Questions and Responses
Flight Opportunities Program Virtual Industry Day
Jan 22, 2014

Although questions were answered orally at the Virtual Industry Day, in the event of apparent conflict, this document takes precedence over any oral statements made.

1. Do you have any rough idea of what the "standard payload slot" is? 1kg, 10kg, 100kg?

Flight Opportunities Program (FOP) is looking for each contractor to propose what their standard payload slot is in terms of any dimensions (ie: mass, volume, shape, payload interfaces, etc), however, the minimum payload ability for a qualified vehicle in accordance with the Performance Work Statement (PWS) is 1 kg.

2. Are companies from IDIQ1 grandfathered into IDIQ2 in any way?

(IDIQ1 = Indefinite Delivery Indefinite Quantity Contract 1. This is considered IDIQ 2) No. This is a new competitive acquisition with new requirements.

3. What if a vehicle has multiple standard payload slots? Are we allowed to add CLIN items and do they need to be numerically separated from Full Manifest items?

The intent of this CLIN structure is to provide for economies of scale. If a vehicle has multiple standard payload slots, please reflect a separate price for each in your proposal. You may propose as many CLINs for which you have distinct prices. FOP prefers to buy individual slots, but may elect to purchase more than one or an entire manifest.

4. Did you ask Primes to respond whether it was ok to release contact info to potential subs or was it the other way around?

During Virtual Industry Day, FOP requested that registration information for each entity participating in Industry Day be released for sharing with other organizations participating. The purpose was to encourage subcontracting opportunities and teaming arrangements since only the organization's name was displayed within the WebEx™ participants list. We have released a list of attendees along with the slides from Virtual Industry Day to encourage prospective prime contractors and subcontractors to contact these organizations.

5. Is the intent of CLIN 10x to fly with a partial manifest at a lower price than a full manifest under CLIN 00x? We assumed that FOP could buy a full manifest under CLIN 00x, and only equip 1 slot if desired.

Yes, and please refer to response to question 3.

6. How should science and integration companies relate to vehicle providers in the proposal? Should there be a formal partnership, letters of support, or should proposing integration companies stay unbiased?

The contract is comprehensive and inclusive of all required services. All proposals must include flight and integration services. These can be accomplished by one or more entities, but the Government will contract with only one prime entity per proposal. The Government does not specify the arrangement between entities, but it must be legally binding. Research payloads are solicited under a separate arrangement.

7. Do the future burdened rates have to be based on already-approved DCAA-type indirect rates, or can they use estimated future indirect rates?

DCAA approved indirect rates are not required in commercial (FAR Part 12) Firm-Fixed-Price (FFP) contracts. However, DCAA approved rates can be helpful to the Government when evaluating prices. Regardless of which method is used to determine burdened rates, prices should be competitive in the commercial market.

8. Do the non-standard integration services also have to be fixed-price?

In accordance with FAR 12.207(a), commercial contracts shall be FFP. Non-standard services are defined as payload integration or flight services beyond the base proposed standard payload slot/manifest. Non-standard services can be handled two different ways: (1) common non-standard services can be included in the proposal for the base contract, while (2) unique and uncommon non-standard services can be negotiated at the task order level resulting in a FFP modification using proposed burdened rates.

9. Can we propose a fixed rate for integration services under an Other Transaction Authority (SAA type agreement) fully burdened rate without having to incur the expense of DCAA compliance?

This requirement is not an Other Transition Authority or Space Act Agreement type arrangement. This will be a commercial contract pursuant to FAR part 12.

10. Would LEO activities draw from NASA's same FOP budget line item?

Low Earth Orbit (LEO) activities are not a current requirement on this contract.

11. Is Profile 4 intended to cover a nominal suborbital mission for a reusable vehicle? (If so, needs to have a provision for parachutes or other decelerators to be deployed significantly above 0 km AGL.)

All flight profiles in the PWS are defined from the payload perspective and not the vehicle perspective. PWS, Section 5.3: Profile 3 (formerly 5.4, P4) defines freefall for the research payload, which is typically performed by payload separation at apogee. Based on industry feedback, the Government has added clarifying language to this profile for the final RFP.

12. If the expansion clause were to be used to add a flight profile later, would an added flight profile be easily applicable to a contact that is already in place under IDIQ 2, or would more extensive modification be necessary?

