

## Design Characteristics of Pakistan's Ballistic Missiles

Last update: July 2011

Name	Other names	Length (m)	Diameter (m)	Warhead wt. (kg)	Range (km)	Accuracy – CEP (m)	Propellant	Status
Hatf-1 <sup>1</sup>		6	.56	500	70	Unknown	Solid	Deployed
Hatf-1A <sup>2</sup>		6	.56	500	100	Unknown	Solid	Deployed
Hatf-1B <sup>3</sup>		6	.56	500	100	Unknown	Solid	Deployed
Hatf-2 <sup>4</sup>	Abdali	6.5	.56	250-450	180-200	150	Solid	Deployed
Hatf-2A <sup>5</sup>	Abdali	7.5	.80	280-350	800	600n	Solid	Deployed
Hatf-3 <sup>6</sup>	Ghaznavi	8.5	0.8	700	290	250	Solid	Deployed
Hatf-4 <sup>7</sup>	Shaheen-1	12	1	700	750	600	Solid	Deployed
Hatf-5 <sup>8</sup>	Ghauri-1	15.9	1.35	1200	1,300-1,800	200	Liquid	Deployed
Hatf-5A <sup>9</sup>	Ghauri-2	15.9	1.35	700	1,500-1,800	Poor/Unknown <sup>10</sup>	Liquid	Deployed
Hatf-5 <sup>11</sup>	Ghauri-3	Unknown	Unknown	Unknown	3,000-3,500	190 <sup>12</sup>	Liquid	Development
Hatf-6 <sup>13</sup>	Shaheen-2	17.2	1.4	700	2,500	350	Solid	Deployed
Hatf-9	NASR	Unknown	Unknown	Unknown	60 <sup>14</sup>	Unknown	Solid	Development

### Sources:

- [1] Duncan Lennox, ed., "Hatf 1," *Jane's Strategic Weapon Systems*, Issue Forty-eight, January 2008, pp. 108-109.
- [2] Duncan Lennox, ed., "Hatf 1," *Jane's Strategic Weapon Systems*, Issue Forty-eight, January 2008, pp. 108-109.
- [3] Duncan Lennox, ed., "Hatf 1," *Jane's Strategic Weapon Systems*, Issue Forty-eight, January 2008, pp. 108-109.
- [4] Duncan Lennox, ed., "Hatf 2 (Abdali)," *Jane's Strategic Weapon Systems*, Issue Forty-eight, January 2008, pp. 109-110.
- [5] "Hatf 2A," *Missilethreat.com*, accessed 18 February 2011, [www.missilethreat.com](http://www.missilethreat.com), Sharon A. Squassoni, "Weapons of Mass Destruction: Trade Between North Korea and Pakistan," *CRS Report for Congress RL31900*, (Washington, DC: The Library of Congress, 11 March 2004); Duncan Lennox, ed., "DF-11(CSS-7/M11) (China), Offensive Weapons," *Jane's Strategic Weapon Systems*, 1 June 2010, [www.janes.com](http://www.janes.com).

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- [6] Duncan Lennox, ed., "Hatf 3 (Ghaznavi)," *Jane's Strategic Weapon Systems*, Issue Forty-eight, January 2008, pp. 111-112.
- [7] Duncan Lennox, ed., "Hatf 4 (Shaheen 1)," *Jane's Strategic Weapon Systems*, Issue Forty-eight, January 2008, pp. 112-113.
- [8] Duncan Lennox, ed., "Hatf 5 (Ghauri)," *Jane's Strategic Weapon Systems*, Issue Forty-eight, January 2008, pp. 114-115.
- [9] Duncan Lennox, ed., "Hatf 5 (Ghauri)," *Jane's Strategic Weapon Systems*, Issue Forty-eight, January 2008, pp. 114-115.
- [10] "Hatf 5A," Missilethreat.com, accessed 18 February 2011, [www.missilethreat.com](http://www.missilethreat.com).
- [11] Duncan Lennox, ed., "Hatf 5 (Ghauri)," *Jane's Strategic Weapon Systems*, Issue Forty-eight, January 2008, pp. 114-115.
- [12] "Ghauri [Hatf-5]," Federation of American Scientists, accessed 21 February 2011, [www.fas.org](http://www.fas.org).
- [13] Duncan Lennox, ed., "Hatf 6 (Shaheen 2)," *Jane's Strategic Weapon Systems*, Issue Forty-eight, January 2008, pp. 115-116.
- [14] Robert Wall, "Pakistan Tests Nuclear-Capable Missile," *Aerospace Daily & Defense Report*, Vol 238, No. 14, p. 1, 20 April 2011 in LexisNexis Academic Universe, [www.lexis-nexis.com](http://www.lexis-nexis.com).

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