The Federal Government relies on contractors to do its work. It cannot collect taxes, conduct a census, answer questions about Social Security, enforce the laws, react to pandemics or natural disasters or attacks on the homeland, administer foreign aid, develop information technology or weapon systems, or even make war without help from contractors. So, the contracting system is crucially important and must be responsive and effective. Yet the contracting system gets more rule-bound and clunkier every year, clinging to old, time-consuming, timeworn, and tiresome practices despite ever more desperate calls for process innovation. Which brings us to an upcoming National Aeronautics and Space Administration Langley Research Center services acquisition.

The NASA Langley RSES Acquisition

NASA Langley studies aviation, the Earth’s atmosphere, and space exploration. It relies heavily on contractors and is preparing to release the final Request for Proposals for an eight-year contract for research, science, and engineering services—the RSES acquisition. NASA published a request for information at SAM.gov in April 2021, followed by updates in April, July, August, September, October, November, and December 2021. It published a description of its acquisition “strategy” in March of this year, along with a 112-page draft RFP, which came with an additional 94-page “Performance Work Statement” (PWS), a list of 87 additional documents applicable to the PWS, and a 56-page Contract Data Requirements List, among other things. NASA invited comments on the draft RFP, which were due on April 22, 2022, and plans to issue a final RFP in May 2022 for a firm-fixed-price (FFP)/cost-plus-award-fee (CPAF)/cost-plus-fixed-fee (CPFF) contract that will include an indefinite-delivery, indefinite-quantity (IDIQ) line item and contract extension options. The SAM.gov Notice ID is 80LARC22R0003. The firm-fixed-price will be paid for a 90-day phase-in period. The actual contract work will be performed under either CPAF or CPFF terms. The procurement will be set aside for small businesses, and the size standard is 1,500 employees.
Here is how the draft RFP cover letter describes the scope of the prospective contract:

The principle purpose of this requirement is to provide specialized research, science, and engineering services supporting the 15 technical discipline areas as described in Exhibit A—Performance Work Statement (PWS). The work encompasses the full range of Technology Readiness Level from fundamental research through flight rated hardware design/development. The requirements may depend on specialized skills of a single individual or multi-disciplinary team of individuals; or close integration with tasks performed by NASA personnel, other contractor staff, and/or other Government agency personnel. As such, the contract requires an agile, diverse, integrated, and experienced workforce. Work will include cooperative activities with other contractors, NASA Centers, and Federal Agencies and provide access to specialized subject matter experts and expertise, domestically and internationally, in industry and academia across all technical discipline areas.

According to Subsection 2.1 of the PWS:

Due to the dynamic nature of research and development, the contract will experience variations in workload, and offeror [sic] shall be able to staff up and staff down quickly to adapt to changing missions, requirements, priorities, workload, attrition, and funding fluctuations to meet Government requirements without adversely affecting ongoing work.

In short, RSES will be a bodyshop acquisition—a high-tech temp service—that will entail some vaguely defined managerial duties. It will be a do-what-we-tell-you-to-do-when-we-tell-you-to-do-it job. Work will be assigned and managed through “technical direction.” See draft RFP Section G, Contract Administration Data, Subsection G.7, Technical Direction Notices (TDNs). The key to success and award fee will be timely and acceptable responses to ad hoc demands for people to perform various short and long-term work assignments.

The Performance Work Statement (PWS)

The PWS describes 15 mission areas—fields of endeavor in which the contractor will be required to do work, each of which is comprised of subfields. For example, mission area 4.4, Avionics Systems, is comprised of 4.4.1, Avionics Systems, and 4.4.2, Subsystems and Avionics Tools, Models, and Analyses. Each of those is further subdivided; 4.4.1, Avionics Systems, includes 4.4.1.1., Aircraft Avionics Systems, which is broken down into eight smaller components.

The PWS is a general description of various kinds of work. It does not specify actual tasks or require results in clear, specific, and objective terms with measurable outcomes, which is why calling it a PWS is either just titular compliance with the FAR or an indication of the agency’s confusion. We suspect it is the former. See the definition of “performance work statement” in Federal Acquisition Regulation 2.101, as well as FAR 37.602, “Performance work statement.”