If the Government chooses to use the expansion clause, FOP will issue a synopsis and interested parties will be required to submit a proposal only for that new profile. Adding a profile to an existing base contract (IDIQ) will require a modification. Contractors are reminded that not all flight providers are required to perform all flight profiles.

13. In the PWS, Section 5.4: Profile 4, what qualifies as “rapid free-fall descent” ?

See response to Question 11.

14. The requirements for Qualified Vehicles suggest that only companies that have flown a vehicle in a relevant profile by the proposal due date should be applying to this RFP for an IDIQ associated with that profile. Is that an accurate interpretation?

Offerors may propose to provide one or more flight profiles. Profiles in the PWS are representative of current requirements and may not be exhaustive or mutually exclusive. FOP requires evidence of a successful flight of the proposed vehicle or family of vehicles in a relevant profile(s). This can be a test flight or a commercial flight for pay. Offerors must specify the profile(s) they are proposing, and why their experience and associated evidence is relevant to those profile(s). Please refer to Provision 52.212-2 Evaluation – Commercial Items (JAN 1999) and it’s addendum in the Draft Solicitation.

15. For this award, will IDIQ contracts be only awarded to companies that have already demonstrated the capability at the time of proposal?

Please see the response to Question 14.

16. Can you discuss the requirement in 6.1.4 under Reviews and Documents? This is a new requirement.

FOP has deleted this requirement from the final RFP. That stated, this solicitation should be considered a new effort and not an extension of the previous IDIQ.

17. Is "Controlled Vertical Ascent and Descent" meant to mean VTVL rocket platform or balloon glider?

As mentioned in the response to Question 11, all flight profiles in the PWS are defined from the payload perspective and not the vehicle perspective. If a profile is proposed, the offeror must demonstrate the relevance of their vehicle to the flight profile(s) for which they are proposing.

18. Will there be an opportunity for special service contracts as a stand alone, or are the special service contracts only available to those who are already accepted under the full flight service arrangements?

Special services are not a stand-alone requirement for this solicitation. FOP intends to award contracts to entities that can provide comprehensive services that include both flight and payload integration.

19. The statement was made that payloads must be available to payload providers 3 hours before and after flight. Is that a max or min? What if PI needs access within 1 hour or 30 minutes and vehicle and vehicle provider can provide that capability?

The three (3) hours was intended as a maximum amount of time before and after hazardous operations, but unique considerations of payload and launch vehicles will be addressed in each Manifest Requirements Document (MRD), to which the contractor has a chance to respond. Also note that the Government has reworded this requirement for simplification and clarification in the final RFP.

20. How are the researcher's mission needs incorporated into the MRD? Slides 16 and 17 omit the researchers and their mission needs. Not all payloads are identical.

Since this is a government contract which is funded by US tax-payers, NASA is considered the requiring authority. Furthermore, NASA is utilizing the advantages of FAR Part 12 for commercial services. Commercial services are defined on FAR Part 2 (definitions) as follows:

“Services of a type offered and sold competitively in substantial quantities in the commercial marketplace based on established catalog price (“Catalog price” means a price included in a

catalog, price list, schedule, or other form that is regularly maintained by the manufacturer or vendor, is either published or otherwise available for inspection by customers, and states prices at which sales are currently, or were last, made to a significant number of buyers constituting the general public ) or market prices ("Market prices" means current prices that are established in the course of ordinary trade between buyers and sellers free to bargain and that can be substantiated through competition or from sources independent of the offerors) for specific tasks performed or specific outcomes to be achieved and under standard commercial terms and conditions."

In short, NASA is limited to offer to the researchers only what is commercially available, sometimes with slight modifications, but not substantive enough to consider the services as non-commercial. In order to be generously sponsored for an FOP flight, researchers will sign a Space Act Agreement (SAA) acknowledging that NASA will make a best effort to utilize flight services that are commercially available to accommodate their research needs. Also, Contractors who will be part of this IDIQ cannot have conflicting direction, which means the final MRD as approved by NASA FOP will always be considered the final governing document from which each flight is conducted. This research is critically important, but order and consistency must be maintained.

21. How would unique mission constraints of a potential payload/experiment (launch location, launch trajectory, etc.) be considered and priced?

Unique mission constraints are addressed in the MRD, and if they generate requirements beyond those provided by a standard payload slot, should be priced as non-standard services.

