

Some Ballistic Missile Developments Since the Rumsfeld Commission Report

© 2002, National Institute for Public Policy

Compiled by Ambassador David J. Smith

- July, 1998 – Iran tested its 1,300 kilometer Shahab-3, a variant of the North Korean Nodong-1.
- August, 1998 – North Korea launched its Taepo Dong-1 missile or space launch vehicle, consisting of three stages, two with liquid fuel and one with solid. U.S. intelligence agencies tracked debris from the flight 6,700 kilometers, nearly to the coast of Alaska.
- January, 1999 – India displayed its 2,500 kilometer range Agni-2 in the Republic Day parade.
- March, 1999 – Pakistan showed its 1,300 kilometer range Ghauri-1, flight tested in April, 1998, and its 600 kilometer range Shaheen-1 in the National Day parade.
- April, 1999 – India flight tested its Agni-2, consisting of two solid fuel stages. India's May, 1998 nuclear tests included a nuclear warhead for Agni.
- April, 1999 – Pakistan flight tested its 2,000 kilometer range Ghauri-2, a Nodong variant, and its Shaheen-1.
- May, 1999 – *The Washington Times* reported that Iran tested a short range missile from a barge in the Caspian Sea.
- August, 1999 – China conducted the second flight test of its 8,000 kilometer range Dong Feng-31 (DF-31).
- September, 1999 – Iran showcased its Shahab-3 for the second time at the Sacred Defense Week parade.
- October, 1999 – China paraded its DF-31, improved 2,500 kilometer range DF-21A, and 600 kilometer range DF-15 (M-9) in commemoration of the 50th anniversary of the People's Republic of China.
- October, 1999 – China announced a successful simulated launch of its developmental 12,000 kilometer DF-41.

-- October, 1999 – *Chosun Ilbo*, South Korea's largest newspaper, reported development of four North Korean 1,300 kilometer range Nodong-1 battalions.

-- October, 1999 – North Korea, despite an apparent agreement to suspend missile tests, asserted that "the issue of missile launch is a matter wholly pertaining to our sovereignty, and the DPRK will launch a missile and a satellite anytime it feels necessary."

-- November, 1999 – Iran acquired 12 Nodong engines from North Korea.

-- March, 2000 – Pakistan showed its 2,500 kilometer range Shaheen-2 in the National Day parade.

-- April, 2000 – India conducted a flight test of its 150 kilometer range Dhanush, a variant of the Prithvi, from a naval vessel in the Bay of Bengal.

-- July, 2000 – The U.S. Intelligence Community reported that China continues to aid Pakistan's long range missile program.

-- July, 2000 – Iran flight tested its Shahab-3 for the second time.

-- November, 2000 – China conducted the third flight test of its DF-31.

-- December, 2000 – China conducted the fourth flight test of its DF-31. Some experts believe it is now deployed.

-- January 2001 – India flight tested its Agni-2.

-- February, 2001 – India will build the Agni-3 "of higher range and better capabilities than its predecessor," according to Dr. Vasudev Aatre, scientific advisor to Defense Minister George Fernandes. The new weapon is expected to have a maximum range of 3,500 kilometers.

-- March, 2001 – Pakistan again showed its Shaheen-2 in the National Day parade. Other systems displayed include the Shaheen-1, Ghauri-1, and the Ghauri-2.

-- April, 2001 – India launched its Geosynchronous Satellite Launch Vehicle (GSLV). Its Russian KVD-1M third stage underperformed, placing the payload into slightly lower geosynchronous orbit. Shortly afterward, reports of a 5,000 kilometer range Agni-4 or Surya-1 and a 12,000 kilometer range Surya-2 reemerged.

-- May, 2001 – North Korean leader Kim Jong Il told an EU delegation that North Korea would continue to refrain from missile testing until 2003, but could not afford to forgo missile sales.

-- May, 2001 – Iran announced the test launch of its Fateh 110 ballistic missile. Jane's reports that Israeli experts believe the new missile has a composite solid fuelled engine, suggestive of substantial technological advances by Iranian designers.

-- June, 2001 – North Korean Foreign Minister Paek Nam Sun reportedly said, "it has yet to be decided whether we maintain the moratorium on missile testing. That depends entirely on the policy of the new U.S. administration, whether it is hostile or not."

-- June, 2001 – Indian Defense Minister Jaswant Singh told the Parliamentary Consultative Committee on Defense, "Agni-2 is an operational missile."

-- June, 2001 – North Korea conducted a Taepo Dong engine test, possibly for Taepo Dong-2.

-- July, 2001 – *Ha'aretz*, an Israeli newspaper, reported that North Korea sold Nodong missiles and manufacturing technology to Egypt.

-- September, 2001 – India conducted the second flight test of Dhanush.

-- October, 2001 – Iran began serial production of the Shahab-3.

-- December, 2001 -- *Chosun Ilbo* reported a North Korean Taepo Dong-2 engine test.

-- January, 2002 – China carried out an unsuccessful test of its DF-31 warhead.

-- January, 2002 – India displayed its Agni-2 in the Republic Day parade.

-- January, 2002 – India flight tested a shorter range Agni missile.

-- January, 2002 – Iran's indigenous Shahab-3 engine program suffered a setback when a test resulted in explosion and fire.

-- May, 2002 -- Iran conducted a flight test of Shahab-3.

-- May, 2002 -- AP, citing an administration official, reported continued Iranian development of Shahab-4.

-- May, 2002 -- *Korea Herald* reported North Korea's first battalion level exercise involving Scuds and Nodong-1s.

-- May, 2002 -- *Times of India* reported Pakistan's test of Hatf V (3 Ghauri variants range from 1,500 to 2,400 kilometers), followed by tests of the 290 kilometer range Hatf III (Ghaznavi) and 180 kilometer range Hatf II (Abdali).