

**C-2A Operational Flight Trainer (OFT) Service Life Extension Program (SLEP) Industry Day
Questions and Answers from June 18, 2015**

This contract action is being conducted pursuant to the procedures at FAR Subpart 16.505 under the auspices of Training Systems Contract III (TSC III) LOT II, a Naval Air Warfare Center Training Systems Division (NAWCTSD) Multiple Award Contract (MAC). Therefore, pursuant to FAR Subpart 5.202(a)(6) and 16.505(a)(1), this contract action is exempt from synopsis requirements. However, to increase transparency of NAWCTSD requirements and increase opportunities for subcontracting, notice of this opportunity is being provided. Only TSC III LOT II Prime Contractors (contractors previously awarded a contract within this vehicle) are considered an interested party in this contract action. All inquiries regarding participation as a subcontractor should be submitted to a Prime Contractor for consideration. Any documents available for this contract action, including but not limited to Solicitations, Statements of Work (SOW), and Specifications will be made available only to qualifying Prime Contractors.

The following questions and answers apply to the C-2A OFT SLEP Industry Day Questions and Answers from the June 18, 2015 one on one discussions.

FACILITIES/DOOR/MOVING

1. Who is responsible for dermo-ing parts of the trainer the contractor is not taking with them to their site?
 - See SOW 3.2.14.5 Trainer Device Excess Equipment Disposal
2. If electrical upgrade is needed, who performs it?
 - See SOW 3.2.14.3.1 Electrical and Mechanical
3. Will the temporary wall in front of the Roll up door stay down?
 - The Government will remove the temporary wall from SP-313 to move the trainer. It will stay down until RFT of S/N-2 in Norfolk.
4. Is the contractor responsible for putting the temporary wall down/up?
 - No. The Government will replace the wall after RFT of S/N-2 in Norfolk.
5. What parts, cabinets, or spares can be left in San Diego?
 - The answer to this question is dependent upon the Offeror's proposed amount of reuse and refurbished equipment. A decision will be made at the IPT level as to what equipment or items will remain on site after trainer removal.
6. Will the exterior overhead door in the SIM bay at Norfolk be functional prior to installation of the upgraded device, or will this need to be included in the contractor's bid?
 - Highbay rollup door is currently functional
7. Are the Foreign Object Damage (FOD) procedures available for the flight line areas that will be accessed during trainer removal and installation?
 - Flight line will not be accessed during trainer removal and installation
8. Will the contractor be responsible for removal and re-installation of the exterior access panel at North Island, or will this access be provided by the base CE?
 - Govt response: Believe this is reference to the internal wall in Norfolk in SP-313. The govt will be responsible for removal and reinstallation of the wall.
9. What condition will SP 313 be in after S/N-1 is moved?
 - The trainer room will be left empty, clean and free of debris.

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10. Is the contractor moving S/N-1 to temporary location?
 - No. The Government will move S/N-1 to its temporary location.
11. When is S/N-1 moving?
 - To be determined based off Fleet requirements and needs
12. How much time is between S/N-1 move to temporary location and Take down of S/N-2?
 - A minimum of 30 days.
13. Can the government re-emphasize facility constraints at both locations?
 - Facility structure will not be modified as result of the modification effort

VISUAL

14. Are we allowed to modify the large Instructor Operator Station (IOS) hut structure as necessary to allow for a large Field-of-View (FOV)?
 - Yes.
15. Would the Government consider a non-collimated display?
 - No, a non-collimated display will not meet the requirements
16. Is there a Night Vision Goggles (NVG) requirement for the light tight cockpit?
 - No.
17. What is the Navy Aviation Simulation Master Plan (NASMP) Portable Source Initiative (NPSI) data based on?
 - NPSI is based upon a variety of data source inputs from several programs.
18. What are the sources for the NPSI data?
 - NPSI sources include models, imagery, terrain, features, and material classification. For more info, refer to the NPSI data preparation standard:
<http://www.dtic.mil/dtic/tr/fulltext/u2/a570726.pdf>
19. What NPSI data are available?
 - NPSI data are available for all required gaming areas airfields and models except for Al Minhad AB and the C-2A NP2000 8-blade ownership and companion model
20. SOW 3.2.1.2.3 Visual Database Development

The requirement is to update the Visual Database and a stated requirement during Industry Day of not degrading the trainer. Since the airfields will have updated runway alignments due to magnetic declination. Is it the Government's intention that the contractor will update the Navigation Aid (NavAid) databases on the IOS, host, and CNS/ATM? Does the Government also intend for the contractor to update all approach plates on the IOS which will have been affected? If so, will the Government provide cards for the CNS/ATM to update the NavAids database?

