# Complete List of All U.S. Nuclear Weapons

*Last changed 14 October 2006*

If a weapon name is an active link, click on it to see a picture of the weapon, or a page on it (if one exists).

| Desig-nation | Type | Width (in.) | Length (in.) | Weight (lb.) | Yield(s) | Fuzing | Deployment Status | Comments |
|---|---|---|---|---|---|---|---|---|
| Mk-I | Bomb | 28 | 120 | 8,900 | 15 - 16 Kt | Airburst | Used in combat in 1945, never stockpiled; only 5 bomb assemblies completed, all retired by Nov 1950 | Gun-assembly HEU bomb; "Little Boy" dropped on Hiroshima |
| Mk-II | Bomb | | | | | | Theoretical design, never produced | Low-efficiency plutonium implosion bomb |
| Mk-III | Bomb | 60.25 | 128 | 10,300 | 18, 20-23, 37, 49 Kt | Airburst | Used in combat in 1945; mass production 4/47-4/49, 120 produced; all retired late 1950 | Plutonium implosion bomb; "Fat Man", Model 1561; Mods 0, 1, 2 |
| Mk-4 | Bomb | 60 | 128 | 10,800 - 10,900 | 1, 3.5, 8, 14, 21, 22, 31 Kt | Airburst | Entered service 3/49; produced 3/49-5/51; 550 produced (all mods); Retired 7/52-5/53 | Implosion fission bomb; redesigned weapon based on Mk-III Mod 1; first IFI weapon; first assembly-line produced nuclear weapon; used type C and D pits, composite Pu-HEU cores; 3 mods |
| T-1 / TX-1 | Atomic Demolition Munition | About 8 | ? | About 150 | Low kiloton | Time delay | Entered service, withdrawn, late 1940s | Developed at Picatinny Arsenal for the U.S. Army. The only U.S. nuclear weapon ever developed outside of the nuclear laboratory system. Gun- |

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| | | | | | | | | assembly HEU weapon. |
| W-4 | Warhead | 60 | 90 | 6,500 | | Airburst | Canceled 1951 | Planned warhead for the Snark SSM cruise missile; Mk-4 bomb derivative |
| Mk-5 | Bomb | 43.75 | 129 - 132 | 3,025 - 3,175 | 6, 16, 55, 60, 100, 120 Kt | Airburst or contact | Entered operational stockpile 5/52; last retired 1/63; 140 bombs (all mods) produced | 92 lens high efficiency implosion bomb; used type D pit, composite cores; first weapon with major size/weight reduction over Fat Man; used as primary (1st stage) in the first thermonuclear devices; 4 mods; first weapon to use auto IFI |
| W-5 | Warhead | 39; 44 | 76 | 2,405 - 2,650; 2,600 (XW-5-X1) | same as Mk-5 | Airburst or surface | Start of manufacture 4/54 (Regulus), 7/54 (Matador); retired 7/61 - 1/63; 35 (Regulus), 65 (Matador) produced | Warhead for the Matador (MGM-1) and Regulus 1 (SSM-N-8) SSM cruise missiles; application to the Rascal air-to-surface canceled; first missile warhead; produced by modifying stockpile Mk-5 bombs |
| Mk-6 | Bomb | 61 | 128 | 7,600 - 8,500 | 8, 26, 80, 154, 160 Kt | Airburst or contact | Manufactured from 7/51 to early 1955; 1100 bombs (all mods) produced; last retired 1962 | Improved high-yield lightweight Mk-4; 7 mods; some Mk-4Ds were converted Mk-6 Mod 0; early mods had 32 lens implosion system, Mod 2 and later had 60 lens system |
| Mk-7 | Bomb | 30.5 | 183 | 1,645 - 1,700 | 8, 19, 22, 30, 31, 61 Kt | Airburst or contact | Manufactured 7/52 - 2/63; in service July 1952-1967; 1700 - 1800 produced | Mk-7 "Thor"; multipurpose light weight tactical bomb; 92 lens implosion system; 6-7 yields; 10 mods, PAL A used on late mods |
| | | | | | | | W-7 warhead manufacture begun 12/53; BOAR: stockpiled 1956 - 1963, 225 produced; Corporal: stockpiled 1955 - 1965, | Multipurpose warhead - BOAR air-surface rocket, the |

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| W-7 | Warhead | 30 - 30.5 | 54.8 - 56 | 900 - 1,100; 970 (W-7-X1 / X2); 983 (Betty) | 90 T; 2 - 40 Kt | Airburst, surface, hydrostatic | 300 produced; Honest John: stockpiled 1954 - 1960, 300 produced; ADM: stockpiled 1955-1963, 300 produced; Betty: stockpiled 6/55 - 1960, 225 produced; Nike Hercules: canceled 1956 | Corporal (M-2) and Honest John (M-3) ballistic missiles, ADM, Betty Mk 90 ASW depth bomb, Nike Hercules SAM missile warhead (W-7-X1/X2); 7 yields, 4 mods; Corporal yield 2-40 Kt (several options), ADM yield low (90 T?), Betty yield 32 Kt |
| Mk-8 | Bomb | 14.5 | 116 - 132 | 3,230 - 3,280 | 25 - 30 Kt | Pyrotechnic delay | Manufactured 11/51 - 5/53; in service 1/52 - 6/57; 40 produced (all mods) | Earth penetrating weapon, gun-assembly HEU bomb, nicknamed "Elsie" (for LC - light case), 2 mods; replaced by the Mk-11 |
| W-8 | Warhead | | | | | | Canceled May 1955 | Gun-assembly warhead, intended for use as a cratering warhead for the Regulus missile |
| W-9 | Artillery Shell | 11.02 (280 mm) | 54.8 | 803; 850 | 15 Kt | Mechanical time delay airburst | Manufactured 4/52 - 11/53; Retired 5/57; 80 produced | Used in T-124, the first U.S. nuclear artillery shell; gun-assembly HEU weapon, modified TX-8; replaced 1-for-1 by W-19; only 20 280mm cannons were ever made |
| Mk-9 / T-4 | Atomic Demolition Munition | | | 120 - 200 | | Time delay | Stockpiled 1957; retired 1963 | The T-4 was built from recycled W-9 warheads; gun-assembly HEU weapon; replaced by W-45 |
| Mk-10 | Bomb | 12 | | 1,750; 1,500 | 12 - 15 Kt | Airburst | Canceled May 1952 | "Airburst Elsie", a reduced size/ weight derivative of the Mk-8; superseded by the Mk-12 |
| | | | | | | Pyrotechnic | Manufactured 1/56 - 1957; | Improved Mk-8 gun-assembly weapon, replaced Mk-8 on 1- |

