



**SBIR 24.4 Q&A Telecon Transcript
20 FEB 2024**

SOCOM244-005: Advanced Manufacturing for Common Launch Container

SBIR Process Timeline

February 6, 2024: Topic issued for pre-release

February 21, 2024: USSOCOM begins accepting proposals via DSIP

March 12, 2024: DSIP Topic Q&A closes to new questions at 12:00 p.m. ET

March 26, 2024: Deadline for receipt of proposals no later than 12:00 p.m. ET

1. The Type-V pallet needs to be easily integrated into the container?

The Type V delivery platform will be the primary delivery method. Secondary will be strapped down to the ramp or floor. The Common Launch Container (CLC) does not need to be integrated into the TYPE V pallet, but does need to be easily secured to a Type V delivery platform, the floor, and to the other containers.

2. Can you address which platforms you expect to deploy this system on or does that breach classification?

Anything that can do cargo delivery of a type 5 platform.

3. Do you expect the contractor to possess an FCL? If so, what level?

We are doing phase one, phase one is an unclassified work. As this is an opportunity for you, it should not require an FCL. As we get closer there might be an opportunity to start investigating into getting an FCL.

4. At the risk of asking a dumb question, can the TPOC provide more background on the topic? The published objective is very short and light on details.

A common launch tube (CLT) or common launch container (CLC) is used to employ munitions. The CLT/CLC arrives inside an additional shipping/storage container. The shipping container costs X amount of dollars, tube costs X amount of dollars. The CLT/CLC is then removed from the shipping container to employ. The goal is to get rid of the extra handling and the extra cost by making the shipping container and the launch container one unit. Currently the CLC is made from aluminum. The user does not care what the CLC is made from as long as it meets requirements.

5. Is the common launch container a standard ISO 20'?

No. The solicitation includes the government standards and specs required to be compliant. They are included in the references section. The main things to keep in mind is there are going to be the shipping container requirements, your shock and vibrate, your heat, your other environmental requirements for any shipping container that has a munition inside of it. Additional requirements are for the container to be used as a launcher. Some of the forces and impacts that are required to launch munition out of a container. Include those when you're looking at specs and standards.





6. Again, possible classification risk, but can you provide examples of previous munitions that are using this common launch container?

Not at this time. An example is launching an effect that is 9 inches circumference and approximately 80 inches in length and somewhere between 160 and 210 lbs.

7. Is the intention to eliminate the need for CLT or Common Launch Container?

No. The goal is to eventually have the shipping container and the common launch container to be one in the same.

8. Are the "Common Launch Containers" detaching from the type V pallet or staying attached to the type V through the airdrop process?

For the Airdrop process, they will be staying with the Type 5 pallet as they were strapped down, as they leave the aircraft.

9. CLTs already have ejection functionality, so is the ejection velocity really geared towards the larger munitions listed?

The ejection velocity is the same regardless of mass, but the force is greater as you scale up. Scalability and the reason we're going after advanced manufacturing is we can scale this thing up and down easily.

10. Any initial thoughts on "advanced manufacturing" and how this aligns with your objective? I understand you aren't trying to constrain solutions - thoughts?

For advanced manufacturing the process selected should be able to make improvements or design changes mid lot through an update to the design with minimal time delay. This solicitation is looking at the final product. Additive manufacturing is often looked at to have benefits for producibility and affordability at smaller scales, more affordable at larger scales, subtractive process, more cost effective. At times additive manufacturing is brought in for that producibility and the affordability discussion. But based on the standards and specs laid out in the topic paper, it also must be reliable and validate those specifications.

Bottom line from a maintenance perspective, storage and transportation is easier if it is all one package. It saves shipping costs; we can ship a lot more at one time. When we start adding containers around containers, you're taking up space, you're adding multiple trips which increase cost and delay.

11. Is there a desire to airdrop the full container loaded with the munitions stored internally?

Yes. The CLC may also be retained internal to the aircraft and eject from there.