22. Some payloads complement each other to address specific objectives. Once payloads are approved individually by FOP, will the integrator then be responsible for consolidating payloads on flights and manifesting the flight?

Yes, although the MRD process involves a dialogue between the Government and service provider to arrive at the best solution.

23. If IDIQ is given based on a test flight under a particular profile, does this "qualify" a vehicle for Task Orders on other flight profiles?

Each proposal must specify which flight profile they are intending to perform for this contract. If the flight vehicle's test flight can only reasonably prove that one of the flight profiles can be

performed, then they must only propose to that flight profile. In order for them to propose for another profile, they must wait until a separate test flight proves they are capable of performing the new profile and then propose either under the technology expansion or ramp-on provision of the standing solicitation.

24. For P1--most all suborbital vehicles will not be capable of attaining 100km...is this a steadfast number?

No. Please see the response to Question 14.

25. Clarifying Joel's answer re: MRDs, does that mean the campaign manager will bundle multiple payloads into a single bid document? Or bid them all separately, then aggregate onto vehicles based on the bids?

The first statement is correct. The campaign manager will work with the contractor to essentially create a manifested flight requirement and then draft an MRD which will capture the payload requirements which have been “bundled” in writing.

26. I still don't feel that this question was adequately answered: "In the PWS, Section 5.4: Profile 4, what qualifies as “rapid free-fall descent” ?" There was talk of payload separation for Profile 4 in the verbal answer, but there is no reference to payload separation for this profile in the PWS.

Please see response to Question 11.

27. PWS says, "The Government intends to periodically provide opportunities for additional contractors and/or Qualified Vehicles to be added to the Provider Pool." How often will the government provide opportunities for additional contractors and in what manner (i.e. same RFP means)?

Please see Page 29, Clause C-002 of the Draft solicitation that states that “the original solicitation, as revised, shall remain open for the life of this contract.” Furthermore, it states that “each anniversary date during the life of this contract or at any other time established via synopsis, the Government will accept proposals from new flight services providers for IDIQ contracts and proposals from existing IDIQ contractors for additional flight services.” This process, although not express, will also apply to Clause C-003.

28. So MRD and MID are agreed on between flight provider and NASA without any approval whatsoever from the payload provider?

This is not correct. The researcher reserves the right to refuse providing a payload to NASA after they are presented with the aforementioned SAA (see response to question 20). In developing the SAA, which allows the researcher's payload to be sponsored by NASA, the NASA campaign manager works carefully with each researcher to accommodate their research needs in the best way possible within the limitations of the contract.

29. You note that "Each anniversary date during the life of this contract or at any other time established via synopsis, the Government will accept proposals from new flight service providers for IDIQ contracts and proposals from existing IDIQ contractors for additional flight services." Outside of the standard annual process, how long would you anticipate it will take to move from a vehicle's first flight to an issued IDIQ, ready for Task Orders?

Please see response to question 27. Opportunities to propose services will be provided on at least an annual basis, and more frequently depending upon unmet payload requirements. Also note that it is not possible to provide a general estimate of the interval between first flight and an issued contract, as there are too many unknowns involved. It will vary with the specific conditions and payload requirements.

30. For manned rSLVs [sic], how should the integrator manage payloads that will require a human operator or interface?

In the event of a manned vehicle, the crew will manage any payloads that require human operators. The anticipated contract will not have a provision for human participants (researchers).

31. Question: is it safe to assume that if the proposer doesn't have an approved license or permit (FAA), at the time of proposal due date, it won't meet the minimum qualification?

Vendors must provide evidence of a successful flight under relevant conditions. This would typically be a test flight or a commercial flight. In either case, there should be an FAA permit, waiver, license, or similar approval.

32. Can you comment on the relative weights given to payload mass, profile, and altitude in your normalization model?

The model will be used to develop an Independent Government Estimate (IGE) for comparison to proposed prices under the same flight conditions. There is no specific weighting; all parameters are important.

33. Per the Unit Prices per Task Order: Do you want to see how the Price of 1 PL Slot per manifest changes with flight rate in the base year?

Yes. Any additional pricing information is important. This is at the discretion of each offeror.