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| Mk-11 | Bomb | 14 | 147 | 3,210 - 3,500 | | delay | in service 1/56 - 1960; 40 produced | for-1 basis; stockpiled as the "Mk-91 penetration bomb" |
| Mk-12 | Bomb | 22 | 155 | 1,100 - 1,200 | 12, 14 Kt | Timer or contact | Manufactured 12/54 - 2/57; Retired 7/58 - 7/62; 250 produced | High-speed fighter-bomber weapon; 92-point implosion weapon; nicknamed "Brok"; probably first weapon using beryllium tamper; 4 versions stockpiled - 2 prototypes, 2 mods |
| W-12 | Warhead | 22 | | 900 | Low Kt | Airburst | Canceled Nov 1955 | Talos (Navy)/Talos-W (Army) surface-air missile warhead |
| MK-13 | Bomb | 61 | 128 | 7,400 | 32 Kt (Upshot - Knothole Harry shot) | Airburst or contact | Canceled Aug 1954 | High-yield Mk-6 follow-on, 92-point implosion system; superseded by TN Mk-15/39 |
| W-13 | Warhead | 58 | 100 | 6,000 - 6,500 | | Airburst or contact | Canceled Sept 1954 | Early warhead intended for Snark cruise missile, Redstone ICBM; superseded by TN Mk/W-15/39 |
| TX / MK-14 | Bomb | 61.4 | 222 - 223.5 | 28,954 - 29,851; 31,000 | 5-7 Mt; 6.9 Mt (Castle Union shot) | Airburst | Stockpiled 2/54 - 10/54; 5 produced | First deployed solid-fuel thermonuclear weapon; recycled into Mk-17 weapons by 9/56; used 95% enriched Li-6; 64 ft parachute |
| MK-15 | Bomb | 34.4 - 34.7; 35 | 136 - 140 | 7,600 | 1.69 Mt (Castle Nectar), 3.8 Mt (Redwing Cherokee) | Airburst, contact (F/F or rtd), laydown | Manufactured 4/55 - 2/57; Retired 8/61 - 4/65; 1200 produced (all mods) | First "lightweight" U.S. TN bomb; used HEU secondary casing; 3 mods; 1x3 ft and 1x12 ft ribbon parachutes |
| W-15 | Warhead | 34.5 | | 6,400 - 6,560 | | | Canceled Feb 1957 | Class "C" TN missile warhead derived from MK-15, canceled in favor of very closely related W-39 |
| TX-16 | Bomb | 61.4 | 296.7 | 39,000 - 42,000 | 6 - 8 Mt | Airburst | Stockpiled 1/54 - 4/54; 5 produced | First deployed thermonuclear weapon; weaponized version of Ivy Mike device; only cryogenic TN weapon ever deployed |
| EC-17 | Bomb | 61.4 | 224.9 | 39,600 | 11 Mt (Castle Romeo | Airburst | Stockpiled 4/54 - 10/54; | "Emergency Capability" weapon (deployed prototype); |

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| | | | | | shot) | | 5 produced | used natural lithium; free fall bomb |
| MK-17 | Bomb | 61.4 | 296.7 | 41,400 - 42,000 | 10 - 15 Mt | Airburst or contact (Mod 2 only) | Manufactured 7/54 - 11/55; Retired 11/56 - 8/57; 200 produced | Similar to MK-24, different secondary; heaviest U.S. nuclear weapon, 2nd highest yield of any U.S. weapon (along with similar Mk-24); 3 mods; Mod 2 contact fused; 1x64 ft. parachute; replaced by the Mk-36 |
| MK-18 | Bomb | 60 | 128 | 8,600 | 500 Kt (Ivy King shot) | Airburst or contact | Manufactured 3/53 - 2/55; Retired 1/56 - 3/56; 90 produced (all mods) | Very high-yield MK-6/Mk-13 follow-on; largest pure fission bomb ever deployed; nicknamed the SOB ("Super Oralloy Bomb"); 92-point implosion system, all HEU core; 2 mods; Retired by conversion to lower yield Mk-6 Mod 6; superseded by TN Mk-15 and Mk-28 |
| W-19 | Artillery Shell | 11.02 (280 mm) | 54 | 600 | 15 - 20 Kt | Mechanical time delay airburst | Production began 7/55; Retired 1963; 80 produced | Used in T-315 atomic projectile; improved W-9; gun-assembly HEU weapon |
| Mk-20 | Bomb | 60 | 128 | 6,400 | | | Canceled Aug 1954 | Improved high-yield MK-13; superseded by TN MK-15 |
| Mk-21 | Bomb | 56.2; 58.5 | 149 - 150 | 15,000 - 17,700 | 4 - 5 Mt | Airburst, contact, laydown | Manufactured 12/55 - 7/56; Retired 6/57 - 1//57; 275 produced (all mods) | Redesigned Shrimp TN device with 95% enriched Li-6 fuel; 3 mods, all "dirty"; "clean" version tested, never deployed; Mod 1 contact fused; Mod 2 also had w/boosted primary; Retired by conversion to Mk-36-Y1 Mod 1 |
| W-21 | Warhead | 52; | 145 | 15,000 - 16,000 | | | Canceled | For B-58, SM-64A 56 Navaho |
| Mk-22 | Bomb | 51 | | 18,000 | 1 Mt | | Canceled April 1954 | UCRL design based on the Morgenstern/Ramrod devices; canceled following Morgenstern fizzle (Castle Koon) |
| | | | | | | Mechanical | Production began 10/56; | US Navy "Katie" shell; W-19 (11 inch |

