# Program Solicitation 04-05 Answers to Submitted Questions

#### **OUESTION #1:**

FALCON Phase 1 Draft Solicitation question #32 was answered as follows regarding interacting with government labs and facilities:

"Agencies and organizations of the United States Government are discouraged from participating as members, subcontractors or otherwise as part of a contractor team responding to this FALCON BAA solicitation."

Is this answer still applicable to the FALCON Task 1, Phase II solicitation?

#### ANSWER #1:

Yes

# **QUESTION #2:**

Section 2.1.2 ECLV Operational System (ECLV-OS) Capabilities states: "accommodate a surge rate of 16 launches in 24 hours". Does the delivery of 16 ECAVS to a release point in space within the 24 hour period meet the intent of this requirement?

#### ANSWER #2:

Yes, however, offerors shall assume there will be a minimum of six launches, each with a different release point.

# **QUESTION #3:**

How much money has been appropriated for the Phase II Task I FALCON SLV effort in FY04 and how much was requested in FY05? What is the PE number for this effort?

#### ANSWER #3:

Approximately \$24 million was appropriated for Task 1 efforts (including Phase I and II) for FY04, about \$35 million requested for FY05. However, the government intends to use some of the appropriated funds for government furnished equipment, facilities and test support.

#### **OUESTION #4:**

Section 2.1.2 of the BAA lists the ECAV weight as 2000 lbm. The generic ECAV data lists another number. Can you tell me which one is correct?

#### ANSWER #4:

The ECLV-OS should meet the capability of launching a minimum 2000 lbm ECAV. 2000 lbm is an objective for the ECAV designers. Weight growth and its subsequent effects, including but not limited to structural and performance, is a possible risk reduction element for the Risk Reduction Roadmap (Section 3.3.1).

# **OUESTION #5:**

The Phase II Statement of Objectives states that System, Preliminary, and Critical Design Reviews should be conducted. Will the form and content of these Reviews be in accordance with Mil Standards or is their form and content to be defined specifically by DARPA and/or the Performer?

# ANSWER #5:

The offeror should propose the overall form and content of reviews, with Minimum Accomplishment Criteria for PDR in section 3.7. Mil Standards may be used.

## **QUESTION #6:**

The Volume 2 – FAR Based Cost Proposal instructions require cost support data be provided for each significant team member. This support data could potentially include information which a team member may consider proprietary, such as forward pricing rates and factors. Does the Government have a preferred method for submission and receipt of this data?

# ANSWER #6:

Proprietary cost information from team members may be submitted separately to DARPA following the Administrative Instructions in sections 4.4.

### **OUESTION #7:**

Will a Word (.doc) file of the proposed model OTA agreement be posted on the DARPA website? (Rationale for question: We have to provide a copy back to you for the Cost Proposal with changes, but currently only a pdf is available.)

#### ANSWER #7:

A Word (.doc) file of the proposed model OTA agreement has been posted on the DARPA website: http://www.darpa.mil/baa/#tto.

# **QUESTION #8:**

Page 55, Attachment 3, Letter B – Annual Program Plan Document.

This paragraph states that the Annual Program Plan and the Annual Site Review are described in Article III, Section B. We could not locate Article III, Section B, nor could we locate a description of the Annual Program Plan and Annual Site Review in another section of the document. Please provide a description of the Annual Program Plan and Annual Site Review.

#### ANSWER #8:

Disregard Attachment 3, Letter B. An Annual Program Plan and Site Review are not part of this program.

#### **OUESTION #9:**

Please Define CONUS as used in this Program Solicitation. Does CONUS refer to the 48 contiguous states or to all US controlled territory? Please confirm that the answer to question #53 from "Responses to FALCON Draft Solicitation Questions" from Phase I is still applicable with regards to OCONUS operations. Please confirm that a concept that proposes the use of OCONUS US-controlled territory or an OCONUS operational base is compliant with the solicitation.

# ANSWER #9:

For purposes of the FALCON program, CONUS is defined as meaning within the 48 contiguous states. Offerors are free to include options for using OCONUS U. S. bases in their proposals, but must meet or exceed ECLV-OS objectives in section 2.1.2.

# OUESTION #10:

In Section 2.1.1, the orbital insertion accuracy for the SLV is listed as +/- 25 km. Does this tolerance apply to just the insertion apsis, both the insertion and non-insertion apses, or to the semi-major axis?

## ANSWER #10:

The SSLV reference orbit tolerance is +/- 13.5 nm at perigee and apogee.