Given that actual work will be specified in technical direction, it seems overkill to write a 94-page work statement with a list of 87 reference documents for a CPAF contract with extension options. Contractually, a short scope section followed by “The Contractor shall perform as directed” would serve just as well. The chosen contractor will gladly do whatever it is asked to do and more for award fee, a good CPARS rating, and the exercise of options, unless NASA Langley turns out to be a lousy customer.

The Evaluation Factors For Award—The Mission Suitability Evaluation Factor

The draft RFP describes the source selection evaluation factors for award in Section M, pages 106–112. Draft RFP Subsection M.5, Evaluation Factors and Relative Importance, states that there
are three evaluation factors—Mission Suitability, Past Performance, and Cost/Price—and that they are equally important. (We are surprised that experience, which is not the same as past performance, is not a factor.) In what follows we will focus on Mission Suitability.

Draft RFP Subsection M.6, *Technical/Mission Suitability Proposal (Factor 1)*, paragraph (a) explains how NASA will evaluate mission suitability in the RSES procurement as follows:

In accordance with FAR Subpart 15.3 and [NASA FAR Supplement] Subpart 1815.3, the information provided in this volume will be evaluated to assess the offeror’s demonstrated understanding of the Mission Suitability requirements and approach for accomplishing those requirements, including ability to perform as proposed. A lack of resource realism may adversely affect the offeror's Mission Suitability score and result in cost realism adjustments under the Cost factor. The Government will validate the consistency between all proposal volumes and any inconsistencies identified may indicate a lack of understanding and adversely impact the offeror's adjectival rating(s) and score. Only that information provided within the proposal will be evaluated; any reference to previously submitted information, if any, will be considered only to the extent the information is resubmitted as part of the proposal. Information incorporated by reference will not be considered or evaluated.

So, “mission suitability” refers to (1) “demonstrated understanding (whatever that means) of the requirements,” (2) “approach,” (whatever that means), and (3) “ability to perform.”

Subsection M.6 paragraph (b) then goes on to state:

The Government will evaluate the Offeror’s Mission Suitability based on its approach to meet the requirements in L.21(f), as outlined below:

(1) **SUBFACTOR 1: Approach for Managing the Contract (MGMT)**
   - MGMT 1: Integrated Management Approach
   - MGMT 2: Integrated Staffing Approach
   - MGMT 3: Key Positions
   - MGMT 4: Approach to Improve Diversity, Equity, Inclusion and Accessibility (DEIA)

(2) **SUBFACTOR 2: Understanding the Requirement and Technical Approach (URTA)**
   - URTA 1: Technical and Innovation

The foregoing is all the draft RFP has to say about the mission suitability factor. We hope it is clearer to our readers than it is to us.

Evaluation factors are attributes of offerors and their offers that are valuable because they will contribute to the pursuit and achievement of the Government's acquisition objectives. A description of an evaluation factor should include descriptions of two components: (1) the name and description of the thing to be evaluated—the object of evaluation, and (2) the name and description of the characteristic, feature, quality, or property of the object to which a value will be attributed if, and to the degree that, the attribute is present. If the evaluation factor is “soundness of approach,” then approach (whatever that is) is the object of evaluation and soundness (whatever it is) is the attribute of interest. A well-written RFP Section M makes the object-attribute structure clear and provides a clear description of each object and each attribute.

We think that in NASA's draft RFP “mission suitability” should be read as a compound noun: *mission-suitability*. If that is correct, then it is the second of the two evaluation factor components—the attribute of interest. That would raise the question: What object must be mission-suitable? The offeror? The offer? Something else?
The Proposal Preparation Instructions

Draft RFP Section L contains instructions, conditions, and notices to offerors. Subsection L.21, Instructions for Volume 1—Technical Proposal—Mission Suitability (Factor 1), is two and one-half pages long. Paragraph (b) states:

The proposal shall be specific, detailed, and complete to clearly and fully demonstrate the offeror's understanding of the Mission Suitability requirements and approach to effectively and efficiently accomplish those requirements, including full explanations of the techniques and procedures to be employed, as well as the resources necessary to perform as proposed. Stating the offeror understands and will comply with the requirements, or paraphrasing the requirements is not acceptable. In addition, statements such as “standard procedures will be employed,” or “well-known techniques will be used,” are not acceptable. Information may not be incorporated by reference.

In other words, proposals should not be like NASA’s draft RFP.