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| W-23 | Artillery Shell | 16 | 64 | 1,500; 1,900 | 15 - 20 Kt | time delay airburst | Retired 10/62; 50 produced | shell) internal components adapted to 16 inch shell body |
| EC 24 | Bomb | 61 | 225 | 39,600 | 13.5 Mt (Castle Yankee shot) | Airburst | Stockpiled 4/54 - 10/54; 10 produced | "Emergency Capability" weapon (deployed prototype); used enriched Li-6; free fall bomb |
| Mk-24 | Bomb | 61.4 | 296 | 41,400 - 42,000 | 10 - 15 Mt | Airburst | Manufactured 7/54 - 11/55; Retired 9/56 - 10/56; 105 produced | Similar to MK-17, different secondary; heaviest U.S. nuclear weapon, 2nd highest yield of any U.S. weapon (along with similar Mk-17); 2 mods (Mod 2 with contact burst canceled); 1x64 ft parachute; replaced by the Mk-36 |
| W-25 | Warhead | 17.35 - 17.4 | 25.7 - 26.6 | 218 - 221 | 1.7 Kt | Time delay | Manufactured 5/57 - 5/60; Mod 0 retired 8/61 - 1965, all retired by 12/84; 3150 produced (all mods) | MB-1 Genie AAM warhead; unboosted composite implosion warhead; first "sealed pit" weapon; 2 mods, Mod 1 had environmental sensing device safeties |
| Mk-26 | Bomb | 56.2 | 150 | 15,000 - 17,700 | | | Canceled 1956 | Mk-21 sibling design |
| Mk-27 | Bomb | 30.2 | 125 - 142 | 3,150 - 3,300 | | Airburst or contact | Manufactured 11/58 - 6/59; Retired 11/62 - 7/65; 700 (all mods) produced | Navy TN bomb; This UCRL design was a competitor with the LASL Mk-28 to satisfy the Class "D" light weight TN bomb requirement; 3 mods |
| W-27 | Warhead | 30.25 - 31 | 75 | 2,800 | 2 Mt | Airburst or contact | Manufactured 9/58 - 6/59; retired 8/62 - 7/65; 20 produced | Regulus I (SSM-N-8) SSM cruise missile warhead; considered for several other systems all of which were were canceled: the F-101 and B-58 bomb pods, and the Rascal, Regulus II, and Matador cruise missiles |
| | | | | | | | Manufactured 1/58 - 3/58, 8/58 - 5/66; | Multipurpose TN tactical and strategic bomb; longest weapon design in U.S. (33 years); 2nd largest production run of any U.S. weapon |

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| Mk-28 | Bomb | 20; 22 | 96 - 170 | 1,700 - 2,320 | Y1: 1.1 Mt, Y2: 350 Kt, Y3: 70 Kt, Y5: 1.45 Mt | FUFO: F/F or retarded, airburst or contact, laydown | retirement of early mods began 1961, last one retired 9/91; 4500 produced (all mods) | design; Y4 was fission only; 20 mods and variants; PAL A (Y1), B (Y2), D (Y3, Y5); replaced by B-61 and B-83 bombs; 1-point safety problem with primary discovered after start of initial manufacture, halting production for 5 months |
| W-28 | Warhead | 20 | 60 | 1,500 - 1,725 | 70 Kt - 1.45 Mt | Airburst or contact | Manufactured 8/58 - 5/66, entered service (Hound Dog) 1959 and (Mace) 1960; Hound Dog retired 1/64 - 1976, Mace retired 1970; production - 900 (Hound Dog), 100 (Mace) | Warhead for the Hound Dog (AGM-28) and Mace (MGM-13) cruise missiles; 5 mods; PAL A and B |
| W-29 | Warhead | 52; 35 | 145 | 3,500 | | | Canceled Aug 1955 | Canceled in favor of Mk-15 |
| W-30 | Warhead | 22 | 48 | 438; 490; 450 | 300 T; 500 T (Talos and TADM); 4.7 Kt; 19 Kt | Airburst, contact, time delay | TADM: stockpiled 1961 - 1966, 300 produced; Talos: manufactured 2/59 - 1/65, retired 1/62 - 3/79; 300 produced | Multipurpose warhead: Talos SAM/SSM, XW-30-X1 TADM (Tactical Atomic Demolition Munition) warhead; Talos - 1 yield, 3 mods; TADM - 2 yields stockpiled |
| W-31 | Warhead | 28 - 29; 30 | 39 - 39.3 | 900 - 945 | 1, 2, 12, 20, 40 Kt | Airburst, timer, surface | Honest John: manufactured 10/59 - 12/61, retired 7/67 - 1987, 1650 produced; Nike Hercules: manufactured 10/58 - 12/61, retired 7/67 - 9/89, 2550 produced; ADM: stockpiled 9/60 - 1965, 300 produced | Multipurpose boosted fission warhead: Honest John SSM, Nike Hercules SAM, ADM (Atomic Demolition Munition); Versions used: Honest John: W-31 Mod 0, 3; Nike-Hercules: W-31 Mod 0, 2; ADM: Mk-31 Mod 1; 4 yields stockpiled: 2 for Nike-Hercules, 3 for Honest John (2, 20, and 40 Kt) |

