

# 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.

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

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