- See Real-World airfield and generic airfields requirements in the SPEC
21. SOW 3.2.1.2.3 Visual Database Development and 3.2.1.3.2 Weather Radar Software Obsolescence

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The Government has stated the Weather Radar update will be an option on this contract. There is currently a direct correlation between the storm cells on the Weather Radar and on the Out-The-Window (OTW). Additionally, the Weather Radar contains a terrain database which currently correlates to the OTW. If the Weather Radar option is not exercised, this will cause a degradation of the training devices. Will the Government release the contractor from the correlation requirement if the option is not awarded?

- The Government understands that if the Weather Rader Option is not exercised, the OTW may not match the Weather Radar display.

22. SOW 3.2.1.2.3 Visual Database Development

The 2F168 devices have an Enhanced Ground Proximity Warning System (EGPWS) on them with the database matching the OTW database. Will the Government update the EGPWS to ensure correlation between the OTW and the EGPWS?

- If the Weather Radar option is not exercised it will be the Government's responsibility to update the weather radar data to correlate with the new visual display information.

23. Of the deliverable airfields (primary and secondary) mentioned in the Performance Specification (PRF), which ones are available from the NPSI repository?

- All the deliverable airfields are available from the NPSI repository with the exception of Al Minhad AB, UAE.

24. Of the deliverable environment models mentioned in the PRF, which ones are available from the NPSI repository?

- All the moving models are available from the NPSI repository with the exception of the C-2A (8-blade) and the C-2A Ownship (8-blade). However, we do have the C-2A 4-blade model, so we expect minor modifications in order to create the two C-2, 8-blade models.

25. With regard to section 3.1.3.14.3.3.7 (Visually performed aircraft inspections) of the PRF, how does the government envision these inspections will be trained? Are these all inspections that can be done inside the cockpit area of the aircraft or should there be a separate station where this training is performed?

- All visual performed aircraft inspections listed in the paragraph are to be done from inside the cockpit area using the Out-the-Window displays with the exception of sentence 'g' (tail shimmy) which needs to be deleted.

26. Are you married to any particular Image Generation (IG)?

- The Government does not have an opinion on subcontractors/suppliers. It is the sole responsibility of the Offeror to meet the requirement of the SOW and SPEC.

27. What's driving the cleaning requirement on the mirror? Drives solution to be glass

- DELETED FROM SPEC - 3.1.3.14.3.2.7.c Preclude rubbing-off or scratching of optical surfaces and coatings by normal cleaning with mild detergent and water and a soft cotton cloth or other easily accomplished and economical cleaning procedure.

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DATA PACKAGE

28. Can the Government provide the drawings for both devices?
 - A PDAL for both devices will be provided as Government Furnished Information (GFI).
29. Can the Government provide the Trainer Math Model Report (TMMR) for the E-2C aero model?
 - Yes
30. Can the Government provide the source code for Fail-to-Feather E-2C malfunctions in IOS so they don't have to be developed?
 - 2F110 Host source code files are available upon request for Fail to Feather malfunctions as part of GFI after contract release.
31. Can we get the source code for the host and IOS?
 - Yes. Will be provided "as is" in the SDD in the GFI data package for both devices
- Can the Government provide the source code for the Universal Auto Fidelity Test UAFT.
 - The UAFT source code is proprietary.
32. Is the HOST and IOS documentation in GFI data package?
 - Yes. Will be provided "as is" in the Software Detailed Design (SDD) in the GFI data package for both devices
33. Can we get the Facility Reports?
 - Yes.
34. Will Source code be in the data package?
 - Yes. Will be provided "as is" in the SDD in the GFI data package for both devices
35. Is the TTPRR in the data package?
 - Yes.
36. What is in the data package?
 - List of Commercial-Off-The Shelf (COTS) Manuals (included and missing)
 - Software Baseline Explanation of document changes pending from Government
 - E-2C 2F110 Trainer Criteria Report
 - E-2C 2F110 Trainer Math Model Report
 - SN-1/SN-2
 - COTS Manuals (not all COTS manuals were soft copy, only those we have as soft copy are provided)
 - Computer Resources Integrated Support Document (CRISD)/Software User's Manual (SUM)
 - Computer Software Product End Item (CSPEI) – List of Software delivered for last modification
 - Interface Design Description (IDD)
 - O&M
 - O&M Manuals
 - Maintenance Drawings
 - Parts Catalog

