FACT SHEET

Special Assistant to the Under Secretary of Defense (Personnel and Readiness) for Gulf War Illnesses, Medical Readiness and Military Deployments

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Project Shipboard Hazard and Defense (SHAD)

Scarlet Sage

Project Shipboard Hazard and Defense (SHAD) was part of the joint service chemical and biological warfare test program conducted during the 1960s. Project SHAD encompassed tests designed to identify US warships' vulnerabilities to attacks with chemical or biological warfare agents and to develop procedures to respond to such attacks while maintaining a war-fighting capability.

The primary purpose of the Scarlet Sage test was to evaluate the effectiveness of the experimental Shipboard Toxicological Operational Protection System (STOPS) against environmental attack of a BW tracer under operational situations.

The biological tracer was Bacillus subtilis var. niger (often referred to as Bacillus globigii [BG]). The STOPS destroyer, USS *Herbert J. Thomas* (DD-833), was challenged with aerosols of BG released from a continuous point source approximately 500 meters upwind of the ship.

Scarlet Sage tests were conducted in an operational area of the Pacific Ocean, off San Diego, California during the period February 9 through March 4, 1966.

The Department of Defense (DoD) is providing this information, at the request of the Department of Veterans Affairs (VA), to assist the VA in providing healthcare services to qualified veterans and to assist veterans in establishing service connection for disability claims. The Special Assistant to the Under Secretary of Defense (Personnel and Readiness) for Gulf War Illnesses, Medical Readiness and Military Deployments collected this information from multiple sources and requested that the military services declassify it to allow its public distribution. The VA accepts this information provided on location, dates, units and/or ships, and substances involved in this exercise, which the Special Assistant extracted from classified DoD records, and will provide it to individual veterans as necessary, but the VA cannot verify its accuracy.

Test Name	Scarlet Sage (Test 66-6)
Testing Organization	US Army Deseret Test Center
Test Dates	February 9 – March 4, 1966
Test Location	Testing was conducted in the Pacific
	Ocean, off San Diego, California.
Test Operations	To test the Shipboard Toxicological
	Operational Protective System (STOPS), a
	BW tracer was disseminated upwind of the
	ship.
Participating Services	Navy, plus Deseret personnel
Units and Ships Involved	USS Herbert J. Thomas (DD-833)
Dissemination Procedures	An aerosolized slurry of Bacillus subtilis
	var. niger (BG) was released from a point
	source located approximately 500 meters
	upwind of the target vessel.
Agents, Simulants, Tracers	Bacillus subtilis var. niger (BG).
Ancillary Testing	Not identified.
Decontamination	Not identified
Potential Health Risks Associated with	Bacillus subtilis var. niger (Bacillus
Agents, Simulants, Tracers	globigii [BG]) The American Type Culture
	Center characterizes Bacillus subtilis var.
	niger as a BioSafety Level-1 (BSL-1)
	bacterium. The Centers for Disease
	Control and Prevention define BSL-1 as
	suitable for work involving well-
	characterized agents not known to
	consistently cause disease in healthy adult
	humans. (Sources: American Type
	Culture Collection data sheet,
	http://phage.atcc.org [as of January 11, 2002]
	and Biosafety in Microbiological and
	Biomedical Laboratories, U.S. Department
	of Health and Human Services, Public
	Health Service, Centers for Disease
	Control and Prevention and National
	Institutes of Health, 4 th ed., p. 17, April
	1999, U.S. Government Printing Office,
	Washington)

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