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BIENNIAL WEAPONS PROGRAM REPORT

VOLUME I – ENDURING STOCKPILE

FY2010 (U)

~~Controlled Distribution~~

~~NUCLEAR WEAPON DATA~~

~~SIGMA 1, 2~~

~~CRITICAL NUCLEAR WEAPON DESIGN INFORMATION~~

~~DOD DIRECTIVE 5210.5 APPLIES~~

~~RESTRICTED DATA~~

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~~Derived from: CG-W-5, 10/16/95, US DOE OC~~

~~Date: December 10, 2009~~

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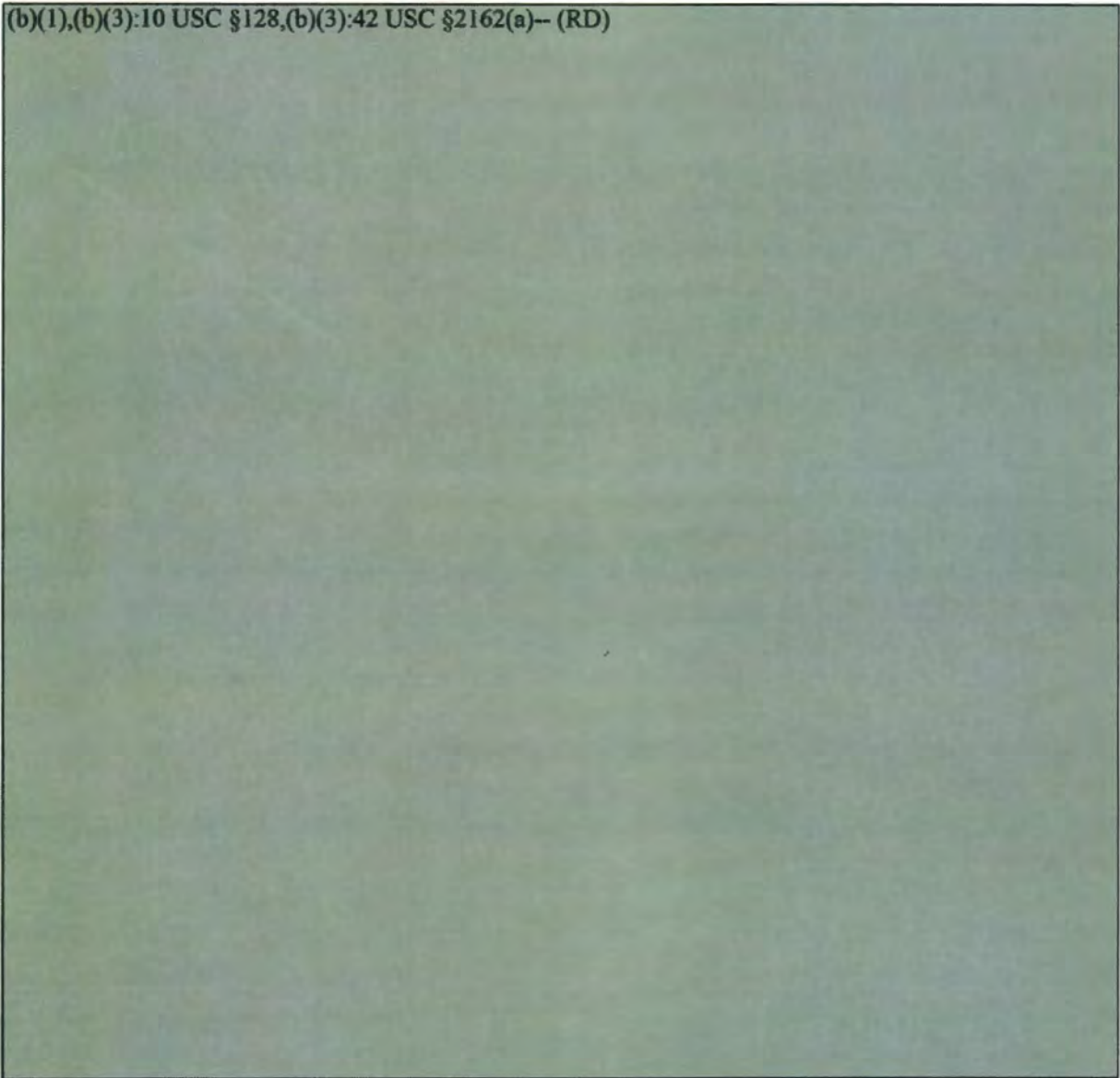
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i

I. DESCRIPTION

The B61 is a lightweight, multipurpose, selectable-yield gravity bomb. The enduring stockpile consists of Mods 3,4,7,10, and 11 - all of which are derived from the basic B61 design. The most recent Mod, the B61-11, is an earth penetrator variant of the Mod 7.

