

Design Characteristics of United States: Cruise Missiles

Last update: April 2013

Name	Type/System	Length (m)	Diameter (m)	Payload (kg)	Range (km)	Accuracy CEP (m)	Propulsion	Guidance	Status
AGM-86C ¹	ALCM	6.3	0.62	1450 kg HE	> 1100	3	Williams/Rolls Royce F107-WR-101 Turbofan	Litton INS, GPS	Deployed: B-52 at Barksdale & Anderson AF Bases
AGM-86D ²	ALCM	6.3	0.62	540 kg penetrator	> 1100	3	Williams/Rolls Royce F107-WR-101 Turbofan	Litton INS, GPS	Deployed: B-52 at Barksdale & Anderson AF Bases
BGM-109E Tactical Tomahawk ³	Air, ship, submarine launched LACM	6.17	0.53	454 kg HE	1600	5	Williams F415-WR400 Turbofan	INS, GPS, TERCOM, DSMAC	Deployed: Los Angeles, Virginia, & Ohio class attack submarines; all cruisers & destroyers
AGM-158A (JASSM*) ⁴	ALCM, LACM	4.27	2.41 wingspan	453 kg WDU-42B (J-1000) penetrator	> 370		Teledyne CAE J402-CA-100 Turbojet	INS, GPS, IIR	Deployed: B-1B, B-2A, B-52H, F-15E, F-16 Block 50, F-16 Block 40, F-35, F/A-18 E/F

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Name	Type/System	Length (m)	Diameter (m)	Payload (kg)	Range (km)	Accuracy CEP (m)	Propulsion	Guidance	Status
AGM-158B JASSM-ER ⁵	ALCM, LACM	4.27	2.41 wingspan	453 kg WDU-42B (J-1000) penetrator	> 930		Williams F107-WR-105 Turbofan	INS, GPS, IIR	Deployed - B-1 Lancer
AGM, RGM, UGM-84G Harpoon Block 1G ⁶	Air, Ship, Sub launched ASCM	3.85	0.34	221 kg WDU-18/B penetrating HE fragmentation	220		Teledyne J402-CA-400 Turbojet (Solid booster for RGM & UGM)	INS, GPS, radar homing	Deployed
AGM, RGM-84H (SLAM-ER ^{**}) ⁷	Air launched, LACM, ASCM	4.37	0.34	360 kg WDU B-40	>280		Teledyne J402-CA-400 Turbojet (Solid booster for RGM & UGM)	INS, GPS, FLIR	Possible deployments; being upgraded to K version
AGM-84K Harpoon (SLAM-ER ATA ^{***}) Block 1F ⁸	Air launched, LACM, ASCM	4.37	0.34	360 kg SAP	>280		Teledyne J402-CA-400 Turbojet	INS, GPS, FLIR, IIR	Deployed
AGM-, RGM--84L Harpoon Block II ⁹	Air, Ship launched, LACM	3.84	0.34	227 kg SAP	>280		Teledyne J402-CA-400 Turbojet (Solid booster for RGM)	INS, GPS, FLIR	Deployed
AGM-, RGM-84M Harpoon Block III ¹⁰	Air, Ship launched ASCM	3.83	0.34	221 kg HE	>111		Teledyne CAE J402-CA-400 Turbojet	INS, GPS, FLIR	Development

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Notes:

- * Joint Air-to-Surface Standoff Missile (JASSM)
- ** Harpoon Stand-Off Land Attack Missile - Expanded Response (SLAM-ER ATA)
- *** Stand-Off Land Attack Missile-Expanded Response Automatic Target Acquisition (SLAM-ER ATA)

Sources:

- ¹ "Factsheet - AGM-86B/C/D Missiles," U.S. Air Force, 24 May 2010, www.af.mil.
- ² "Factsheet - AGM-86B/C/D Missiles," U.S. Air Force, 24 May 2010, www.af.mil.
- ³ "Tomahawk: Serving the U.S. and Allied Warfighter," Raytheon, Public Release SPR-2012-591, 2012, www.raytheon.com; Carlo Kapp, "Tomahawk Cruise Missile Variants," Air Power Australia, Technical Report APA-TR-2005-0702, July 2005 (updated April 2012), www.ausairpower.net; Andreas Parsch, "Raytheon (General Dynamics) AGM/BGM/UGM-109 Tomahawk," Designation-Systems, www.designation-systems.net.
- ⁴ "AGM-158 Joint Air to Surface Standoff Missile (JASSM), Dyess Air Force Base, 28 February 2011, www.dyess.af.mil; "AGM-158 Joint Air to Surface Standoff Missile (JASSM)," Federation of American Scientists, www.fas.org.
- ⁵ "AGM-158 Joint Air to Surface Standoff Missile (JASSM), Dyess Air Force Base, 28 February 2011, www.dyess.af.mil; "AGM-158 Joint Air to Surface Standoff Missile (JASSM)," Federation of American Scientists, www.fas.org.
- ⁶ "Harpoon," Weapons Systems, weaponssystems.net; Andreas Parsch, "Boeing (McDonnell Douglas) AGM/RGM/UGM-84 Harpoon," Designation Systems, 2008, www.designation-systems.net; "AGM-84 Harpoon," F-16.net - The Ultimate F-16 Reference," www.f-16.net.
- ⁷ "Standoff Land Attack Missile Expanded Response (SLAM-ER)," Naval Air Systems Command, www.navair.navy.mil; "Harpoon," Weapons Systems, weaponssystems.net; Andreas Parsch, "Boeing (McDonnell Douglas) AGM/RGM/UGM-84 Harpoon," Designation Systems, 2008, www.designation-systems.net; "AGM-84 Harpoon," F-16.net - The Ultimate F-16 Reference," www.f-16.net.

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⁸"Standoff Land Attack Missile Expanded Response (SLAM-ER)," Naval Air Systems Command, www.navair.navy.mil; "Harpoon," Weapons Systems, weaponssystems.net; Andreas Parsch, "Boeing (McDonnell Douglas) AGM/RGM/UGM-84 Harpoon," Designation Systems, 2008, www.designation-systems.net; "AGM-84 Harpoon," F-16.net - The Ultimate F-16 Reference," www.f-16.net.

⁹ "Standoff Land Attack Missile Expanded Response (SLAM-ER)," Naval Air Systems Command, www.navair.navy.mil; "Harpoon," Weapons Systems, weaponssystems.net; Andreas Parsch, "Boeing (McDonnell Douglas) AGM/RGM/UGM-84 Harpoon," Designation Systems, 2008, www.designation-systems.net; "AGM-84 Harpoon," F-16.net - The Ultimate F-16 Reference," www.f-16.net.

¹⁰ "Standoff Land Attack Missile Expanded Response (SLAM-ER)," Naval Air Systems Command, www.navair.navy.mil; "Harpoon," Weapons Systems, weaponssystems.net; Andreas Parsch, "Boeing (McDonnell Douglas) AGM/RGM/UGM-84 Harpoon," Designation Systems, 2008, www.designation-systems.net; "AGM-84 Harpoon," F-16.net - The Ultimate F-16 Reference," www.f-16.net.

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