



Up Top In Operations

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Don't Lose Situational Awareness...

A Tale of Two Mishaps

Written by: Gail A. Fisher, DVC-OE

I'd like to share two actual narratives from Coast Guard UTB (41' utility boat) underway mishap reports.

Mishap #1 - While conducting a man-overboard drill a break-in Crewman assumed the role of pointer and moved up the starboard side of the UTB. The pointer placed her left hand in close vicinity of the aft pane of glass just above the handrail. The starboard window was only partially open which did not allow the break-in coxswain to hear the pointer very well. Break-in coxswain then heaved the window aft resulting in the forward pane of glass striking the pointer's left hand. Evolution was immediately secured and UTB was RTB (return to base). Member was

met at Station's pier by station EMT who applied ice and transferred member to E.R. Member's hand was found to have received three contusions and a severe strain.

Mishap #2 - CG 41457 was returning to station from a demps run (full power trials for the engines) after a fuel leak was found on the starboard engine. During mooring, the engine was started to get the boat back into the slip and then secured once lines were put over. While backing the rest of the way into the slip, the mast and RDF (radio direction finder) antennae hit the boat house overhead, cracking the RDF antennae and bending the mast slightly. The engine was then clutched ahead to prevent further bending of the mast.

What do these mishaps have in common? Let's see...All the parties involved lost:

Situational Awareness

In Mishap #1, both the coxswain and crew were break-in's (trainees). They were focused on learning their jobs, but not on the entire boat, its personnel and the surrounding area. They had not learned how to see how their actions impact other systems and people on the vessel. And, what was the level of situational awareness of the duty coxswain and crew? Should they have spotted a potential mishap and prevented it?

As Auxiliarists, we spend a good deal of time training our members in the Boat Crew program. Could this happen to one of us? It certainly could, if we don't learn from the experience of this crew. We can

get distracted, bored, stressed and fatigued. We must learn to spot the warning signs for the loss of situational awareness early, and help our crew regain it!

In Mishap #2, the coxswain and engineers got tunnel vision while executing a routine maneuver - docking. In this instance, there were some extenuating circumstances with the fuel leak. But the coxswain was focused on the boat movement, and the engineers were concerned with the engine casualty. They became inattentive to the global situation, and the safety of the vessel. The result was unnecessary damage.

Could this happen to one of us? You bet! We can easily be distracted by an unusual and worrisome turn of events, just as this boat crew did. But, we can learn from the experience of this boat crew, and work to maintain our vigilant pursuit of situational awareness.

We learned about situational awareness in Team Coordination Training. We must take this concept out of the classroom and put it into practice! Bring your TCT training to life! It can prevent unnecessary injury to our personnel, and damage to our vessels.

**TCT!
TCT!**

Remember to "stay in the middle..."

Looking for a Boater's Paradise?

Written by: Charles B. Ford,
BC-OSS

Some boaters find one of the greatest pleasures of cruising is called "gunk-holing".

This requires the art or science of finding your way into an unmarked channel where you will be one of a very few boats anchored safely and securely for the night in a beautiful little harbor. Perhaps there is not a house or habitation in sight, or you may be surrounded by lovely old or new homes the proud owners of which enjoy seeing yachts and cruisers enjoying their favorite spot.

Mark Twain was a river pilot. In his book "Life On The Mississippi" he speaks at length about the "crossings". Since the Mississippi only flows one way (down to New Orleans,) it produces an exaggerated effect of the ebb-tide in tidal waters. That is to say, the downstream flow of water causes shoals of sand or mud to build up on the inside



of bends and deep channels to form on the outside. In tidal waters the ebb-tide is faster and stronger than the flood tide and the stronger tide moves more silt and sand than the flood. This zigzagging is referred to as the ebb-tide bends.

What does all this mean to the gunk-holing boatman? Since entrances to these lovely anchorages are usually unmarked with buoys, it is very easy to go aground in spite of local knowledge advice to "stay in middle." Staying the middle means staying equal distance from the shoreline abreast of you at any given moment. Now to make use of the ebb-tide bend theory on a river bend, you will favor the shore on the outside of the bend and stay away from the point of land on the inside of the bend.