(b)(1),(b)(3):10 USC §128,(b)(3):42 USC §2162(a)-- (RD)



1.6 ~~(C-PRO)~~ Weapon Description.

The B61-12 is a lightweight, multipurpose, selectable yield, (b)(1),(b)(3)-1 weapon designed for either internal or external carriage on a wide variety of aircraft.

(b)(1),(b)(3):10 USC §128,(b)(3):42 USC §2162(a)--(RD)

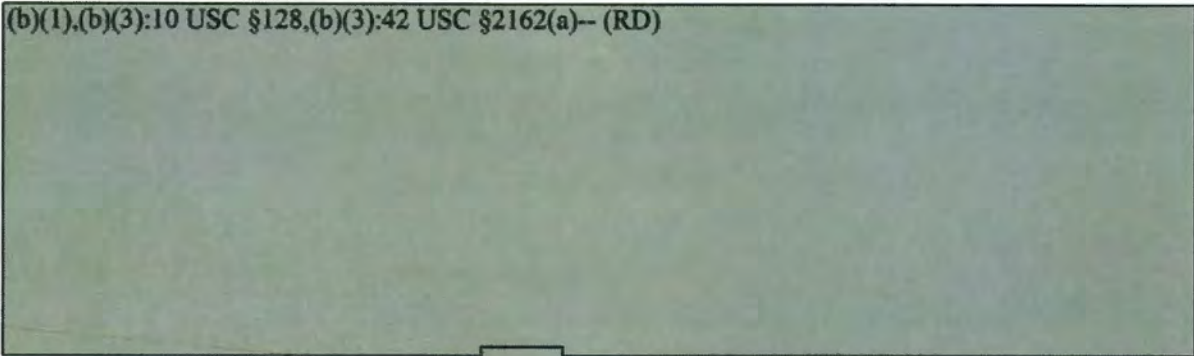
(b)(1),(b)(3):10 USC §128,(b)(3):42 USC §2162(a)-- (RD)

(b)(1),(b)(3):10 USC §128,(b)(3):42 USC §2162(a)--(RD)


(b)(1),(b)(3):10 USC §128,(b)(3):42 USC §2162(a)-- (RD)

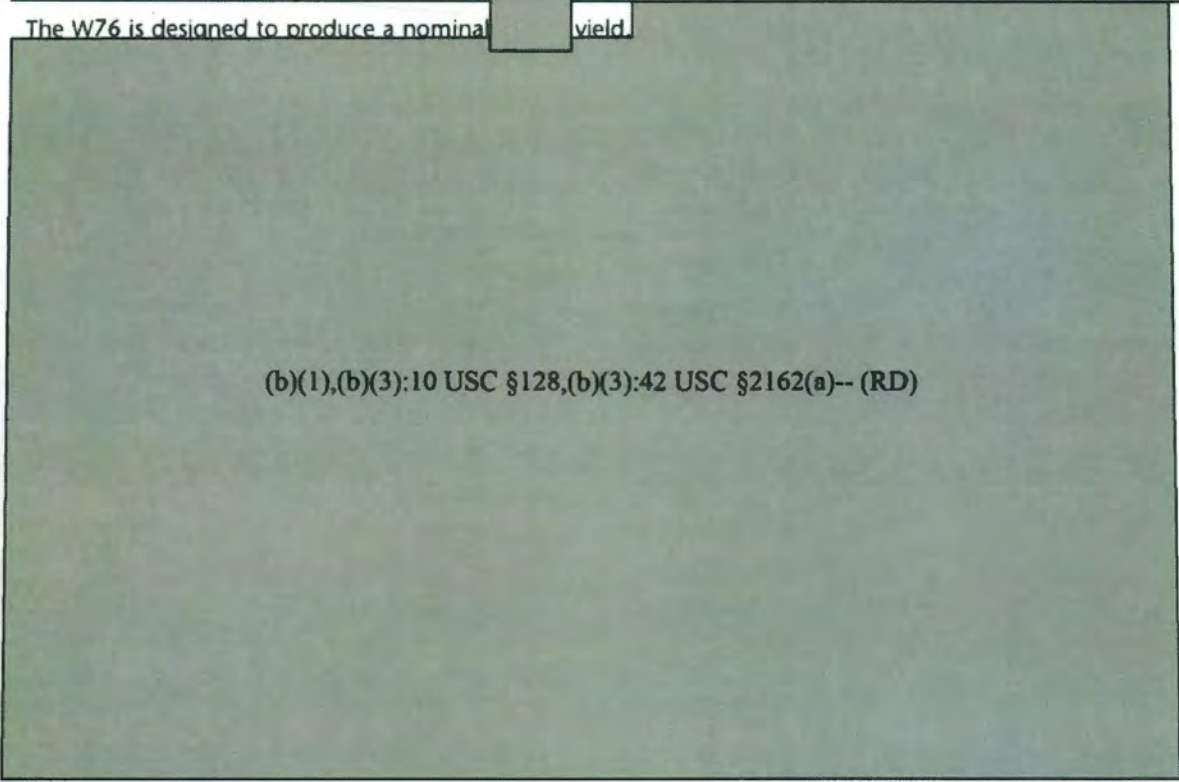
I. DESCRIPTION

(b)(1),(b)(3):10 USC §128,(b)(3):42 USC §2162(a)-- (RD)