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| W-32 | Artillery Shell | 9.45 (240 mm) | | 400; 450 | | | Canceled May 1955 | |
| W-33 | Artillery Shell | 8 (203 mm) | 37 | 240 - 243 | 5 - 10 Kt, 40 Kt (Y2) | Mechanical time delay airburst | Manufactured 1/57 - 1/65; Retired 9/92; 2000 produced | W-33 used in the T-317 atomic projectile; gun-assembly HEU weapon; used titanium to reduce weight and size; 4 yields (Y1 - Y4) using different internal HEU assemblies, high yield variant may be boosted; 2 mods |
| W-34 | ASW warhead / Bomb | 17 | 32 | 312; 320; 311 | 11 Kt | Hydrostatic, laydown, impact | ASW: Manufactured 8/58 - 12/62; retired 7/64 - 1971 (Lulu), 7/64 - 1976 (Astor); 2000 Lulu, 600 Astor produced; Hotpoint: Manufactured 6/58 - 9/62; Retired by 1965; 600 produced | Multipurpose warhead for ASW (antisubmarine warfare) and tactical use; ASW: Mk-34 Lulu depth bomb, Mk-44 Astor torpedo; tactical: Mk-105 Hotpoint bomb, first parachute retarded laydown weapon; 2 mods; boosted fission implosion device identical to the Mk-28 primary |
| W-35 | Warhead | 20; 28 | | 1,500 - 1,700 | 1.75 Mt | | Canceled Aug 1958 | Early LASL TN ballistic missile warhead, intended for Atlas, Titan ICBMs, Thor, Jupiter IRBMs; competitor with UCRL W-38; canceled in favor of W-49 (a modified Mk-28) |
| Mk-36 | Bomb | 56.2; 58; 59 | 150 | 17,500; 17,700 | 9 - 10 Mt | F/F or retarded airburst or contact | Manufactured 4/56 - 6/58; Retired 8/61 - 1/62; 940 produced (all mods) | Two-stage TN strategic bomb; Y1 "dirty," Y2 "clean", each in two mods; parachutes 1x5 ft, 1x24 ft ribbon; all Mk-21s converted to Mk-36 in 1957; Retired in favor of Mk-41; at retirement this weapon represented almost half of the megatonnage of the U.S. arsenal |
| | | | | | | | Canceled | Intended to be a high-yield multipurpose companion to the W- |

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| W-37 | Warhead | 30 | | 900; 940 | | | Sept 1956 | 31; XW-37 was redesignated XW-31Y2 |
| W-38 | Warhead | 32 | 82.5 | 3,080 | 3.75 Mt | Airburst or contact | Manufactured 5/61 - 1/63; retired 1/65 - 5/65; Production: 110 (Atlas), 70 (Titan) | Warhead for Atlas E/F and Titan I ICBMs; used Avco Mk 4 RV; first UCRL designed TN ballistic missile warhead; competitor with LASL W-35/49 |
| Mk-39 | Bomb | 35, 44 (tail section) | 136 - 140 | 6,650 - 6,750 | 3-4 Mt (2 yields, Y1 and Y2) | Airburst, contact; mod w/low-level retarded laydown | Manufactured 2/57 - 3/59; Retired 1/62 to 11/66; 700 produced (all mods) | Improved Mk-15, Mk-39 Mod 0 same as TX-15-X3; used gas-boosted primary to reduce weight; thermal batteries, improved safeties; 3 mods; parachutes: 1x6 ft, 1x28 ribbon, 1x100 ft |
| W-39 | Warhead | 34.5 - 35 | 105.7 | 6,230 - 6,400 | 3.8 Mt (2 yields, Y1 and Y2) | | Redstone: stockpiled 7/58 - 1963, 60 produced; Snark: manufactured 4/58 - 7/58, retired 8/62 - 9/65, 30 produced | Warhead for Snark cruise missile, Redstone MRBM, B-58 weapon pod; Versions: Redstone Mk-39Y1 Mod 1 and Mk-39Y2 Mod 1, Snark Mk-39Y1 Mod 1; W-39 identical to Mk-39 except for fuzing system |
| W-40 | Warhead | 17.9 | 31.64 | 350; 385 (Y1) | 10 Kt (Y1) | Airburst or contact | Bomarc: manufactured 9/59 - 5/62, retired by 11/72, 350 produced; Lacrosse: manufactured 9/59 - 5/62, retired 10/63 - 1964, 400 produced | Warhead for Bomarc SAM and Lacrosse SSM; boosted implosion system adapted from Mk-28 primary; initially deployed version (produced 6/59-8/59) not 1-point safe, Mod 2 retrofit required; 2 yields |
| Mk-41 | Bomb | 52 | 148 | 10,500 - 10,670 | 25 Mt | FUFU: F/F or retarded, airburst or contact, laydown | Manufactured 9/60 - 6/62; Retired 11/63 - 7/76; 500 produced | Highest yield U.S. weapon ever deployed; only U.S. 3-stage TN weapon; Y1 "dirty," Y2 "clean"; parachutes 1x4 ft, 1x16.5 ft; retired in favor of Mk-53 |
| W-41 | Warhead | 50 | | 9,300 | | | Canceled July 1957 | |
| W-42 | Warhead | 13 - 14 | 18.5 | 75 - 92 | | Proximity | Canceled | Intended for air-to-air (e.g. GAR-8), |