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- Product Drawings and Associated Lists (PDAL)
 - Tech Manual Maintenance Requirement Cards
 - Software Design Document (SDD)
 - Trainer Criteria Report (TCR)
 - Trainer Engineering Report (TER)
 - Trainer Facility Report (TFR)
 - Trainer Math Model Report (TMMR)
 - Training System Support Document (TSSD)
 - Trainer Test Procedures Results Report (TTPRR)
37. Can the Government provide the data package early?
- The Government is working to get it out as soon as possible.

AERO

38. If the control loading option is not exercised, are we responsible for meeting the SPEC requirements?
- No. If the option is not exercised, the contractor will only be held responsible to any degradation in performance from the Pre-Modification Inspection (PMI) results.
39. The C-2A Flight Test data used the Naval Flight test standards to collect it?
- Yes. Data collected in accordance with the Naval Test Pilot School Manuals.
40. What is in the data package for the Aero Model? What is the source data?
- TMMR, Auto Fidelity Test (AFT), Naval Air Training and Operating Procedures Standardization (NATOPS), as well as the SDD. Criteria data is C-2A Flight Test data and NATOPS.
41. SOW 3.2.1.7 Auto Fidelity Test (AFT) "The contractor shall update the existing C-2A Device 2F168 AFT test tool and Trainer Test Procedures and Results Report (TTPRR) to reflect the tests and criteria data agreed to during the (McAfee Device Control Modules) DCMs."
- Is it possible to replace the AFT instead of update it?
 - There is no requirement to replace the AFT. The requirement is to update the existing AFT.
 - How is the current aero model evaluated?
 - Using the AFT, TTPRR, and pilot qualitative evaluation.
42. SPEC 3.1.3.11.1.4.3 Longitudinal short period dynamics a. Period. Should this be 0.5 sec or 10 percent instead of 0.05 or 10 percent?
- Period tolerance is 0.5 seconds or 10 percent. SPEC will be updated.
43. SPEC 3.1.3.11.1.4.6 Maneuvering longitudinal stability b. Control deflection vs. airspeed. Should this be 1 degree (wheel) 0.5 inch instead of 1 degree (wheel) 0.05 inch?
- Control deflection vs. airspeed tolerance is 1 degree (wheel) 0.5 in (yoke, rudder) or 10 percent, slope same sign as criteria. SPEC will be updated

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44. SPEC 3.1.3.11.1.4.8 Dutch roll dynamics a. Period. Should this be 0.5 sec or 10 percent instead of 0.05 sec or 10 percent?
- Period tolerance is 0.5 seconds or 10 percent. SPEC will be updated.
45. What maneuvers are in the AFT?
- Maneuvers are defined in the TTPRR and AFT which will be included in the data package.
46. Does the flight test data include force coefficients in all 3 dimensions and moment coefficients about all 3 body axes?
- Flight test data includes classical flying qualities and performance data. Force and moment coefficients can be found in the TMMR included in the data package.
47. Are there any “holes” in the flight test data for any particular angle of attack, Mach number, altitude, or sideslip angle that falls within the training envelope?
- Available data will be provided “As-Is” and reviewed during the Data Consensus Meetings referenced in the Statement of Work.
48. Does flight test data exist for stall conditions?
- Yes
49. In regards to the requirement to include aeroelastic effects in the aerodynamic model, are aeroelastic effects implicitly included in the flight test force and moment data?
- The aeroelastic effects are implicitly implied.
50. Other than the typical effects on lift/drag/etc., are there any specific effects or instabilities caused by aeroelasticity that would impact training?
- No
51. In regards to the requirement to continuously compute Center of Gravity (CG) based on cargo/passenger loading, fuel quantity, and landing gear, will the data pertinent to calculating the CG be provided to the contractor (size/location of fuel tanks, landing gear specs, etc.)?
- . The NATOPS (A1-C2AHB-NFM-000), Weight and Balance Technical Manual (NA01-1B-40), and Aircraft Weight and Balance Joint Services Technical Manual (NA01-1B-50) will be provided as reference material. The NATOPS, specifically Chapters 21 and 24.3 will be the best source of information regarding weight and balance for the C-2A aircraft.
52. What are the size and location of fuel tanks for computing the CG continuously?
- Refer to the NATOPS (A1-C2AHB-NFM-000)

