



# FACT SHEET

Office of the  
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**Deployment Health Support Directorate**

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## **Deseret Test Center**

### **Big Jack, Phase B**

Shortly after President Kennedy's inauguration in 1961, the Secretary of Defense, Robert McNamara, directed that a total review of the U.S. military be undertaken. The study consisted of 150 separate projects. The chemical and biological warfare review was known as Project 112. As part of the Project 112 review, the Joint Chiefs of Staff convened a working committee that recommended a research, testing, and development program for chemical and biological weapons. To oversee this program, the Deseret Test Center was established at Fort Douglas, Utah, in 1962. Both land-based and ship-based tests were conducted during the period 1962 – 1973. The Deseret Test Center closed in 1973.

The purpose of the Big Jack, Phase B test was to obtain information on the degree of penetration of jungle canopy by a chemical warfare agent simulant disseminated from an operational type weapon system.

The Big Jack program was divided into two phases. Phase B trials involved the release and sampling of tri (2-ethylhexyl) phosphate (TOF), a non-toxic simulant for VX nerve agent. The dissemination systems used were the US Navy Aero 14B and E40 spray tanks mounted on Marine A-4 aircraft

The Big Jack, Phase B test area was located on the Fort Sherman Military reservation, Panama Canal Zone. Big Jack, Phase B trials were conducted from February 15 - March 9, 1963.

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 Deployment Health Support Directorate (DHSD) 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 DHSD 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>	Big Jack, Phase B (DTC Test 63-4)
<b>Testing Organization</b>	US Army Deseret Test Center
<b>Test Dates</b>	February 15 - March 9, 1963
<b>Test Location</b>	Near Fort Sherman Military Reservation, Panama Canal Zone
<b>Test Operations</b>	To investigate the penetration and dispersion of a simulant for VX nerve agent when released as an aerial spray over a jungle environment.
<b>Participating Services</b>	US Army, US Navy, US Air Force, Deseret Test Center personnel
<b>Units and Ships Involved</b>	VMA 225, Marine Aircraft Group 14
<b>Dissemination Procedures</b>	Sprayed from US Navy Aero 14B and E40 tanks mounted on Marine A-4 aircraft
<b>Agents</b>	Not used
<b>Simulants and Tracers</b>	tri (2-ethylhexyl) phosphate
<b>Ancillary Testing</b>	Not identified
<b>Decontamination</b>	Not identified
<b>Potential Health Risks Associated with Agents, Simulants, Tracers</b>	<p><u>trioctyl phosphate (tri (2-ethylhexyl) phosphate) (TOF)</u> Used as a nontoxic simulant for VX nerve agent. TOF is a viscous, colorless or pale yellow liquid. It can irritate the eyes, skin, and respiratory tract on contact. It can cause cancer in some animal species, but this has not been demonstrated in humans.</p> <p>(Sources: NLM TOXNET, Trioctyl phosphate 1806-54-8 or Tri(2-ethylhexyl)phosphate 78-42-2, HSDB Human Health Effects and</p>

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	<p>Animal Toxicity Studies, available at <a href="http://toxnet.nlm.nih.gov">http://toxnet.nlm.nih.gov</a>. <a href="http://physchem.ox.ac.uk/MSDS/TR/tris(2-ethylhexyl)phosphate.html">http://physchem.ox.ac.uk/MSDS/TR/tris(2-ethylhexyl)phosphate.html</a> [as of September 25, 2002] and <a href="http://www.ilo.org/public/english/protection/safework/cis/products/icsc/dtasht/_icsc09/icsc0968.pdf">http://www.ilo.org/public/english/protection/safework/cis/products/icsc/dtasht/_icsc09/icsc0968.pdf</a> [as of September 25, 2002]).</p>
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