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| | | | | | | | June 1961 | surface-to-air (e.g. Hawk) applications |
| Mk-43 | Bomb | 18 | 150 - 164 | 2,060 - 2,125 | 70 Kt - 1 Mt; Y1: 1 Mt, Y5: 500 Kt | F/F or retarded, airburst or contact, laydown | Manufactured 4/61 - 10/65; retirement (early mods) began 12/72, last retired 4/91; 1000 produced (all mods) | Laydown bomb for high-speed low-altitude delivery; 5 yields; Y4 is fission only; PAL B (mod 2); Parachutes: 1x4 ft, 1x23 ft ribbon; last version retired was MK-43Y2 Mod 2 |
| W-44 | ASW warhead | 13.75 | 25.3 | 170 | 10 Kt | Hydrostatic | Manufactured 5/61 - 3/68; retired 6/74 - 9/89; 575 produced | ASROC (RUR-5A) ASW warhead; plutonium implosion warhead, similar to primary for Mk-43 |
| W-45 | Warhead | 11.5 | 27 | 150; MADM: 350 | 500 T; 1, 5, 8, 10, 15 Kt | Airburst, surface, time delay, command | Terrier: manufactured 4/62 - 6/66, retired 7/67 - 9/88, 750 produced; MADM: manufactured 1/62 - 6/66, retired 7/67 - 1984, 350 produced; Bullpup: manufactured 1/62 - 1963, retired 7/67 - 1978, 100 produced; Little John: manufactured 9/61 - 6/66, retired 7/67 - 1970, 500 produced | Multipurpose UCRL designed tactical warhead; small implosion design; Y1 (1 Kt): Little John SSM, Terrier SAM, MADM (Medium ADM); Y2: Little John, MADM; Y3 (unboosted): GAM-83B Bullpup ASM, MADM; Y4 (boosted, 1 Kt): Bullpup, Little John, Terrier, MADM |
| Mk-46 | Bomb | 37 | | 6,400 | Mt range | | Canceled Oct 1958 | "Clean" and "dirty" versions tested during Hardtack I; was to have replaced Mk-39; development of improved design continued as Mk-53 |
| W-46 | Warhead | 35-40 | | | | | Canceled April 1958 | Warhead planned for Redstone, Snark, B-58 pod warhead; Redstone/W-46 canceled in favor of Titan II/W-53 |
| | | | | | | | EC-47 manufactured | Polaris SLBM TN warhead; breakthrough in |

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| W-47 | Warhead | 18 | 46.6 | Y1: 717 - 720;<br>Y2: 733 | Y1: 600 Kt;<br>Y2: 1.2 Mt | Airburst or contact | 4/60 - 6/60, retired 6/60, 300 produced; W-47 manufactured 6/60 - 7/64, retired 7/61 - 11/74, 1060 produced (Y1 and Y2) - only 300 in service at a time | compact, light high yield design; integral warhead/beryllium re-entry vehicle; 3 versions: EC-47, W-47Y1, W-47Y2; several severe reliability problems required repeated modification and remanufacture (in 1966 75% of the stockpiled Y2s were inoperable, correction took until 10/67) |
| W-48 | Artillery Shell | 6.1 (155 mm) | 33.3 | 118 - 128 | 72 T | Mechanical time delay or proximity airburst, or contact | Manufactured 10/63 - 3/68; retirement (135 Mod 0s) 1/65 - 1969, all 925 Mod 1s retired 1992; 1060 produced (all mods) | Small diameter linear implosion plutonium weapon, 2 mods |
| W-49 | Warhead | 20 | 54.3 - 57.9 | 1,640 - 1,680 | 1.44 Mt | Airburst or contact | Manufactured 9/58 - 1964; Thor retired 11/62 - 8/63 (a few to 4/75); | LASL developed ICBM/IRBM warhead; Used in Thor (Mod 0,1, 3), Atlas (Mod 0, 1), Titan, Jupiter (Mod 0, 1, 3, 5) warhead; 2 RVs used Mk-2 heat sink and Mk-3 ablative; 2 yields, 7 mods; Mk/W-28 adaptation with new arming/fuzing system; PAL A; successor to W-35 |
| W-50 | Warhead | 15.4 | 44 | 409 - 410 | Y1: 60 Kt;<br>Y2: 200 Kt;<br>Y3: 400 Kt | Airburst or contact | Manufactured 3/63 - 12/65; retired 4/73 - 4/91;<br>280 produced | TN warhead for Pershing SSM (Mod 1, 2), Nike Zeus SAM (canceled 5/59); Mod 1 equipped with PAL A; 3 yields, 2 mods |
| W-51 | Warhead | | | | 22 T | | Became XW-54 Jan 1959 | Very small spherical implosion warhead, initial development by LRL, development transferred to LASL and design redesignated W-54 |
| | | | | | | Airburst or | Manufactured 5/62 - 4/66; | Sergeant SSM warhead; 2 yields, 3 mods; PAL A (Mod 2); warhead test in |