MISC

53. Is there a requirement to refurbish/replace gauges?
- No. Gauges were previously refurbished/replaced on previous Communication, Navigation, and Surveillance /Air Traffic Management CNS/ATM modification.
54. Can we reuse Input/Output (I/O) cards that are still supportable?
- Yes, as long as it meets SPEC requirements.
55. Could the option award dates extend the period of performance?

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- If option award is not exercised by schedule in Section B of the contract, it is possible it could affect period of performance. If options are awarded in accordance with the contract schedule, the period of performance will not be changed. However, should an option exercise be delayed, it would be the contractor's responsibility to demonstrate the impact to the schedule.
- 56. Explain the "No Initial Operational Test & Evaluation (IOT&E)" bullet in the slides
 - No NAVAIR led Initial Operational Test and Evaluation Testing needed for these devices. NAWCTSD test team will perform testing.
- 57. TRB on other programs wants docs/slides 60 days in advance, is the government OK with slides being different on the day of the event than what was submitted 60 days prior?
 - Yes.
- 58. The two I/Os differ in hardware, is the software different?
 - Yes
- 59. What level of similarity is the Government expecting? Identical hardware layouts?
 - Government is not expecting identical hardware layouts, as space constraints at each facility may require differing layouts.
- 60. Is the Government expecting any audio computer changes?
 - No.
- 61. Will there be schedule/IMS requirement (Options, assumptions, parameters)
 - Yes.
- 62. Period of performance (PoP) is 28 months on the first device?
 - The maximum PoP is 28 months on the first device
- 63. \$5.8M is the basic award for the first device?
 - Yes.
- 64. Will Trainer Equipment Change Requests (TECRs) be on separate Contract Line Item Numbers (CLINs)?
 - One CLIN will contain all TECRs
- 65. One of the TECRs indicates that the "moving aircraft function does not work" – does this indicate a lack of functionality, that the function is broken, or that the models are not currently being controlled by anything? Has it ever worked?
 - The moving aircraft function has never worked correctly; but, the TECR correction is for the moving aircraft function to operate correctly.
- 66. SOW 3.2.13.3 Maintenance Training Course. "The contractor shall prepare and conduct a 40-hour maintenance training course for the training devices, locations, and dates specified in the contract."
 - Is it possible for the Government to reword this requirement to remove the requirement for a 40-hour maintenance course? The special emphasis is to be on the visual system. This could be accomplished in much less than 40 hours.
 - Reworded to "not to exceed 40 hours"
- 67. Since the Government is requesting limited updates to the 2F168 devices will the Government require risk in all areas of design to be addressed in Section L?

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- No; however, it is the Offeror's responsibility to review Sections L&M to ensure that their proposal is in compliance.
68. Is there any testing being done on the Norfolk sim before it moves to temporary location?
- Upon completion of the Norfolk sim to the temporary location, at a minimum, the Functional Check flight Procedures will be run from NATOPS, A1-C2AHB-NFM-000 dated 15 June 2013, Chapter 10, Section 10.5 (Profile A)..
69. Can we perform PMI prior to PDR?
- Normally PMI takes place just prior to removal of the trainer. If PMI takes place prior to PDR, completion does not mean the trainer is ready to be removed. The removal will be dependent upon fleet requirements and needs.
70. What level of Computer Software (CS) is needed?
- Medium –Low- Low according to the RMF.
71. Will IGs need to be CS compliant?
- YES
72. A number of Industry Day attendees asked specific questions relating to proposing performance enhancements.
- Draft Sections L & M have not been released yet. However; when the RFP is released, the Government strongly cautions all Offerors to the C-2A request for proposal (RFP) to frame their responses to be in strict compliance with the specific requirements stated in Section L of the RFP and considering exactly how offers will be evaluated by the criteria stated in Section M. If an Offeror chooses to propose a solution that offers the Government some performance beyond the stated requirements of the SPEC, the offeror needs to clearly identify the specific measurable benefits to the Government in terms of life cycle cost benefit, reduced training risk, or meeting a known future training need.