34. How will subcontractors with less than three years/five entities of past performance be evaluated?

Past performance is evaluated according to the criteria listed in section 52.212-2 Evaluation – Commercial Items (JAN 1999) and its addendum. Lack of past performance is considered "Neutral" which is not penalized. The Government recognizes that in a rapidly emerging market, many providers will have less than three (3) years experience and/or fewer than five (5) contracts. Vendors are encouraged to provide all relevant past performance data.

35. Comment: RFP states, "the offeror should describe capabilities for periods at reduced or micro gravity...and maximum available time on reduced gravity." These capabilities can only be quantified during a flight test to max altitude. Therefore QV must have flights to max altitude.

A flight to maximum altitude for a vehicle is not necessarily required to qualify for a particular flight profile. Offerors can use performance from lower altitude flights or flights with vehicles in the same family of vehicles. Any extrapolation from current performance must be justified through engineering analysis.

36. Revisiting: If IDIQ is given based on a test flight under a particular profile, does this "qualify" a vehicle for Task Orders on other flight profiles?

Please refer to the response to Question 23.

37. Sorry if I missed this one: What's the period of IDIQ? Does a Vehicle Provider need to resubmit a proposal every year?

First Question: According to the Draft solicitation Page 16, Clause 52.216-18, Ordering (OCT 1995), the ordering period for issuing task orders is 5 years from the date of award. At the end of the ordering period, it is possible that NASA will have a similar requirement and it will be issued via competitive solicitation at that point. Also, Clause C-001 on page 27 of the Draft RFP will be incorporated to each issued task order under the awarded IDIQ. Task Orders will be varying lengths and can only be issued for up to 1 year past the overarching IDIQ ordering period. This solicitation is for each IDIQ which will provider contractors the opportunity to be issued task orders.

Second Question: Only if they have a new capability, but to continue performing the same services, no.

38. Some QV's may not be ready by proposal submittal date, but will be ready before the anniversary. I would think it's in NASA's interest to reopen the process whenever these vehicles are ready and expand the pool. Please confirm that NASA is willing to reopen whenever more QV's becoming ready.

The contract is based on payload requirements rather than available services. The Government will request proposals on an annual basis to allow additional vendors to join the provider pool, or whenever there are payload requirements for which there are no currently qualified providers.

39. Will offerors be given feedback during the solicitation process and after the bid has closed if they are not selected for an award? One would be able to use this valuable feedback to readjust for future biddings.

Yes. Offerors may request a debriefing by the acquisition team after contracts are awarded to successful offerors.

40. Is the full proposal due Feb 5 or just the letter of intent? When is the full proposal due?

There is no letter of intent at this point and the due date for proposals will be identified in the final solicitation. Currently, only the draft is posted.

41. Attachment A, p.3 states "The Contractor shall be capable of providing payload slots on QVs with commercial flight operations, offered to the general public for pay on a published flight schedule." It is not clear what requirements you are levying in terms of commercial operations, publicly offered, or published flight schedules. Do all Task Order flights need to take place on a publicly published flight schedule?

The Government's intent is purchase services which are available on a commercial basis, which usually implies a flight schedule and a price list for manifest of payloads, offered to any entity that wishes to purchase these services. Please note that the North America Industry Classification System (NAICS) code for this acquisition is 481212 described as "Space transportation, freight, nonscheduled" (page 1, block 10 of the SF 1449 Draft Solicitation). This can be verified on http://www.census.gov/eos/www/naics/. In short, the intent is for commercially provided services, but this NAICS allows for un-scheduled commercial services as well. In order to be consistent with the NAICS, "on a published flight schedule" has been removed from the PWS Paragraph 4.2.3.

42. If FOP requests orbital capability will this be a completely separate service from the regular NASA Launch Services Office?

Placing payloads into orbit is not a current requirement of this contract; it is listed as an example of the type of service that might be requested at some point in the future under the "Expansion" clause. That said, if an orbital requirement should eventually be added, it will be a separate service from the NASA LSO.

Draft RFP Questions/Comments and FOP Responses
Feb 5, 2014

43. This sounds somewhat similar to CRuSR on the surface. I did not see any funding awards mentioned. I am assuming then this program is to connect vehicles to payloads then fund the flights.

This is a commercial contract wherein there is an exchange of payment for services rendered. There are no "funding awards" involved. The purpose of this contract is to provide payload integration and launch services for payloads that are selected in a process independent of this contract.

