

ATTACK ON THE USS STARK

Ships still vulnerable despite change in rules

N.Y. Times News Service

WASHINGTON — Naval experts, describing how Iraqi missiles could have slipped past the defenses of the USS Stark on Sunday, gave details yesterday indicating that other ships in the Middle East Task Force could be highly vulnerable to any similar, unanticipated attack.

The portrayals of the experts — including John F. Lehman Jr., who until last month was secretary of the Navy — highlighted the importance of the new operating rules that were adopted this week in the gulf.

In the rules, Iranian and Iraqi planes approaching in a threatening manner are to be shot down before they get close enough to launch missiles.

Although the destroyer Waddell, the guided-missile frigate Stark, and the other ships of the task force in the gulf are equipped with systems designed to defend against the Exocet, the experts called such attacks a risky matter and said the systems are designed for wartime rules, under which the ships would not wait for missiles to be launched.

Under wartime rules, the ship's Phalanx weapon system would have been set to fire automatically at any approaching object. During the attack on the Stark, warnings were not sounded soon enough to allow the Phalanx to be activated.

Warning systems on the Stark would give only a few seconds' notice, at most, of an Exocet missile if its launch were not detected, and the ship's systems would discern the launch only with difficulty, the experts say.

Lehman said in an interview yesterday that one of the crucial defensive systems on the Stark, designed to sound an alarm at the approach of an Exocet missile, would have allowed only a few seconds of warning.

Pentagon officials said on Monday that the Stark might have had between one minute and 90 seconds of attack warning, but this assertion was based on the flight time of the missile, and on the assumption that radar operators on the Stark observed the missile's launch.

Despite previous reports that an AWACS surveillance plane in the Persian Gulf had observed the launch, officials said yesterday that AWACS operators did not see the launch. No other U.S. personnel observed the launch either, the officials said. The ship's captain has said he did not know the missile had been launched until seconds before it hit.

Lehman explained, and other naval weapons experts confirmed, that an Exocet missile does not switch on the radar mounted in its nose until it is about four miles from a target. At that time, it is moving at a speed of about 600 knots and is only seconds away.

"There is no perfect defense, and if you are going to let them shoot first, there is a chance greater than zero that there is going to be a hit," said Lehman, who during his six-year tenure as Navy secretary prided himself on his familiarity with the details of naval operations.

Lehman and other experts, including Navy officers and industry officials, describing in detail the missile defenses on frigates like the Stark,

made these points:

- The ship's radar, which observed the approaching Iraqi Mirage F-1, would detect it launching a missile only if an unusually skillful operator were paying close attention to the plane's image on his radar display.

- The version of the electronic warning system on the frigates, unlike more advanced versions on other ships, does not provide the ability to jam an Exocet by emitting radio signals to confuse the missile.

- The warning system, known as the SLQ-37 and made by the Raytheon Co., is not connected automatically to another defensive system, which dispenses "chaff," or metallic fragments, to lure the missile off course by posing a false target. Rockets to spray the chaff would have to be fired manually.

Given these limitations, the only effective defense against a surprise attack would have been to keep the Phalanx gun system, which rapidly fires a stream of shells into the path of an approaching missile, turned on in an automatic mode. On Sunday, the Stark's Phalanx was not in that mode.

Even if the Phalanx had been set on automatic controls, or had been switched to automatic in the final seconds of the Exocet's approach, there is a chance of a missile penetrating.

Lehman said that in trials the Phalanx, which has a lethal range of about one mile, "shot down six out of eight" targets.

The facts known so far