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| W-52 | Warhead | 24 | 56.7 | 950 | 200 Kt | contact | retired 3/74 - 8/78; 300 produced | 1963 showed Mods 1 and 2 to be useless, Mod 3 was first to achieve rated yield |
| Mk-53 | Bomb | 50 | 148 - 150; Y2 144 | 8,850 - 8,900 | 9 Mt | FUFO: F/F or retarded, airburst or contact, laydown | Manufactured 8/62 - 6/65; retirement (early mods) began 7/67, last 50 retired from active service (but retained in permanent stockpile) early 1997; 350 produced, 50 still in stockpile | Carried by B-47, B-52; B-58 used Mk-53BA (in BLU-2/B pod); 4 mods, Y1 "dirty" version, Y2 "clean" version; fissile material all HEU, no plutonium; parachutes: 1x4 ft, 1x16.5 ft ribbon, 3x48 ft ribbon; last 50 retired in favor of B-61 Mod 11; part of the U.S. "enduring stockpile" |
| W-53 | Warhead | 37 | 103 | 6,200 | 9 Mt | Airburst or contact | | Titan II warhead |
| W-54 | Warhead | 10.75 | 15.7 | 50 - 51 | 250 T | Contact or proximity | Manufactured 4/61 - 2/65; retired 7/67 - 4/72; 1000 - 2000 produced | GAR-11/AIM-26A Falcon AAM warhead; originally called "Wee Gnat"; adaptation of Mk-54 |
| Mk-54 | Warhead | 10.75 | 17.6 | 50 - 55 | 10, 20 T | Time delay | Manufactured 4/61 - 2/65; retired 7/67 - 1971; 400 produced | Warhead for Davy Crockett M-388 recoilless rifle projectile; 2 yields; 2 mods; very light, compact spherical implosion plutonium warhead |
| Mk-54 SADM | Atomic Demolition Munition (ADM) | 16 | 24 | 150 (complete); 59 (W-54 only) | Variable, 10 T - 1 Kt | Time delay | Manufactured 8/64 - 6/66; retired 1967 - 1989; 300 produced SADM: | M-129/M-159 SADM (Special Atomic Demolition Munition) used a Mk-54 warhead package very similar to Davy Crockett; 2 mods; mechanical combination lock PAL |
| W-55 | ASW | 13 | 39.4 | 470 | Mid Kiloton Range | Hydrostatic | Manufactured 1/64 - 3/68, 3/70 - 4/74; retired 6/83 - 9/90; 285 produced | SUBROC (UUM-44A) ASW missile thermonuclear warhead; based on the 202 Kt Hardtack I Olive device |
| | | | | | | Airburst or | Manufactured 3/63 - 5/69; retired 9/66 (early mods), Mod-4 retired | Minuteman I and II warhead, based on UCRL W-47, competitor with the W-59 for Minuteman; |

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| W-56 | Warhead | 17.4 | 47.3 | 600; 680 | 1.2 Mt | surface | 1991-93; 1000 produced (all mods), 455 Mod-4s produced | 4 mods, retrofit of early mods required to fix reliability problem, blast and radiation hardening added later |
| Mk-57 | Bomb | 14.75 | 118 | 490 - 510 | 5 - 20 Kt | Retarded airburst, retarded laydown, F/F contact, hydrostatic | Manufactured 1/63 - 5/67; retirement (early mods) started 6/75, last retired 6/93; 3,100 produced | Light weight multipurpose tactical strike/depth bomb; boosted implosion fission weapon; modular design, 6 mods; PAL B; 1x12.5 ft ribbon parachute; Retired in favor of B-61 |
| W-58 | Warhead | 15.6 | 40.3 | 257 | 200 Kt | Airburst or contact | Manufactured 3/64 - 6/67; retired 9/68-4/82; 1400 produced | Polaris A-3 warhead, each A-3 carried three multiple re-entry vehicles (MRVs), first MRV warhead in service |
| W-59 | Warhead | 16.3 | 47.8 | 550 - 553 | 1 Mt | Airburst or contact | Manufactured 6/62 - 7/63; retired 12/64 - 6/69; 150 produced | Warhead for Minuteman I/Mk 5 RV and the canceled Skybolt; version of LASL "J-21" design; |
| W-60 | Warhead | 13 | 20 | 115 - 150 | Very low | Proximity | Canceled Dec 1963 | Typhon SAM warhead |
| MK/B 61 | Bomb | 13.3 | 141.64 | 695 - 716 | Variable (4 yields), 0.3 - 340 Kt; Mod 3: 0.3 - 170 Kt; Mod 4: 0.3 - 45 Kt; Mod 7/11: 10 - 340 Kt; Mod 10: 0.3 - 80 Kt | FUFO: retarded and F/F, contact or airburst, laydown | Manufactured 10/66 - early 90s; early mods retired 70s - 80s; 3150 produced, 1350 in service | Multipurpose tactical/strategic bomb; basic design adapted to many other weapon systems; 4 yields; 11 mods, 5 in service; PAL B, D, F; uses IHE in primary; parachute: 1x17 ft or 1x24 ft ribbon; longest production run of any U.S. nuclear weapon, oldest design in service; part of the U.S. "enduring stockpile" |
| W-62 | Warhead | RV Body: 21 in; Warhead: 19.7 in | RV Body: 72 in; Warhead: 39.3 in | Warhead/RV: 700-800 lb; Warhead: 253 lb | 170 Kt | Airburst or contact | Manufactured 3/70 - 6/76; early mods retired starting 4/80; 1725 produced, 610 in active service; | Minuteman III/Mk-12 RV warhead; remaining W-62s part of U.S. "enduring stockpile", but will be removed from active service under START II (to be replaced by W-88s) |
| | | | | | | | | LRL design for |

