

Noel, Jessica LTJG

From: [REDACTED]
Sent: Wednesday, August 17, 2005 5:54 AM
To: [REDACTED] LCDR; Noel, Jessica LTJG
Cc: [REDACTED] A NAVDIVESALTRACEN
Subject: RE: Hyperlite chamber

Jess

[REDACTED] brings back fond memories. I was the one who was on PSTAR when we made the first deployment with them, and it fit in the H65, but barely (you had to take the door latch off to get it in). I know aircrews are very picky about what goes in their aircraft. That's fine. However, unless there is a specific prohibition saying they cannot do it, they need to be willing to do it. Do you still get air support from POPDIV or is it just Kodiak? I think it would be beneficial for [REDACTED] and I to establish some kind of understanding with that Airsta so that you don't have to reinvent the wheel each time a new aircrew comes aboard. We may be able to do that with Kodiak next time we go to Anchorage (they're right down the street from each other, right).

Just got [REDACTED] email and that is pretty much what I expected. They will try to keep anything unfamiliar out of the aircraft, but unless they can show you a prohibition in writing, they shouldn't say no. The important thing is to do a good inbrief with the aircrews where you actually break out the equipment and put it in the bird. That gives them a chance to see where they're going to stow things, what gets tied down where, etc.

Let me know where your aircrews are generally coming from and we'll see if there's something we can do from this end.

Aloha,
 [REDACTED]

From: [REDACTED] CDR
Sent: Wednesday, August 17, 2005 9:22 AM
To: Noel, Jessica LTJG; [REDACTED] LT
Cc: [REDACTED] NAVDIVESALTRACEN
Subject: RE: Hyperlite chamber

Jess,

These chambers were researched by [REDACTED]'s and my predecessors and then bought after NEDU completed their testing. Now how 'bout that for passing the buck! I won't do that to you, here is some history.

I haven't found any research in my files that the CG aviation community was or how they may of been involved. During the Navy's testing at NEDU on the chambers the final report mentions that "Gas supply containers (air and oxygen cylinders) will need special approval/precautions. Ensure that adequate supplies of oxygen and compressed air are available." One of the criteria for accepting this chamber was that it would be able to be used in a helo/airplane. So they were anticipating the bottles and flying issues. Also in that same document it was mentioned that the Air Force and NAVAIR are reviewing this and approval for use in helos/airplanes is anticipated. The date of the report is Sept '99. The aviation community should be able to get info on this (approval for flight) from the USAF School of Aerospace Medicine, Davis Hyperbaric Medicine Division. I don't have any documentation that of the approval. The AF has bought a number of these and from what I understand talking with some of their docs who come through the R&T or DMO courses here, they are flying with them.

That being said I know various units have trained with the aviators in the past and this has not been an issue, or at least it wasn't ever brought to our attention. The Polar Star did some training with their Air Det while on a trip to the Antarctica back in 1999/2000 and it fit inside a H-65 with some seat reconfigurations. Those folks didn't see to have any problems

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with the bottles. I can see what they (aviators) are concerned about however they transport medical personnel with O2 for medevacs. Also what is so special about civilian medevac helos that transport patients with O2 that our helos can't do the same. Also the CG has transported dive teams with full scuba bottles in the past, maybe not Kodiak but other AirStas have. Granted the bottles are under pressure but they are not a danger unless someone knocks off the valves which takes a pretty severe blow. If that was to happen in a helo or an airplane I suspect that something else is going or did go wrong onboard, and the bottles would be the least of your worries.

When transporting a chamber the only bottles needed (depending on flight time) is one of our scuba tanks (fully jammed 100's) for maintaining pressurization and ventilation of the chamber, and 2-3 bottles (Super D size) of O2 (TX gas) from an EMT kit for the bibb. Thinking out of the box - Remember O2 breathing periods can be stopped for various reasons as long as you continue from the point of interruption and they get the proper breathing periods (time and number) at depth. This is not something you would want to do routinely but is available. However I seriously don't think that is necessary and advise against it. For severely injured diving patients they need the O2 and thats what I would argue. But there is always another way of getting the job done.