Paragraph L.21, referred to in RFP Subsection M.6(b), is about two and one-half pages long. We will quote from it only in part, just to give you a feel for the thing:

(e) Within the response to Subfactor 1 and 2 below [discussed above], identify and discuss the top 3 programmatic risks (i.e., at the Subfactor Level, for a total of 6), and the approach for mitigating/managing these risks as set forth in NFS 1815.305(a)(iv), Proposal evaluation.

(f) The offeror shall provide a detailed response to each subfactor as follows:

SUBFACTOR 1: Approach for Managing the Contract (MGMT)

MGMT 1: Integrated Management Approach: The offeror shall demonstrate its integrated approach to manage work across the proposed organizational structure and to execute the requirements of the PWS. The approach shall demonstrate the management and internal organizational structure (including Prime and all Subcontractors) and the functions of each organizational unit. The Offeror shall include an organizational chart, and explain critical relationships including, but not limited to, span of control, degree of autonomy, and lines of communication. The offeror shall address their approach and capability to manage and collaborate with external networks to perform contract requirements. This may include, but is not limited to domestic and international:

- Academic consortiums and individual institutions.
- Public and private sector institutions.
- Other industry partners

MGMT 2: Integrated Staffing Approach: The offeror shall demonstrate a staffing approach that integrates technical expertise to meet the PWS requirements, including, but not limited to:

a. Approach to recruit, staff and retain a technically proficient workforce with the capabilities to perform the requirements of the PWS

b. Ability to conduct cross-disciplinary and leading-edge research at all levels, from basic through applied, in all areas of interest to [Langley Research Center] and NASA including but not limited to, aerospace, space exploration and science.

c. Ability to rapidly assemble multiple-partner teams, subject matter experts, independent of affiliation and/or to quickly and efficiently respond to surging workload due to changing missions and requirements.

In addition, offerors must address “MGMT 3: Key Positions” and “MGMT 4: Approach to Improve Diversity, Equity, Inclusion, and Accessibility.”

The instructions continue as follows:

SUBFACTOR 2: Understanding the Requirement and Technical Approach (URTA)

1. URTA 1: Technical and Innovation: The offeror shall demonstrate its approach and commitment to
both accomplish technical requirements and drive innovation throughout the execution of this contract, including:

a. Offeror’s approach to infuse innovation into its strategy to accomplish the PWS requirements including, but not limited to:
   i. Approach to foster a culture that promotes both incremental improvements and innovation, and which challenges existing assumptions and ideas to enhance mission performance.
   ii. Approach for identifying opportunities for transformation, infusing emerging skills, capabilities, technologies and other innovations which enhance performance. These opportunities include, but are not limited to operational, process, and staffing improvements, and other novel approaches.
   iii. Approach to leveraging NASA, industry, academia, and other stakeholders to identify needs and opportunities for transformation and innovation in emerging areas of interest which advance capabilities and NASA’s research objectives.

The draft RFP does not state that the technical proposal described above is to be promissory in nature, i.e., part of an offer, and is thus to become part of the contract. It appears that the sole purpose of the technical proposal will be to provide NASA with information it wants about:

1. each offeror’s understanding of the requirements set forth in the PWS,
2. its “approach,” and
3. its ability to do the work.

Read superficially, those instructions seem to make sense. But they do not ask specific questions or request specific information, so writing a proposal will entail a certain amount of reconnaissance by fire, so to speak. Offerors will have to guess what NASA wants to know specifically. Thus, one of the great competitive challenges in the RSES procurement will be speculative analysis and interpretation of a vague solicitation.

How is the Technical Proposal (Mission Suitability Factor 1)—Volume I to be packaged for submission? draft RFP Table L-1—Summary of Proposal Submission Requirements, states that proposal pages are to be 8 1/2 by 11 inches, single-spaced, with one-inch margins all around. No particular font is specified, but it must be 12-point, with normal character spacing, neither expanded nor condensed. There must be no links or references to “outside” material.

How many pages? The Technical Proposal (Mission Suitability Factor 1) —Volume I, which must be “specific, detailed, and complete,” and “fully demonstrate the offeror’s understanding of the Mission Suitability requirements and approach to effectively and efficiently accomplish those requirements, including full explanations of the techniques and procedures to be employed, as well as the resources necessary to perform as proposed” is limited to 35 pages, about the length of a long-form essay. Writing those 35 pages will be quite a task.