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| W-63 | Warhead | | | | | | Canceled Nov 1966 | Lance SSM warhead; ER ("neutron bomb") design; (canceled in favor of W-70 |
| W-64 | Warhead | | | | | | Canceled Sep 1964 | LASL design for Lance SSM warhead; ER ("neutron bomb") design; canceled in favor of W-63 |
| W-65 | Warhead | | | | Mt range | | Canceled Jan 1968 | Sprint ABM warhead, canceled in favor of W-66 |
| W-66 | Warhead | 18 | 35 | 150 | Kt range | | Manufactured 6/74 - 3/75; retired from service 8/75, ret. from stockpile 1985; 70 produced | Sprint ABM warhead, ER ("neutron bomb") warhead |
| W-67 | Warhead | | | | 150 Kt | | Canceled Dec 1967 | LRL ICBM/SLBM multiple warhead, intended for Poseidon and Minuteman-III |
| W-68 | Warhead | | | 367 | 40 - 50 Kt | Airburst or contact | Manufactured 6/70 - 6/75; retired 9/77 - 1991; 5250 produced | Poseidon Mk-3 RV warhead, each missile carried 10 RVs; aging problems with explosive required complete rebuilding of stockpile 11/78-83 (3200 rebuilt, others retired); largest production run of any U.S. warhead |
| W-69 | Warhead | 15 | 30 | 275 | 170 - 200 Kt | Airburst or contact | Manufactured 10/71 - 8/76; retired 10/91 - 9/94; 1500 produced | SRAM (short range attack missile, AGM 69A) air-surface missile warhead; derived from Mk-61; initially removed from active service 6/90 due to fire safety concerns |
| W-70 | Warhead | 18 | 41 | 270 | Mods 0,1, 2: variable from 1-100 Kt; Mod 3: 1 Kt | Airburst or contact | Manufactured 6/73 - 7/77 (Mods 0-2), 8/81 - 2/83 (Mod 3); retired 7/79 - 9/92; Mods 0-2: 900 produced, Mod 3: 380 | Lance SSM warhead; LRL successor to W-63 design; 4 mods; Mods 0, 1, 2: TN warhead with 3 yield settings (1-100 Kt), Mod 1 had improved selection of yields; Mod 3: enhanced radiation ("neutron bomb") version, 2 yield options (slightly less than 1 Kt, and |

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| | | | | | | | built | slightly more than 1 Kt), both 60% fusion and 40% fission; PAL D |
| W-71 | Warhead | 42 | 101 | 2,850 | 5 Mt | Airburst (command & delay timer) | Manufactured 7/74 - 7/75; retired from service 1975, ret. from stockpile 9/92; 30 produced | Spartan ABM warhead, used thermal x-rays for exoatmospheric RV kill |
| W-72 | Warhead | 15 | 79 | 825 | ca. 600 T | Contact | Manufactured 8/70 - 4/72; retired 7/79 - 9/79; 300 produced | Walleye (AGM-62) guided glide bomb warhead; W-72 was a modified W-54, salvaged from retired AIM-26A Falcon AAM; yield was significantly enhanced over Falcon version |
| W-73 | Warhead | <17 | | | | | Canceled Sept 1970 | Condor ASM warhead; derived from Mk-61; canceled in favor of a conventional HE warhead |
| W-74 | Artillery Shell | 6.1 (155 mm) | | | 2 yields (both >100 T) | | Canceled June 1973 | Linear implosion pure fission plutonium warhead; intended to replace W-48 |
| W-75 | Artillery Shell | 8 (203 mm) | | | >100 T | | Canceled 1973 | "Big brother" of W-74, similar design |
| W-76 | Warhead | | | 363 | 100 Kt | Airburst or contact | Manufactured 6/78 - 7/87; active service; approx. 3000 produced | Trident I and Trident II Mk-4 RV TN warhead, missiles can carry 8-14 RVs; developed by LANL; part of the U.S. "enduring stockpile" |
| B-77 | Bomb | 18 | 144 | 2,400 | Variable, Kt to Mt range | FUFO | Canceled Dec 1977 | High yield strategic TN bomb, intended to replace Mk-28 and Mk-43; PAL D; costly, heavy delivery system lead to cancellation, warhead design continued with B-83 |
| | | | | | 335 - 350 | Airburst or | Manufactured 8/79 - 10/82; active | Minuteman III/Mk-12A RV warhead; LANL design derived from W-50 with a new lighter primary; part of U.S. |

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| W-78 | Warhead | 21.25 | 67.7 | 400 - 600 | Kt | contact | service; 1083 produced, 920 in service | "enduring stockpile", but will be removed from active service under START II (to be replaced by W-88s) |
| W-79 | Artillery Shell | 8 | 44 | 200 | Variable - 100 T to 1.1 Kt (Mod 0), 0.8 Kt (Mod 1) | Proximity airburst or contact | Manufactured 7/81 - 8/86; ER version retirement started mid-80s, all retired 9/92; 550 (325 ER, 225 fission) produced | Plutonium linear implosion weapon, used in XM-753 atomic projectile (AFAP); Mod 0: dual capable - pure fission or enhanced radiation (ER of "neutron bomb"), 3 yield options; Mod 1: fission only; PAL D |
| W-80-0 | Warhead | 11.8 | 31.4 | 290 | Variable: 5 Kt and 170-200 Kt | Airburst or contact | Manufactured 12/83 - 9/90; active service; 367 produced | SLCM warhead; uses supergrade plutonium; PAL D; LANL design derived from Mk/B-61 warhead; now stored ashore; part of the U.S. "enduring stockpile" |
| W-80-1 | Warhead | 11.8 | 31.4 | 290 | Variable: 5 Kt and 150-170 Kt | Airburst or contact | Manufactured 1/81 - 9/90; active service; 1750 produced, 1400 in service | Warhead for ALCM (1000 in service), ACM (400 in service); PAL D; LANL design derived from Mk/B-61 warhead; part of the U.S. "enduring stockpile" |
| W-81 | Warhead | <13.5 | | | 2 - 4 Kt | | Canceled 1986 | USN Standard SM-2 SAM warhead; PAL F; variant of Mk/B-61 warhead, enhanced radiation version initially planned, later converted to fission only |
| W-82 | Artillery Shell | 6.1 (155 mm) | 34 | 95 | <2 Kt | Airburst | W-82-0 canceled in Oct 1983; W-82-1 canceled in Sept 1990 | 155 mm companion to the the W-79, for use in XM-785 atomic projectile (AFAP); original Mod 0: dual capable - pure fission or enhanced radiation; Mod 1: fission only; PAL D |
| | | | | | Variable, | FUFO: F/F or retarded, | Manufactured 6/83 - 1991; | Current high-yield strategic TN bomb; PAL D; uses IHE, |