44. How is flight cost determined and when are the payment(s) made for the flight (before or after)?

Flight costs are based on the firm-fixed pricing as proposed by the successful offerors and accepted by the Government as "fair and reasonable". Payments are made via invoices for completed services rendered in accordance with the contract.

45. My company would require some up-front flight funding to kick-start the process. At least for the first couple of flights. After that profit from the previous flight(s) should be available to cover future flight up-front expenses and vehicle upgrades, refurbishment, insurance etc....

This contract has no provision for up-front funding. Only providers who are able offer a product that is sufficiently mature to provide services at the time of proposal submission will be considered.

46. Is the past performance of all teammates/subcontractors applicable or only the past performance of the prime?

All relevant past performance histories will be evaluated. If a prime contractor is proposing to use a subcontractor and the prime cannot accomplish the work as established in the PWS without the subcontractor, then the subcontractor must be evaluated.

47. Is there any evaluation or pricing advantage provided to socio-economic preferred providers such as 8a, HUB zone, native owned, etc. organizations?

No. This is a "Full and Open" solicitation, with the only limitation being a restriction to domestic United States entities.

48. Page 35 of the industry day briefing states that "Incumbents agree to new contractors". Please clarify, do the incumbents get to decide upon addition of new contractors?

No. The statement means that by proposing to this solicitation, an offeror agrees to the entire set of terms and conditions, which include the provision for the Government to add additional contractors at least annually, but whenever it is in the Government's best interests to do so, by use of the same evaluation criteria as for the initial solicitation.

49. Page 31 of the briefing states that "Proof of Qualified Vehicle or Proof of Flight Test Phase" is required. Must this exist before the proposal submission or before award of contract or

before award of task order? This can be expensive and providing it before an award is made can be very risky to a low margin business.

This is a firm requirement. Proof must be submitted as part of the proposal.

50. Are modifications to the flight profiles allowed?

Profiles are based on typical payload requirements and are not intended to be absolute. Offerors should specify any deviations from the profiles and the reason for those deviations. That said, prospective vendors should consider the profiles to be demonstrative of actual manifest requirements.

51. Draft SF1449 and Draft Solicitation: pg. 32/53 PART 1.f currently states: "The Offeror should provide sufficient evidence within the operational plan that they possess applicable licenses or waivers from the appropriate regulatory agency(s), or provides sufficient explanation of why such items are not applicable to their proposed QV(s)." To ensure that this provision encompasses all scenarios that an offeror is likely to face (including regulator-driven delays beyond the control of the offeror) we recommend the following revisions to the provision (additional text is underlined): "The Offeror should provide sufficient evidence within the operational plan that they possess <u>or are in the process of obtaining</u> applicable licenses<u>, permits</u> or waivers from the appropriate regulatory agency(s), or provides sufficient explanation of why such items are not applicable to their proposed QV(s)."

This is a commercial solicitation with the requirement that offerors possess the capability to provide services at the time of submittal of proposals, which includes the requirement for documenting necessary approvals. In order to have completed the requirement for demonstrated capability by means of a successful flight test or commercial operation, there should be evidence of some form of regulatory approval, such as a waiver, permit, license, or similar documentation. Also, “permits” was added to “licenses, waivers, and/or flight approvals” list in Section 4.2.1.3 of the PWS, and in Clause 52.212-1 Instructions to Offerors; Commercial Items, Part 1 – Technical Proposal, Paragraph (f), and in Clause (or Addendum to), 52.212-2 Evaluation; Commercial Items Section A. Technical Acceptability, paragraph 1.

52. Draft PWS: pg. 3 of 8 - We feel that the suborbital reusable launch vehicle industry should be held to a more rigorous standard than 50% reusability. Any reusability threshold below 51% would enable the participation of QVs that are majority expendable rather than reusable. A more reasonable threshold would be at least 80% reusable (excluding propellants and other expendables). In the same vein, corresponding revisions reflecting the revised reusability standard would need to flow through to the definition of "sRLV" on p. 8 of 8.

Reduction of the reusability requirement was inadvertent. Based on industry feedback and the technical merit of the feedback received, the reusability requirement has been returned to that of the previous solicitation: 80% by mass not including expendables.