# QUESTION #11:

There appears to be a disconnect between the requirement to launch a payload of 1,000 pounds to a 100nm, due east orbit from 28.5 degrees north latitude and the requirement to launch a payload of 470 lbm into a 100 nm sun-synchronous orbit from VAFB. (reference section 2.1.1, page 5). Please confirm that the referenced altitudes and payload masses are correct for both of these cases.

# ANSWER #11:

The 1000 lbm to 100 nm, due east orbit from 28.5 degrees North Latitude is the baseline objective. Additionally, the 470 lbm to 100 nm sun-synchronous orbit from VAFB is desired.

### **OUESTION #12:**

The Program Solicitation does not define the contract type (Firm-Fixed-Price vs. Cost-Plus) to be used for the FAR-based response. Please define the required contract type or confirm that the contract type can be determined by the Proposer.

#### ANSWER #12:

The Government anticipates a Fixed Price, Variable Output type contract for both the FAR-based proposal and OT Agreement.

# QUESTION #13:

Section 4.2 prescribes an outline for Volume 1 where outline sections 2 through 6 are limited to 80 pages. Section 4.2.1.4 Technical Approach, Process and Schedule refers to section 5.a and indicates that this portion of the outline includes the WBS, TDD and IMS. Section 4.4.1, Volume 1 also indicates that the TDD and IMS be included in Volume 1. It also indicates that the TDD and IMS and not included in the page limitation.

Section 4.2.2 prescribes that Volume 2 also include the TDD and IMS, although Section 4.4.1, Volume 2 does not further indicate the inclusion of the TDD and IMS in Volume 2.

Does the Government desire the complete TDD and IMS in both Volume 1 and 2?

#### ANSWER #13:

Yes

### **OUESTION #14:**

Can you please provide the definition of the word "variable" with respect to its usage in Attachment 9, under the "Recurring Operations Cost" section of the spreadsheet?

#### ANSWER #14:

Fixed costs are those expenditures required regardless of the actual launches ("standing army"). Variable costs are those incurred only when a launch occurs (i. e. consumables, expendable hardware, range support, flight analysis, etc).

# QUESTION #15:

SSLV-DS PDR may be conducted earlier if that better suits the Offeror's schedule. If the contractor proposes an earlier date, can they proceed with post PDR activities?

#### ANSWER #15

Yes, assuming the government accepts the PDR milestone deliverables.

#### **OUESTION #16:**

Where is the funding for Volume 4 submittal coming from? Is it part of the Phase 2, Task 1 budget?

#### ANSWER #16:

Funds currently allocated to GFE would be applied to this option.

### **OUESTION #17:**

In Figure 2.1 there are no specific dates for critical milestones such as ATP and finalization of Phase II. Is each contractor given leeway to define specific dates for these milestones?

## ANSWER #17:

Offerors should assume August 1, 2004 as an approximate ATP date. Finalization is 36 months after ATP.

#### OUESTION #18:

Section 2.1.1 "Launch satellite within 24 hours from alert status."

- A. Is this meant to be different from the ECLV-OS alert-to-launch requirement of 2 hours in Section 2.1.2?
- B. Also, does this mean that the system must maintain a hold status of up to 24 hours prior to launch?

# ANSWER #18:

- A. Yes
- B. No alert status hold duration capability is defined. The offeror should define the hold duration capability of their concept.

#### **OUESTION #19:**

Section 3.0, Phase II Statement of Objectives, states that one of the primary objectives is to "develop through critical design a demonstration system enabling an operationally responsive global reach capability, that when integrated with an ECAV meets the objectives defined in Section 2.1.2.

- A. The objectives given in Section 2.1.2 are for an operational ECLV. Does this indicate that the demonstration system should have at least the same performance capability as the operational system, or just that it should enable such capability?
- B. Is it the intent of this statement to infer that the ECLV-DS will launch an ECAV-DS to global ranges?
- C. If so, what is the definition of global range that should be assumed for this purpose? ANSWER #19:
  - A. It should enable the capability. Section 4.2.1.3, ECLV-DS: "...identify the degree of commonality between the demonstration design and the operational system design upon which it is based. ... The Offeror should discuss the physical and functional attributes of the Operational System that this demonstration will exhibit and also those aspects that will require further development and validation outside the current FALCON program."
  - B. The ECLV-DS flight path has not been fixed. It is for the offerors to propose a meaningful demonstration of the performance capability.
  - C. Global range includes all points on the earth outside CONUS.

### **OUESTION #20:**

The generic ECAV definition package mentions CAV conditions (reentry altitude, velocity and insertion angle) as well as an ECAV mission set (CCAFS to Woomera, Australia).

- A. Are we to assume the CAV conditions shown are launch vehicle separation conditions?
- B. Should we assume that the ECLV-DS is to demonstrate specifically the ECAV reentry conditions rather than the mission set?