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| B-83 | Bomb | 18 | 145 | 2,400 | low Kt to 1.2 Mt | airburst or contact, laydown | active service; 650 produced | fire resisitant pit; parachutes: 3x4 ft, 1x46 ft; 1x5 ft, 1x46 ft |
| W-83 | Warhead | | | 1,700 - 1,900 | | | | PAL D |
| W-84 | Warhead | 13 | 34 | 388 | Variable: 0.2 - 150 Kt | Airburst or contact | Manufactured 9/83 - 1/88; inactive stockpile; 300-350 produced | GLCM warhead, missile scrapped under INF Treaty; LLNL design derived from LANL Mk/B-61 Mod 3/4 warhead; uses IHE, PAL F; part of the U.S. "enduring stockpile" |
| W-85; alternate image | Warhead | 12.5 | 42 | 880 | Variable: 5 - 80 Kt | Airburst or contact | Manufactured 2/83 - 7/86; retired 1988 - 3/91; 120 produced | Pershing II SSM warhead; derived from LANL Mk/B-61 Mod 3/4 warhead; uses IHE, PAL F; upon retirement the W-85 was recycled into B-61 Mod 10 bombs |
| W-86 | Warhead | | | | | Delayed | Canceled Sept 1980 | Earth penetrating warhead for the Pershing II SSM, canceled due to change in mission from hard to soft targets |
| W-87 | Warhead | 21.8 | 68.9 | 500 - 600; 440 | 300 Kt; upgradeable to 475 Kt | Timer or proximity airburst, contact | Manufactured 7/86 - 12/88; active service; 525 produced | Peacekeeper (MX) ICBM/Mk-21 RV TN warhead (missile carries 10); RV/warhead weighs 800 lb; LLNL design; primary uses IHE and fire resistant pit; yield upgradeable by adding HEU rings to secondary; part of the U.S. "enduring stockpile"; after MX retirement, will equip Minuteman III |
| W-88 | Warhead | 21.8 | 68.9 | <800 | 475 Kt | Timer (w/path length correction) and proximity airburst; contact | Manufactured 9/88 - 11/89; active service; 400 produced | Trident II Mk-5 RV warhead; does not use IHE; uses HEU jacket with secondary stage; production terminated by FBI raid on Rocky Flats; part of the U.S. "enduring stockpile" |
| | | | | | | | | SRAM (short range attack missile) II warhead; LLNL |

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| W-89 | Warhead | 13.3 | 40.8 | 324 | 200 Kt | Airburst or contact | Canceled Sept 1991 | design; safety features: PAL D, IHE, FRP; also considered for Sea Lance ASW missile |
| B 90 | Bomb | 13.3 | 118 | 780 | 200 Kt | retarded airburst, retarded contact, F/F airburst, F/F contact, hydrostatic | Canceled 1991 | USN nuclear strike/depth bomb; intended to replace Mk-57; PAL D; 1x26 ft parachute |
| W-91 | Warhead | | | 310 | 10, 100 Kt | | Canceled Sept 1991 | SRAM-T (short range attack missile - tactical) warhead; SRAM-T was a SRAM II derivative for the F-15E Eagle fighter/bomber; LASL TN design orignally called "New Mexico 1"; safety features: FRP, IHE; 2 yields |

**Abbreviations:**

- AAM Air-to-Air Missile
- ABM Anti-Ballistic Missile
- ACM Advanced Cruise Missile
- ADM Atomic Demolition Munition
- AFAP Artillery Fired Atomic Projectile
- ALCM Air Launched Cruise Missile
- ASM Air-Surface Missile
- ASW Anti-Submarine Warfare
- ER Enhanced Radiation ("neutron bomb")
- EC Emergency Capability
- F/F Freefall
- FRP Fire Resistant Pit
- FUFO Full-fuzing Options
- HEU Highly Enriched Uranium
- ICBM Intercontinental Ballistic Missile
- IFI In-Flight Insertion
- IHE Insensitive High Explosive
- IRBM Intermediate-Range Ballistic Missile
- Kt Kilotons
- LANL Los Alamos National Laboratory (nee LASL)
- LASL Los Alamos Scientific Laboratory
- LLNL Lawrence Livermore National Laboratory (nee LRL)
- LRL Lawrence Radiation Laboratory (nee UCRL)
- MK Mark
- MRBM Medium-Range Ballistic Missile
- Mt megatons
- PAL Permissive Action Link
- Pu Plutonium
- RV Re-entry Vehicle
- SAM Surface-to-Air Missile

- Rtd Parachute-retarded
- SLBM Sea-Launched Cruise Missile
- SSM Surface-to-Surface Missile
- T tons
- TN Thermonuclear
- UCRL University of California Radiation Laboratory
- USN US Navy

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