53. Draft PWS: pg. 4 of 8 - As written, section 4.2.6.1 requires a Contractor to allow access to its payload by the Payload Provider not more than 3 hours before or after hazardous operations. While we strive to allow Payload Providers access to their payloads within intervals even shorter than 3 hours, we think revising this requirement to 4 hours would provide a more realistic margin for all payload scenarios (including payloads with specialized integration requirements).

It is recognized that payload access requirements and the scope of hazardous operations will vary from mission to mission. The PWS has been updated to reflect that the access requirements will be specified and negotiated at the task order level.

54. Draft PWS: pg. 5 of 8 - As written, section 6.1.1 requires the Contract to provide a PUG for each QV. We recommended revising this section to read "...provide a Payload User's Guide for each QV or QV family to the Government" to clarify that a PUG applicable to a given family of QVs will satisfy this requirement. In the same vein, we recommend revising section 8.1 on p. 6 of 8 to refer to "Payload User's Guide (PUG) for each Qualified Vehicle or Qualified Vehicle Family" and revising the definition on p. 8 of 8 to read: "Payload User's Guide is the Contractor-provided documentation that defines the payload interfaces of the Qualified Vehicle or Qualified Vehicle family, including,..."

Acknowledged. The Government will clarify the PUG requirement in the final RFP.

55. Past Performance Questionnaire Request - Please clarify the process for identifying the recipients of past performance questionnaires - will offerors identify past performance references in the course of proposing against the solicitation and flight opportunities distribute the questionnaires in the form posted on the FBO website to the indicated references?

Contractors are required to request the past performance questionnaire from any entity they believe will provide the Government with relevant past performance information. The questionnaire portion is separate from the contractor provided past performance information, which is limited both by page count and the number of years of past performance information should be provided. The surveys can be distributed to any entity deemed relevant by the offeror, with **no limitations**. However, the offeror **cannot** submit the questionnaires for the third party entities. They are encouraged to be proactive with third party entities so that the surveys will be submitted on time. This will be further clarified in the final RFP.

56. You state: "the proposed Qualified Vehicle (QV) or QV family has begun test phase at a minimum, accompanied with evidence and/or rationale that they are capable of providing one or more of the Flight Profiles in the Performance Work Statement (PWS) to a commercial standard by the proposal due date." Please clarify – if a vehicle family is in test, and the flight provider can analytically demonstrate a future capability to conduct a given Flight Profile, is that sufficient to qualify a vehicle for that profile?

Vehicles may only be qualified for performances actually demonstrated. That stated, it will be sufficient for an offeror to demonstrate that one member of a vehicle family is capable of meeting one or more flight profiles, and can adequately explain how another vehicle from the same family will be capable of meeting the same profile(s).

57. Does flight profile P1 require both low gravity AND vacuum exposure? Or is it sufficient for a vehicle to provide one or the other?

It is sufficient to provide microgravity. The primary requirement for this profile is payload exposure to the space environment, at minimum this requires a duration of micro-gravity. Some payloads will also require exposure to vacuum. The profile has been clarified to reflect that payload exposure to the external environment will be required for some payloads, but is not required to qualify for the profile

58. Does flight profile P4 require free-fall descent all the way to 0 km AGL? Or may deceleration systems be deployed at some altitude to enable vehicle and/or payload reuse?

The profile in question, redesignated P3 in the updated PWS, is written from the perspective of the payload. The typical use for this profile is payloads testing reentry systems. The profile has been clarified to reflect that free fall for the payload is typically achieved by ejection of the

payload from the spacecraft at apogee rather than ballistic re-entry of the vehicle to ground level. After payload ejection, normal vehicle recovery methods are assumed.

59. As written, none of the five profiles appear to encompass the primary ConOps for internal (non-exposed) payloads on commercial sLRV flights. Which profile is intended to cover such a payload in a ballistic suborbital profile with recovery?

The profiles and the requirements for them have been clarified in the PWS. Each profile represents a set of typical payload requirements that can be achieved by one or more industry standard flight profiles. As described, the operation in question may apply to profiles P1 and P5 (previously designated P6). Profile P1 has been clarified to reflect that payload exposure to the external environment is a desired feature for some payloads, but not required for the profile.

60. You state: "The Government may conduct an independent Mission Risk Assessment (MRA) prior to flight. In that event the Contractor shall participate in the MRA and assist the Government with its assessment." What rates will the government pay for such required support? Will the government pay for mission delays to other customers? Or accept a delay to a later flight?

