

Section L:

A. Sample Tasks (Element)

The offeror shall:

- provide a narrative (including milestone schedule) of the unique and critical aspects and requirements for conducting the hypothetical tests shown below,
- define a test team (including staffing and rationale for staffing) which would be sufficient to conduct the test, assuming double-shift operations/extended overtime to accommodate wind tunnel and arcjet. Provide labor hours required and type and quantity of Other Direct Costs (ODCs) that may be required.
- explain the offeror's approach for achieving high data quality while maintaining highest safety standards, along with the identification of key risk and a mitigation plan to minimize or eliminate the risk.

The offerors are advised that the following sample tasks are defined as typical scenarios for both the wind tunnel and arcjet. Where insufficient information exists to adequately address the above (i.e., to adequately communicate an understanding of the nature of these tests), the offeror should make appropriate assumptions about the test requirements and state those assumptions.

1. 11-ft TWT High Performance test

Typical test requirements are the use of a 6 component balance with an accuracy of 1/4% of the gauge capacity, PSI modules, AOA measurements, with sting modification or development to accommodate the test criteria.

Typically, a customer will ask for an acoustics measurement, and collection of data using 350 channels after the first test. These add on tests will necessitate changes to the model as well as to the hardware and software. Often, there is no advance notice whether these add on tests are required.

2. Arcjet: Ablation Material Characterization: (Scheduled completion date of this test is critical.)

- a. Assumption on conditions:
 - Tests in two facilities (AHF – material screening tests on 25 models with a flexible schedule. IHF will run a critical material characterization test of 15 samples, each with 5 thermocouples installed by customer and must complete all testing by 5 days from start).
 - IHF test completes all calibration runs and installs first two samples.
 - AHF just begins tests but suffers unexpected failures in the downstream heat exchanger (loss of at least two tubes in middle of package) which will require 2 days to repair. The vacuum system affects both IHF and AHF critically and the entire arcjet facility is down.
- b. In addition to providing information required by Part A above, Offerors will demonstrate how to manage repairs in AHF during the middle of a test, and to get IHF back on schedule to meet critical finish date.

Section M:

A. Sample Tests (Element)

The offeror's narrative response, including assumptions, to the requirements of the sample tests will be evaluated for a demonstrated understanding of:

- test and facility differences,
- specific technical tasks that each test requires,
- critical issues and risk management,
- staffing/resource issues,

and an approach that:

- ensures safe and efficient completion of these tests,
- promotes excellence,
- adds value to the tests,
- ensures a high quality of data.