You may recall that the draft RFP is 112 pages long and that the PWS is another 94 pages and comes with a list of 87 reference documents. As a general rule, a typical 8 1/2 by 11 inch single-spaced 12-point font page in MSWord contains about 550 words on average, so a 35-page proposal will contain about 19,250 words. The 112-page draft RFP contains 44,352 words, excluding the PWS. The 94-page PWS contains 35,866 words. The PWS’s 87 reference documents contains who knows how many words. The proposal writers will have to do a lot of condensing in order to be “specific, detailed, and complete” especially since the draft RFP prohibits references to outside material. No footnotes!

According to the draft RFP cover letter, NASA plans to give offerors about 60 days for proposal...
preparation. Writing a competitive and “specific, detailed, and complete” 35-page technical proposal that addresses things like how the offeror plans to “infuse innovation into its strategy” and “foster a culture that promotes both incremental improvements and innovation” based on a 112-page solicitation and a 94-page PWS is no easy feat. Offerors will have to read and analyze more than 200 pages of Government prose, develop an understanding of it, organize their thoughts about how to demonstrate their understanding of it, and write, edit, format, and publish a lot of text, all under the pressure of time and with a lot at stake. And offerors must also prepare a past performance volume and a cost/price volume.

We do not know how many businesses are able to write competitive proposals of good quality under an unforgiving deadline based on vague instructions and with little if any substantive one-on-one contact with the prospective customer beforehand. Some capable small business firms might be discouraged from competing for that very reason. Why bother? NASA plans to base its source selection decision on competing answers to an essay test from Hell. The thing comes across as a setup for an incumbent.

**The Source Selection Process**

Why is NASA, an agency known for dazzling technical achievements, using this timeworn and tiresome process of soliciting, reading, and evaluating “narrative” technical proposals for the acquisition of bodyshop services? Which of the following would be the better way to determine how well an offeror understands the requirement, has reasonable ideas about how to perform, and is likely to perform—(a) grading 35-page essays without access to the authors or (b) receiving oral presentations and engaging in question and answer sessions with the presenters?

The FAR Part 15 source selection process model that most agencies use today was developed during the late 1950s and early 1960s and has not changed much since that time. It is described at its most complex in the 10 volumes of Senate hearings about the controversial decision in the source selection for the Tactical Fighter Experimental (TFX) procurement of 1962–63, *TFX Contract Investigation: Hearings Before the Permanent Subcomm. on Investigations of the S. Comm. on Government Operations*, 88th Cong. 1st Sess., pt. 1 (1963), available via Google Books. The TFX became the F-111/FB-111, *Aardvark*.

When used for the acquisition of services the source selection process is a paper-intensive, labor-intensive, time-consuming, and costly-for-all venture in essay writing and grading. What offerors describe in their “technical” or “management” essays will likely have little if anything to do with what actually happens after award or much if any bearing on results. It is likely that within a few weeks after the award of most large service contracts most Government personnel either do not remember, never knew, or do not care about the winning technical “approach,” much less so two or three years later. That is especially true under a CPAF/CPFF contract in which the contractor will perform pursuant to ad hoc technical direction.

NASA has spent 11 months developing a bloated, vague, and confusing draft RFP, and is planning to take 6 more months to evaluate proposals and make what should be a fairly simple source selection decision. And they are not alone among federal agencies in engaging in that kind of behavior.

**The Only Route To Process Improvement: Professional Education And Training**

Why does the essay-writing contest survive? Why is NASA, of all agencies, still using it? Why is
NASA on its way to taking at least 18 months to award what is a fundamentally simple contract? And why is the Department of Defense on its way to taking forever to award a warfighter cloud services contract in a field of technology moving ahead in rapid leaps and bounds?