Since operations are on a commercial basis, the Government will not be assuming any responsibility for assessing mission risk. This requirement has been removed from the final RFP revision.

61. If an existing qualified vehicle (QV) demonstrates a new flight profile capability between annual solicitations, is it possible to on-ramp that capability immediately? Or must a provider wait for the next solicitation to offer this added functionality to the Government?

Potential providers must wait for the Government to reopen the solicitation in order to be added to the provider pool, which will be annually or whenever it is in the Government's best interests to do so. The requirements of this contract are based on known and anticipated payload requirements, so it is expected that the Government will use the On-Ramp provision when it has a requirement for which there is no current vendor on the contract. Otherwise new providers or existing providers with new capabilities will be afforded the opportunity to submit proposals annually on the contract anniversary date. That stated, it is in a provider's best interests to keep the Government informed of any new capabilities.

62. FAR 52.246-4 (Inspection of Services - Fixed-Price) is included in the solicitation. This clause is not a part of the previous solicitation (NND11373737R) and, without tailoring, we believe it should not apply to the current solicitation. Please explain the need to include this clause.

While performance on the previous contract may be relevant to the new requirement, this requirement is new and independent from solicitation NND11373737R and therefore terms and conditions required by NND11373737R cannot be used as a guideline for NND14480735R. This clause is required pursuant to FAR 46.302 and is not tailorable. However, this clause is not asking for anything more than records customarily maintained by commercial entities.

63. FAR 52.223-15 (Energy Efficiency in Energy-Consuming Products) is included in the solicitation. This clause is not a part of the previous solicitation (NND11373737R). Please explain the need to include this clause.

This clause was checked by the contracting officer under the standard commercial clause 52.212-5 fill-ins. Checking this clause was an oversight and it will un-checked for the final solicitation since it is not required pursuant to FAR 23.206. Thanks for catching this oversight.

64. In the solicitation, the "Basis for Contract Award" section states the following: "Offeror's proposal provides proof that the proposed Qualified Vehicle (QV) or QV family has begun test phase at a minimum, accompanied with evidence and/or rationale that they are capable of providing one or more of the Flight Profiles in the Performance Work Statement (PWS) to a commercial standard by the proposal due date (REF: PWS Sect 5)." Based on this statement, is a full Flight Profile (as defined by the PWS and/or defined by the offeror in the proposal) required to be demonstrated by the proposal due date? If test flights prior to the proposal due date have demonstrated capability, but that capability is expected to be increased in the short-term (although after the proposal deadline), does the offeror just need to provide sufficient evidence that they have a path to being able to provide this expanded capability in order to be considered a QV for the Flight Profile in question?

Proposals must provide evidence that the proposed QV or QV family is capable of meeting one or more of the listed flight profiles on the date of proposal submission. Offerors may document any deviations from the required profiles along with justification for those deviations. Flight tests showing a progression towards meeting a flight profile will be considered, but the there must be very strong evidence to support a claim that the capability will exist when the contract is signed.

65. In the PWS, Section 4.2.3 Commercial Operations states that the "Contractor shall be capable of providing payload slots on QVs with commercial flight operations, offered to the general public for pay on a published flight schedule." For the commercial flight operations that are required to be offered to the general public, is it a requirement that these commercial flights are research flights, or do tourism flights also apply?

The Government is not concerned with the nature of other payloads or passengers. Any type of flight that fully meets the RFP requirements will be considered, regardless of the stated purpose of the mission. Thus a tourism flight that can also provide the required profile for a secondary payload meets the intent of the PWS, assuming all other requirements (e.g. payload integration and processing) are met.

66. Based on the Flight Profiles defined in the PWS, it does not appear that the industry-standard flight profile is included which provides internal payloads a rocket-powered flight to high altitude followed by a controlled landing. Specifically, would a trajectory wherein a winged spaceplane launched from the ground or from a relatively low altitude (e.g. below 12 miles AMSL) that ascends to a space altitude of 50 miles, 100 km, or more (e.g. depending on the specific requirements of the payload), then return to 0 AGL via a controlled landing apply to one of the currently defined Flight Profiles in the PWS?

The profiles and the requirements for them have been clarified in the PWS. Each profile represents a set of typical payload requirements that can be achieved by one or more industry standard flight profiles. As described, the operation in question may apply to profiles P1 and P5 (previously designated P6).