



# "What's Behind That Missing Cover?" I Wonder

Navy photo by JO2 Zack Baddorf

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Maybe you're a newly reported Sailor aboard your first ship... maybe you're a seasoned petty officer, chief, senior chief, or master chief petty officer... or maybe you're an officer. No matter who you are or how much time you've spent aboard ship, chances are you'll walk by an open access to a void or tank and think, "Ooh, I wonder what lies deep within that black hole?"

Would curiosity get the best of you? Would you decide to enter the space just to see what's inside, especially if there are leads and cords running into the space? If so, please remember one thing: Curiosity killed the cat.

I remember reporting to my first ship, USS *Harold J. Ellison* (DD-864). I walked around by myself, checking out the ship and seeing what was going on. Back in the old days, we didn't get a sponsor assigned to us. Lo and behold, what did I find but an access to a void in the main space with the cover removed. It

led into a dank, dark space deep within the bowels of ship. I wondered what was inside.

My mind was going a hundred miles an hour. Should I stay outside or go in? What could it hurt just to take a peek? But my gut told me to keep out. It was the best decision I made that day (I'll explain why later).

Finishing my impromptu tour around the ship, I ran into my LPO. I told him about the open void and asked if he knew why it was open. He began to explain in the classic first-class-to-fireman manner, in no uncertain terms, that no, he had no idea why the void was open. Then he asked me the ultimate question, "Did you go inside?"

"No," I replied. He seemed relieved. The next thing I knew, he grabbed me by my arm and hustled me over to the void. When we got there, he started to scratch his head and mumble, "No void label... no open void chit... no gas-free-engineering form... no



nothing!” Then he began his lecture (at least, that’s what it seemed like to me). In actuality, it was a lesson in gas-free engineering. Looking back, I was darn glad he did it.

My LPO explained that if I had entered this void without following the gas-free-engineering procedures, I could have found myself in one of two conditions. He said I might have been lying face down or up, gasping for air, or turning blue around the lips and not breathing. In other words, I could have been hauled out on a stretcher or in a body bag. This image definitely got my attention.

He then started explaining the gas-free engineering program to me, and I realized I needed to learn a lot more about it. I not only learned about it, but I began to live by it. As I climbed through the ranks, I held training with my people on its procedures. And even though it’s been 26 years since the initial incident sparked my interest, I’ve kept up with the continual changes in the program. And I can honestly say neither I nor anybody else who ever worked for me ever has gotten hurt from failing to follow gas-free-engineering procedures.

Is the gas-free-engineering program up to snuff on board your ship? The governing documents for maintaining this program are Naval Ships’ Technical Manual (NSTM) 074, Vol. 3, Rev. 4, and Vol. IV, Chapter 25, ComFltForComInst 4790.3, Joint Fleet Maintenance Manual (Rev. A, Change 6). These documents provide detailed requirements that everyone must follow, and they apply to all shipboard situations (including entering a tank, void or other confined space).

There are several good things about these manuals:

- They address non-routine instances when gas-free engineering is required (such as cold work and hot work).
- They describe IDLH (“immediately dangerous to life or health”) situations.
- They spell out how often shipboard personnel need to get gas-free-engineering training.

Some of the requirements change while you’re in an industrial environment, such as during an IMAV or

in a shipyard for a lengthy industrial availability. However, the basic requirements of this program never change, whether you’re underway or in port.

If you own this program, is your PMS current? Is it scheduled and done within the required periodicity? A common problem in this area is expired calibration gas for the four-gas analyzer. This calibration gas is only good for one year, so check the date on your bottles. If they are expired, order new ones as soon as possible.

Another common oversight I see during ship surveys is a lack of hydrostatic testing on SAR SCBAs and overhaul of the air regulators for these units. Your PMS should dictate when completion is required. If your PMS does not cover these requirements, get a PMS feedback report to your 3-M coordinator pronto.

I visit ships each month as part of a safety-survey team, and shipboard personnel usually tell me their gas-free-engineering program is “squared away” or “good to go.” Yet, once I begin looking at the program—administratively and materially—and check the level of knowledge at the deck-plate level, 80 percent of the programs don’t meet the minimum basic requirements of PMS, NSTM 074, Vol. 3, Rev. 4, and Vol. IV, Chapter 25, ComFltForComInst 4790.3, Joint Fleet Maintenance Manual (Rev A, Change 6).

Query the people who work for you, and find out just how much—or little—they know about the program. You might be surprised at the results. Teach your people about it. Make it a routine part of your divisional or departmental training once a week. Place notes in your Plan of the Day once or twice a week to get the word out; there’s enough information available to cover training and POD notes once a day for a year.

The more you and your personnel learn about the gas-free engineering program, the greater the chances you or one of your people will save a life or keep someone from being injured in a confined space. ■

#### Resources:

- Safety and Occupational Health Program Manual for Forces Afloat (OpNavInst 5100.19E), <http://www.safetycenter.navy.mil/instructions/default.htm>
- Ships’ Safety Bulletin, October-December 2006 (“Calling All Gas-Free Engineers: Are You ‘Licensed to Kill?’”), <http://safetycenter.navy.mil/media/ssb/issues/SSBOctDec06.pdf>
- Guide to Safety in an Availability (hand-out), <http://safetycenter.navy.mil/afloat/surface/downloads/availabilityguide.doc>