Your progress can be improved by reading the water, watching for ripples and slicks and your depth sounder. A sudden decrease in depth is a warning to

veer off the shore on the inside of the bend and reduce speed.

Ripples and slicks require a good deal of practice and a few mistakes to interpret. Sometimes the slicks are on the shoals, sometimes the ripples are on the shoals and the slick on the deeps. One thing is reasonably sure, the depth will change from slick to ripple!

Research Projects Underway

Coast Guard Research & Development

Written by: Edwin J. Kroeker,
BC-OEN

The Coast Guard Research and Development Center (<http://www.rdc.uscg.mil>) supports the Coast Guard major mission areas with specific research projects.

One project underway is research into the use of technology to form an augmented reality system to complement and potentially replace our current visual aids to navigation system. This opportunity is made possible by the convergence of emerging technologies in the areas of ubiquitous communications and wearable computers, multimodal I/O devices such as voice recognition and virtual reality eyewear, and new, powerful Internet protocols and tools.

"CG R&D" continued on page 3

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Application of such new technologies to navigation and marking systems could improve overall performance by providing alternative, customized cues that will allow users to navigate in a wider range of environmental conditions and situations. Your imagination can provide the image of current navigation hazard information superimposed on your view of a waterway as you navigate your vessel in daytime, nighttime, clear, or limited visibility situations.

This project will determine the technical feasibility of using augmented reality and other related technologies to enhance the performance of the current Coast Guard visual short-range aids to navigation system. The areas of work include studying how to repurpose existing ATONIS information and how to author new geocoded navigation content for presentation; evaluation of human factors associated with using augmented reality systems; and development of a prototype for alpha testing.

It will be a while before technology such as this is commonplace, but this type of project (executed in traditional Coast Guard style: lots of result for few bucks) gives an example of the Coast Guard's presence in "cutting-edge" technologies.



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Comms Corner

By: **Warren Schneider, DVC-OT**

Phonetic Alphabet

- When necessary to identify any letter of the alphabet, the standard phonetic alphabet should be used. The phonetic alphabet follows:

<u>Letter</u>	<u>Phonetic</u>	<u>Spoken As</u>	<u>Letter</u>	<u>Phonetic</u>	<u>Spoken As</u>
A	ALFA	<u>AL</u> FAH	N	NOVEMBER	NO <u>VEM</u> BER
B	BRAVO	<u>BRAH</u> VOH	O	OSCA	<u>OSS</u> CAH
C	CHARLIE	<u>CHAR</u> LEE or <u>SHAR</u> LEE	P	PAPA	PAH <u>PAH</u>
D	DELTA	<u>DELL</u> TAH	Q	QUEBEC	<u>KEE</u> BECK
E	ECHO	<u>ECK</u> OH	R	ROMEO	<u>ROW</u> ME OH
F	FOXTROT	<u>FOKS</u> TROT	S	SIERRA	SEE <u>AIR</u> RAH
G	GOLF	GOLF	T	TANGO	<u>TANG</u> GO
H	HOTEL	HOH <u>TELL</u>	U	UNIFORM	<u>YOU</u> NEE FORM Or <u>OO</u> NEE FORM
I	INDIA	<u>IN</u> DEE AH	V	VICTOR	<u>VIK</u> TAH
J	JULIETT	<u>JEW</u> LEE ETT	W	WISKEY	<u>WISS</u> KEY
K	KILO	<u>KEY</u> LOH	X	XRAY	<u>ECKS</u> RAY
L	LIMA	<u>LEE</u> MAH	Y	YANKEE	<u>YANK</u> KEY
M	MIKE	MIKE	Z	ZULU	<u>ZOO</u> LOO

(NOTE: Syllables underlined carry the accent.)

- Difficult words within the text of a message may be spelled using the phonetic alphabet and preceded by the proword "I SPELL." If the word can be pronounced, the operator will do so before and after the spelling to identify the word.

EXAMPLE: KEOKUK - I SPELL:

"KILO ECHO OSCAR KILO UNIFORM KILO - KEOKUK."