The chamber is pressurized but is not susceptible to catastrophic explosion or depressurization. During NEDUs testing the chamber's end domes popped at approx. 165'. The chambers are only rated to 60' and so that won't be a problem.

We currently have problems with transporting full scuba bottles on civilian airplanes, so they are taken onboard empty if they are transported at all. A CG C-130 transported a pressured Hyperlite with a civilian patient in it from Chuk to Guam in Feb 2000, other than not having brought enough O2 along there were no problems and they had scuba bottles onboard.

Bottom line from the Dive Program's Technical Manager (me): This is being done elsewhere (civilian and military helos) and there is no reason not to do it in the CG. The CG now has armed helos and are transporting/delivering boarding teams via vertical insertions for noncompliant boardings, there is considerably more risk involved there than a couple of secured air/O2 bottles. Granted additional safety precautions are necessary for the bottles but they should not be showstoppers. We'll let you run with this but if you'd like, have one of their folks contact me and we'll see what we can work out. Also Matt may have some HQ info to help out.

Good Luck,
[REDACTED]

LCDR [REDACTED]
Coast Guard Liaison
Naval Diving & Salvage TRACEN
Tel & Fax: 850-235-5244
Cell: [REDACTED]
email: [REDACTED]@navy.mil

-----Original Message-----

From: Noel, Jessica LTJG [mailto:JNoel@healy.uscg.mil]
Sent: Tuesday, August 16, 2005 18:51
To: [REDACTED] LT; [REDACTED] LCDR NAVDIVESALVTRACEN, Training
Subject: Hyperlite chamber
Importance: High

[REDACTED] - Hi, Guys. Question: Were any aviation concerns addressed or personnel involved in the decision to provide dive teams with the portable chamber? That training I conducted with the divers, medical personnel & aviators has really churned up the aviation world. AirSta Kodiak is looking into the safety concerns and logistics of transporting the chamber due to the O2 & SCUBA bottles involved and I don't know what else, but they don't seem to be real thrilled with it right now. I am trying to provide them with the info they need in order to accept it, but do you already have any documentation that would help them?

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Hyperlite chamber

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Thanks!
Jess

LJG Jessica Noel
Marine Science Officer
Dive Officer
USCGC HEALY
1519 Alaskan Way S.
Seattle, WA 98134
808-434- [REDACTED] underway
(Press 0 when phone picks up.
There will not be a prompt)

high 2

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Noel, Jessica LTJG

From: [redacted] NAVDIVESALTRACEN [redacted]@navy.mil]
Sent: Wednesday, August 17, 2005 5:48 AM
To: [redacted] LCDR NAVDIVESALVTRACEN, Training; Noel, Jessica LTJG; [redacted] LT
Subject: RE: Hyperlite chamber

ALCON-

I ran into a similar problem out in Guam. After every Typhoon out there we routinely flew the dive team out to Saipan and Tinian on Navy SeaHawks. Initially they were hesitant to let us take charged SCUBA cylinders on the bird. Our CO looked it up the specs in some DOT cargo manual and there are no restrictions on compressed air. Once this was revealed they let us fly our gear all the time. I'll attempt to research out the reference and will forward it along when I find it. I believe Naval Helicopter Combat Squadron 5 out in Guam still supports these missions for the Coast Guard and may be a good POC.

In Hawaii, CG AIRSTA Barbers Point flew us all over the Pacific in C-130's with all of our gear including O2. Several times a year we flew out to American Samoa, Kwajalein, or the Marshal Islands for ATON. This was ops normal and never seemed to raise any flags with the CG Aviators out there. As I recall their only concern was that the bottles were within hydro date. Hope this helps.

v/r

HS1 [redacted]
USCG LIAISON OFFICE
NAVAL DIVING SALVAGE TRACEN
PH & Fax 850 235 5344
Cell 580 527 7604
E-mail [redacted]@navy.mil

" If you're not living on the edge, you're taking up way too much space"

-----Original Message-----

From: [redacted] LCDR NAVDIVESALVTRACEN, Training
Sent: Wednesday, August 17, 2005 8:22
To: Noel, Jessica LTJG; [redacted] LT
Cc: [redacted] NAVDIVESALTRACEN
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