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## Fitzgerald Proves Damage Control Is Exhausting

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The members of the USS *Fitzgerald* (DDG-62) performed their damage control (DC) actions with skill and determination. Their efforts are to be saluted. Navy leaders should feel good about the state of damage control training in the surface fleet. Yet this also is a good time to ask some hard questions.

Most recent events illustrate damage control efforts in the face of collisions and groundings. While serious, these events are very different from damage caused by enemy action. The last case of actual *battle* damage in the U.S. Navy was the bombing of the USS *Cole* (DDG-67) in Yemen in 2000. The vast majority of sailors who kept that ship afloat no longer serve on active duty, replaced by a newer generation.

**Question One:** Is the training the Navy provides to current crews preparing them for more than a collision, a grounding, or a main space fire (not to belittle those casualties in any way)?

In a recent *USNI News* [3] report, Sam LaGrone states that the *Fitzgerald*'s damage control efforts continued for days. That is significant. Shipboard damage control training normally involves scenarios lasting from two to four hours. Yet the *Fitzgerald*—and before her, the *Cole*, *Stark* (DDG-31), *Samuel B. Roberts* (FFG-58), and *Princeton* (CG-59)—required considerably longer efforts. This accords with the long history of controlling battle damage in warships.

Consideration of these recent examples, along with experiences in the Falklands War and World War II, suggests some key points about battle damage:

- ▶ It takes time and material.
- ▶ It takes lots of people because it is exhausting and relentless.
- ▶ It is an all-hands responsibility. In many cases, key damage control personnel are either killed or out of position to deal with a crisis, and damage control must be conducted with a pickup team.
- ▶ It requires high-level training. This is why firefighting school was developed in World War II. Training must be realistic. Safety is important, but it should not be at the expense of long-term capability. Navy shipboard firefighting in World War II exposed sailors to real fires so they learned that this was a monster they could beat.
- ▶ It is do-able. Many believe modern weapons are so powerful no ship can survive a direct hit. The *Cole*, *Stark*, and other attacks show otherwise. World War II damage argues otherwise. True, many “unsinkable” battleships were lost during the war; but many “brittle” aircraft carriers survived. We learned that design, procedures, training, and redundancy can limit the effects of severe damage, and with sufficient and well-trained crews even a heavily damaged ship can stay afloat.
- ▶ It is essential. We don't have enough ships to write off the damaged ones.

**Question Two :** How are we preparing our crews for dealing with battle damage?

**Question Three:** Does the trend toward reduced manning and automation work in the face of such damage? When a weapon rips through the interior of a ship, killing sailors, rupturing systems, and compromising automation, crew members must do damage control the old-fashioned way. Are there enough sailors on board our warships? Do our sailors have the right equipment in sufficient quantity and redundancy to prevail?

**Question Four:** Are our ship designs up to the challenge of disruptive battle damage? Is there sufficient system redundancy to isolate damage? Are there sufficient safeguards to address cascading casualties in our increasingly integrated ships?

**Question Five:** What means are in place to quickly come to the aid of a stricken ship—to keep her afloat, evacuate wounded crew members, and tow the ship to a repair facility?

Damage control is a real challenge. It will become increasingly more so as the U.S. Navy faces the potential for combat against capable maritime opponents. What has worked before may not be the answer in the future.

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