(b)(1),(b)
(3):42 USC
§2168(a)
(1)(C)--
(FRD)

The W76 is designed to produce a nominal  yield.



(b)(1),(b)(3):10 USC §128,(b)(3):42 USC §2162(a)-- (RD)

NUCLEAR SYSTEM DESCRIPTION

(b)(1),(b)(3):10 USC §128,(b)(3):42 USC §2162(a)-- (RD)

(b)(1),(b)(3):42 USC §2168(a)(1)(C)-- (FRD)

The W76-1/MK4A is a modification of the W76-0/MK4 warhead with a refurbished secondary and a refurbished primary.

(b)(1),(b)(3):10 USC §128,(b)(3):42 USC §2162(a)-- (RD) Total system yield is certified at a nominal [redacted] kt (b)(3):10 USC §128,(b)(3):42 USC §2162(a)-- (RD)

(b)(1),(b)(3):10 USC §128,(b)(3):42 USC §2162(a)-- (RD)

I. DESCRIPTION

(b)(1),(b)(3):10 USC §128,(b)(3):42 USC §2162(a)-- (RD)

The W78, which is DOE's portion of the W78/Mk12A RV system, was developed as a high yield replacement for the W62.

(b)(1),(b)(3):42 USC §2168(a)(1)(C)-- (FRD)

(b)(1),(b)(3):10 USC §128,(b)(3):42 USC §2162(a)-- (RD)

I. DESCRIPTION

(b)(1),(b)(3):10 USC §128,(b)(3):42 USC §2162(a)-- (RD)

The W80 is a [redacted] warhead designed for use with the air-launched and sea-launched cruise missiles (ALCM and SLCM) and the advanced cruise missile (ACM).

[redacted]
(b)(1),(b)(3):10 USC §128,(b)(3):42 USC §2162(a)-- (RD)

The W80 Mod 1 is used with the U.S. Air Force's ALCM, the AGM-86B, and ACM, the AGM-129. The TLAM-N missiles are designed to be launched from attack submarines, whereas the ALCM and ACM are designed to be launched from B-52H aircraft. The missiles, which fly at high and low altitudes at subsonic speeds, are equipped with inertial navigation guidance systems and are capable of delivering the warhead on target to a maximum range of [redacted] ACM. The warheads have prelaunch selectable yields [redacted]

[redacted]
(b)(1),(b)(3):10 USC §128,(b)(3):42 USC §2162(a)-- (RD)

[redacted]
(b)(1),(b)(3):10 USC §128,(b)(3):42 USC §2162(a)-- (RD)

I. DESCRIPTION

The B83 modern strategic bomb was designed to replace the B28 and B43 bombs. It is a full-fuzing bomb that is carried on two U.S. Air Force aircraft (B-52H and B-2A bombers).

(b)(1),(b)(3):10 USC §128,(b)(3):42 USC §2162(a)-- (RD)

The B83-1 has

selectable yields

(b)(1),(b)(3):10 USC §128,(b)(3):42 USC §2162(a)-- (RD)

I. DESCRIPTION

(b)(1),(b)(3):10 USC §128,(b)(3):42 USC §2162(a)-- (RD)

