety of technologies and systems spanning from acoustic to UV, and he helped pioneer EW for low observable aircraft in the early 1980s. He ran up a 90% win rate as a capture leader and proposal repairman. He then led the L3Harris Ground EW business until retirement in 2023. He joined Aerospace BD (www.aerospacebd.com) as a consulting engineer in 2024 and was appointed CTO in 2025. Aerospace BD provides a broad range of growth-oriented consulting services, including for pre-proposal and proposal activities. You can contact Rich with questions, ideas and comments via e-mail at richard.l.powers08@gmail.com.