What we have here is an example of what social theorist Andreas Reckwitz, now Professor for Sociology at Humboldt University in Berlin, called “crises of routines.” According to his article, Toward a Theory of Social Practices: A Development in Culturalist Theorizing, 5 No. 2 EUR. J. OF SOC. THEORY 255 (2002):

Social practices are routines: routines of moving the body, of understanding and wanting, of using things, interconnected in a practice. Structure is thus nothing that exists solely in the ‘head’ or in patterns of behavior: One can find it in the routine nature of action. Social fields and institutionalized complexes—from economic organizations to the sphere of intimacy—are ‘structured’ by the routines of social practices. Yet the idea of routines necessarily implies the idea of a temporality of structure: Routinized social practices occur in the sequence of time, in repetition; social order is thus basically social reproduction. For practice theory, then, the ‘breaking’ and ‘shifting’ of structures must take place in everyday crises of routines, in constellations of interpretative interdeterminacy and of the inadequacy of knowledge with which the agent, carrying out a practice, is confronted in the face of a ‘situation’.

And what crisis is reflected in NASA’s draft RFP? What is the “situation”? It is a contracting system that is out of whack, in large measure because it sticks to inefficient and ineffective practices, practices that do not serve the Government’s purposes well, a system that resists all attempts at reform.

The essay-writing contest and other clunky contracting practices associated with the FAR Part 15 source selection process model—and that have spread to the FAR Subpart 8.4, Part 12, Part 13, and Subpart 16.505 processes—survive as social practices because, while the federal contracting workforce is staffed with many intelligent people who want to do good work, the Government has not provided them the professional education and training they need to be competent. So they cut and paste, and in so doing they routinize poor practice.

Reform “mandates” do not work. To break the tiresome and costly source selection routine, which is the routinization of suboptimal conduct, we need education. Many well-informed people believe that professional education in contracting is nonexistent and that the training being given to the contracting workforce is of very poor quality. What they believe is true. And thus, given the Government’s dependence on contracting and contractors, we may all be in serious trouble. Forget other transaction authority. Forget commercial solutions offerings. They are band-aids. Whatever merit they may have will be undermined by the routinization of incompetence. The Government needs competent people.

Innovation or, more modestly, the design of better contracting processes, takes know-how. It takes competent people, people who know not only what to do and how, but why. And where does competence come from? One of our favorite quotes is from an article written by the late Robert White (1904–2001), professor of psychology at Harvard, Motivation Reconsidered: The Concept of Competence, 66 No. 5 PSYCHOLOGICAL REV. 297–333 (1959):

As used here, competence will refer to an organism’s capacity to interact effectively with its environment. In organisms capable of but little learning, this capacity might be considered an innate attribute, but in the mammals and especially man, with their highly plastic nervous systems, fitness to interact with the environment is slowly attained through prolonged feats of learning. [Emphasis added.]

White was referring to competence in terms of a broader slice of life than professional compe-
tence, but the quote applies just as well. Competence is knowing *what*, knowing *how*, and knowing *why*. Knowing *why* is the key to process improvement, what people like to call “innovation”; it is “an understanding of the principles underlying a phenomenon.” See Garud, *On the Distinction Between Know-How, Know-Why, and Know-What*, 14 *ADVANCES IN STRATEGIC MGMT*. 81–101 (Jan. 1997). One learns *why* by studying concepts and principles and, we might add, history.

Today’s contracting environment is one of dedication to duty thwarted by complexity, confusion, sudden, urgent and sometimes overwhelming need, obsolete and inefficient practice, professional ignorance and sheer blockheadedness, adversarial legalism, and bureaucratic stall. Competence—the ability to interact effectively with such an environment—requires both formal education and individual study, broad and deep, and effective training. We have tried the Federal Acquisition Institute, the Defense Acquisition University, commercial training providers, and unstructured and half-baked on-the-job training, and they have not worked. For the sake of the mission, for the sake of us all, we must get the politicians, the political appointees, and the senior career people to understand and to act. The Government must persuade private and state colleges and universities to create undergraduate and graduate curriculums in Government Contracting, even if the Government must fund them to do it. *VJE*

**ADDENDUM**

The education we need is not how to follow the established practices but how to break out of them. By now it should be clear that the time-consuming practices described by Vern in the NASA procurement are not meeting the needs of the Federal Government. Many people blame FAR Part 15 but it doesn't require technical and management proposals—those are agency practices. Thus, the problem is an agency-level problem.

But breaking away is hard. It requires that all of the people in an agency, from top to bottom, buy into innovative and more streamlined buying techniques. And that means educating those people on different ways to conduct a procurement. It's a formidable task with no easy answer but, as Vern says, it has to be done. *RCN*