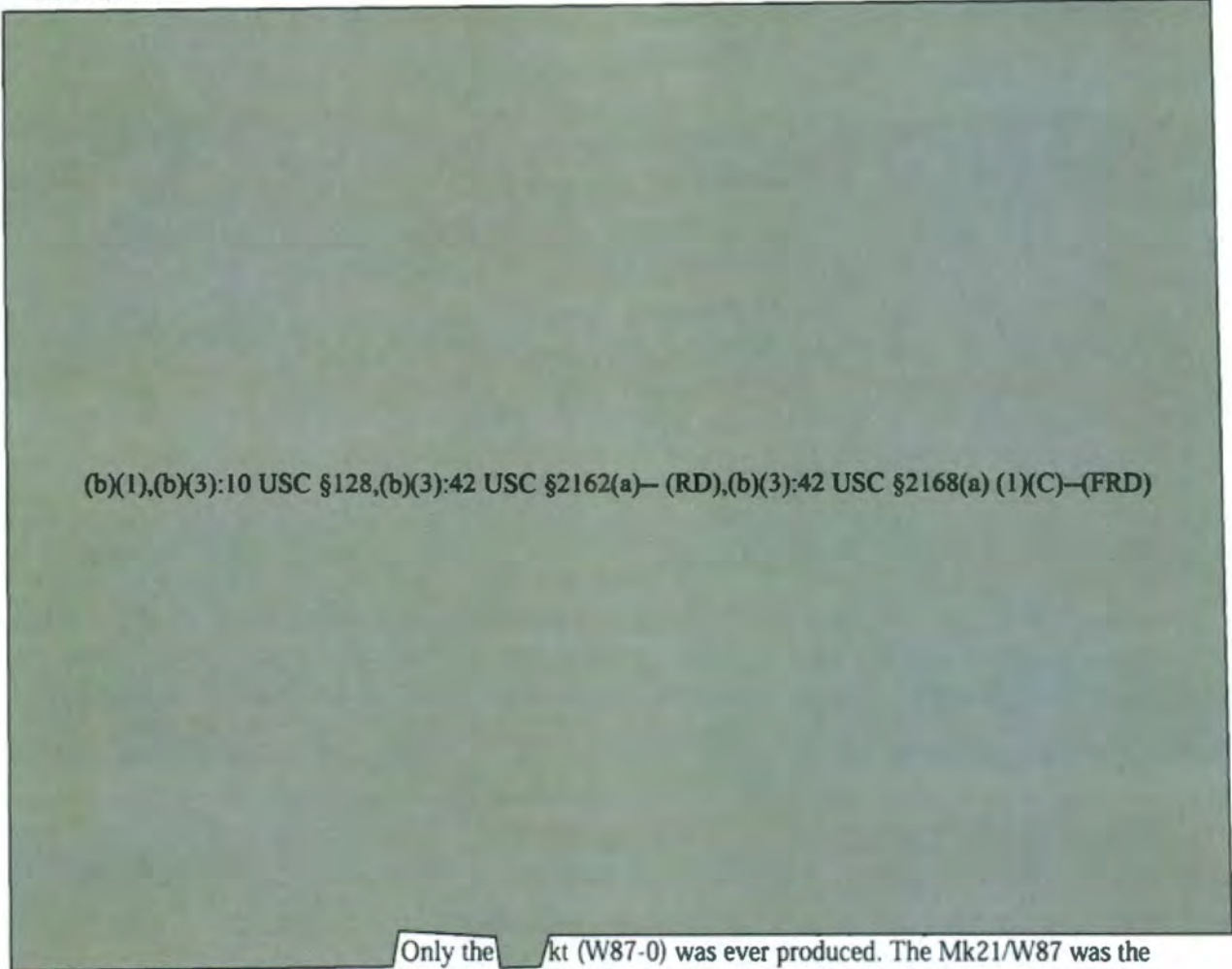
The W84 is a [redacted] warhead that was designed for use with the U.S. Air Force's Gryphon missile, the BGM-109G ground launched cruise missile (GLCM). The Gryphon missile was destroyed in compliance with the terms of the Intermediate Range Nuclear Force (INF) Treaty [redacted]

[redacted] (b)(1),(b)(3):10 USC §128,(b)(3):42 USC §2162(a)-- (RD),(b)(3):42 USC §2168(a) (1)(C)--(FRD) warhead is capable of providing [redacted] selectable yields [redacted]

(b)(1),(b)(3):10 USC §128,(b)(3):42 USC §2162(a)-- (RD)

BACKGROUND

HISTORY



(b)(1),(b)(3):10 USC §128,(b)(3):42 USC §2162(a)-(RD),(b)(3):42 USC §2168(a)(1)(C)-(FRD)

Only the /kt (W87-0) was ever produced. The Mk21/W87 was the first and only intercontinental ballistic missile (ICBM) with IHE and was first deployed on the LGM-118 Peacekeeper; currently it is carried on the LGM-30G Minuteman III.

I. DESCRIPTION

(b)(1),(b)(3):10 USC §128,(b)(3):42 USC §2162(a)-- (RD)

The W88 is a [redacted] warhead designed as an integral part of the U.S. Navy's Mk5 reentry body (RB) for hard targets.

[redacted]
(b)(1),(b)(3):10 USC §128,(b)(3):42 USC §2162(a)-- (RD)

The W88 nuclear system, which is designed to produce a nominal yield of [redacted] kt.

[redacted]
(b)(1),(b)(3):10 USC §128,(b)(3):42 USC §2162(a)-- (RD),(b)(3):42 USC §2168(a) (1)(C)--(FRD)

[redacted]
(b)(1),(b)(3):10 USC §128,(b)(3):42 USC §2162(a)-- (RD)