#### ANSWER #20:

- A. No, they are CAV re-entry conditions.
- B. Yes.

#### OUESTION #21:

Is an ECAV/ECLV test from Vandenberg to Woomera in line with program objectives? ANSWER #21:

Yes

### **OUESTION #22:**

Is a Sun Synchronous satellite insertion mission acceptable for the SSLV-DS demonstration flight at the end of Phase II?

# ANSWER #22:

Yes.

# QUESTION #23:

Does Award Date = Authority to Proceed Date (ATP)?

#### ANSWER #23:

Yes

### **OUESTION #24:**

Section 3.7 indicates that SSLV-PDR may be conducted earlier than ATP+10M if that better suits the offeror's schedule. How will the government handle the possible downselect process if contractors have different PDR dates? Will an earlier PDR date require a contractor to pause while a downselect decision is made at ATP+10M?

## ANSWER #24:

An earlier PDR will not require a contractor to pause to wait for downselect. See Answer #14.

#### **QUESTION #25:**

For Table 4.2a, do subcontractor labor hours need to be included, or can they be listed separately? ANSWER #25:

Table 4.2a only accounts for dollars and provides a column for subcontractor dollars. Subcontractor labor hours are accounted for in Table 4.2b.

### **OUESTION #26**:

Is it acceptable for the cost detail (Table 4.2a), the IMS, and the TDD to go DEEPER than Level 3 in certain areas? Also, do they need to have the same level of detail (e.g. for a specific task group, Level 4 detail in the IMS, but costs only given at Level 3)?

#### ANSWER #26:

The cost detail, IMS and TDD can certainly go deeper than level 3. The Government desires insight to cost information as well as task descriptions and task schedule at least to level 3 of the WBS. If a certain task is provided at a level greater than 3 in the TDD, the cost detail is not required to be broken down to this greater level of the WBS.

# QUESTION #27:

In Table 4.2b is the line item "% of effort subcontracted" to be calculated using dollars or hours?

o If dollars, should only direct labor be included, or indirect costs (e.g. Overhead) as well?

#### ANSWER #27:

This line item should be calculated in terms of labor hours.

### **QUESTION #28:**

In page 6/66, section 2.1.2, there is reference to "Global range" for ECAV. In Phase I, burnout conditions were provided for the SLV as the basis of requirements. Further, no burnout conditions are provided in the solicitation.

#### ANSWER #28:

The conditions were actually re-entry and are the same as those provided in Phase 1, which is identical to the generic ECAV data mentioned in section 2.1.2 of the solicitation.

## **OUESTION #29:**

Throughout Phase I, the government has asked the contractors to calculate and provide average unit cost (AUC) for a quantity of 200 units; 20 units per year for 10 years. Does the contractor assume an average flight rate of 20 vehicles per year for 10 years or should the contractor submit cost data to reflect the AUC of 5 and 20 launches for the low flight rate and high flight rate respectively?

# ANSWER #29:

The offerors must fill out both the low flight rate and high flight rate spreadsheets in Attachment 9. Reference 2.1.1 for the SSLV-OS capabilities.

#### **OUESTION #30:**

In page 30/66, section 4.4.2, line spacing is not specified. Please provide minimum acceptable line spacing i.e. single spaced, 1.5 spaced, double spaced, etc.

#### ANSWER #30:

Minimum acceptable line spacing is single spaced.

## OUESTION #31:

What is the definition of the acronym CPA?

#### ANSWER #31:

Critical Path Analysis.

# **QUESTION #32:**

The spreadsheet provided for FALCON Operations Cost (FALCONOpsCOST(Attach9).xls) contains a formula to calculate "TOTAL LCC" in column P. For subsystem costs (rows 8-26), the formula adds the RDT&E costs to the Average Unit Cost times the number of launches specified in cell C2. However, the number of launches pre-entered in cell C2 for both High and Low Flight Rates is the anticipated number of launches per year (20 and 5, respectively), not the total number of launches expected over the life cycle. Therefore, the formula for TOTAL LCC includes only the cost of one year's worth of launches rather than the expected 10 year operational life cycle. This also impacts the calculation of Total Operations Cost for n flights in cell P54.

Is this what is desired by the government, or should the number of launches be adjusted to 200 for High Flight Rate and 50 for Low Flight Rate to reflect a 10 year life cycle? ANSWER #32:

The number of launches should be adjusted to reflect a 10 year life cycle in cell P56 on each sheet. A revised Attachment 9 has been put on the DARPA solicitations website: <a href="http://www.darpa.mil/baa/#tto">http://www.darpa.mil/baa/#tto</a>.