12. Is this similar to the efforts on PACRAT and Rapid Dragon, but scalable?

Rapid Dragon is the concept of using palletized effects. Dragon Cart and PACRAT are different delivery methods with associated electronics. The CLC at some point may integrate into Dragon Cart, but that is not within the scope of this effort.





13. Are there any pressure containment considerations for the tube during launch function (e.g. rocket motor) vs. small ejection motors?

Not initially on this topic paper. There is no specific pressure requirement for ejection of ammunition, but we did list out some of the weight classes. There would have to be some force applied to move the ammunition out. You can sort of work the math backwards from the weight class munitions that were spelled out there and identify you know the force needing to be applied.

14. Do you need the container configuration changes to happen in the production process or do users in the field need to reconfigure the size of the container?

The CLC will leave the factory ready for the effect to be installed by the integrator. There will not be changes in the field. The goal is to produce a simple, functional, reliable product.

15. I see minimum of 50 units per month. Any thoughts on maximum?

There is not a current maximum defined. Planning for up to 200 a month is realistic surge rate. 50 is a good target.

16. Where would you envision the munitions to be loaded? Would the container mfr supply the munitions producer before they are delivered to the government customer?

Currently the plan is for the integrator or prime to load the effects. The plan could change. The best example for now: you build it, it goes to an integrator, they install the system and the energetics and the effect.

17. Or would the government reload containers?

Definitely explore this space; can CLC be produced in a way that they are reusable? If you look at it and based on the stress determine some parts may not be, explore building it in two parts so a portion can be reused. The government believes that might be useful. Reloading the containers might save some cost to the government. We don't currently do that with the common launch tube due to reliability concerns. There may be cost savings if it can be validated that the container is still reliable after multiple shots.

18. Is there a desire to eliminate pyrotechnics from the ejection process?

That's not the primary goal. If a solution does present, it'd be something the government would look at. Reasons the government would be interested; if it helps the container/launcher, manufacture in some way, if it helps make it more reliable, or if there are some other benefits to removing the pyrotechnics. Just removing the pyrotechnics for the point of removing the pyrotechnics is not a benefit.

19. In this phase I effort, are you more interested in exploring the production process or the product? (or 70/30, 30/70, etc?)

It's a little bit of both. The producibility and affordability are key factors. Work on process improvement once a process and a product is developed.

Phase 1 is a paper deliverable. Phase two would be a prototype of the common launch container. The government will then provide a mass simulant to be used for ground ejections to





validate how the container performs.

Even in Phase one, you should explore the production process used to develop the prototype. It's not just a one-time prototype. There is a technical requirement in the request for a quantity of 50 a month. If the process requires a long lead time, or requires 2 years lead time for logistics, intent will not have been met. Investigating the feasibility of the process is part of this phase one.

20. Will more details be provided in Ph I for the munitions (i.e., touch points, push points, etc.)?

The technical manuals and reference provided will provide a lot of details. The government will be able to provide a diagram with measurements.

Technical exchanges can be arranged with the prime integrator for those selected for phase I. If anything goes CUI or beyond, we'll have to figure out a DD254 process.

21. The only references listed on the solicitation were MIL-STDs were there other references?

Technical exchanges can be arranged with the prime integrator for those selected for phase I. If anything goes CUI or beyond, we'll have to figure out a DD254 process.

22. Do you anticipate awarding more than one Ph1?

Our goal is to award phase ones to qualified proposals and not to put a maximum on number of companies selected. With current capacity, contracting officers' funding, etc. expect 3 or 4 companies.

23. This is just a comment, the scope of this solicitation seems large for a max of \$175k for ph 1 if you are focusing on both product and process.

This is a feasibility study, seven months in length, not to exceed within the seven months. At month number six, you'll provide the feasibility study. It's a paper, it's not a product. At 6 1/2 months, you'll be providing your proposal for phase two, by month 7 this effort will be over. This paves the way for a down select from phase one to phase two. Within phase two the average for this year is \$1.363 million based on SBA's. We will notify the awardees of phase one on how much the actual amount to be awarded for prototyping is in phase two.

