**Taepodong 2**

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*For the 2006 North Korean missile test, see 2006 North Korean missile test.*

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| **Taepodong-2** | |
| **Type** | Ballistic missile, Space booster |
| **Production history** | |
| **Manufacturer** | North Korea |
| **Specifications** | |
| **Weight** | ~79,189 kg |
| **Length** | ~35.8 m |
| **Diameter** | 2.0–2.2 m |
|  | |
| **Warhead** | Conventional Satellite Nuclear (speculated) |
|  | |
| **Engine** | Liquid |
| **Operational range** | 4,000 km–6,000 km (est.) |
| **Speed** | 6,900–8000 m/s 7,825–7,925 (orbital launch). 9,500–10,500 dv total with losses |
| **Guidance system** | Inertial |
| **Launch platform** | Launch Pad |

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| --- | --- |
| **Korean name** | |
| Chosŏn'gŭl | 대포동 2호 |
| Hancha | 大浦洞 2號 |
| McCune–Reischauer | Taep'odong 2ho |
| Revised Romanization | Daepodong 2ho |



Estimated maximum range of some North Korean missiles

The **Taepodong-2** (TD-2, also spelled as **Taep'o-dong 2**) (Korean: 대포동 2호) is a designation used to indicate a North Korean two or three-stage ballistic missile design that is the successor to the Taepodong-1. The missile has been tested once, and failed 35–40 seconds after launch. In 2009 the US National Air and Space Intelligence Center assessed that the Taepodong-2 had not yet been deployed.

**Details**

Based on the size of the missile, the fuel composition, and the likely fuel capacity, it is estimated that a two stage variant would have a range of around 4,000 km (2,500 statute miles) and a three stage variant would be capable of reaching as far as 4,500 km (2,800 statute miles), giving it potentially the longest range in the North Korean missile arsenal. The burn time of each stage is a little over 100 seconds, thus allowing the missile to burn for 5 or 6 minutes. Speculative variants of the missile could be capable of a range of approximately 9,000 km (5,600 statute miles). At maximum range, the Taepodong-2 is estimated to have a payload capacity of less than 500 kg (~1,100 lbs.).

According to Kim il Son, a former worker in the publications department of one of North Korea's top research centers, North Korea began development of the missile in 1987.

Very few details concerning the technical specifications of the rocket are public information; even the name "Taepodong-2" is a designation applied by agencies outside of North Korea to what is presumed to be a successor to the Taepodong-1. The TD-2 first stage likely uses a liquid propellant (TM-185 fuel and AK-27I oxidizer) driven engine and the second stage likely utilizes the Rodong short-range missile. Depending on the range, the estimated payload capacity could be as high as 700–1,000 kg (~1,550 - 2,200 lbs.) at short range, making it potentially suitable for conventional weapons payloads, NBC payloads as well as Earth orbit satellite delivery. At maximum range, the Taepodong-2 is estimated to have a payload capacity of less than 500 kg (~1,100 lbs.). North Korea has yet to demonstrate the ability to produce a re-entry vehicle that works. It is doubtful that a TD-2 could be used to accurately deliver a weapons payload in the near future as the accuracy of the claims of its power cannot be verified.

**Structure**

**First stage**

Taepodong-2's first stage consists of four Rodong motors. It is unknown if the first stage has four separate tanks for fuel and four tanks for oxidizer, or if it has two big tanks for fuel and oxidizer like the Unha rocket.

Around 2007 North Korea claims to have deployed 12 to 18 of this missile and showed them in military parades. Iran is speculated to have acquired 18 Musudan-1 missiles from the DPRK in 2005.

**Second and third stages**

Little is known about the Taepodong-2 design beyond the first stage. Most likely the second stage is one of the Scud-derived North Korean ballistic missiles (either Rodong-1 or Hwasong-6), and the third stage most likely uses Chinese solid-fuel engines.

**Launches**

The sole test launch of Taepodong-2 was conducted on July 5, 2006.

**Missile test in 2006**

See also: 2006 North Korean missile test

A Taepodong-2 missile was test fired on July 5, 2006 from the Musudan-ri Missile Test Facility. According to preliminary reports, the missile failed in mid-flight 35–40 seconds after launch.

**See also**

* [Military of North Korea](http://en.wikipedia.org/wiki/Military_of_North_Korea)
* [North Korea and weapons of mass destruction](http://en.wikipedia.org/wiki/North_Korea_and_weapons_of_mass_destruction)
* North Korean rocket launching operations
  + [1993 North Korean missile test](http://en.wikipedia.org/wiki/1993_North_Korean_missile_test)
  + launching of [Kwangmyŏngsŏng-1](http://en.wikipedia.org/wiki/Kwangmy%C5%8Fngs%C5%8Fng-1) in 1998
  + [2006 North Korean missile test](http://en.wikipedia.org/wiki/2006_North_Korean_missile_test)
  + launching of [Kwangmyŏngsŏng-2](http://en.wikipedia.org/wiki/Kwangmy%C5%8Fngs%C5%8Fng-2) in 2009
  + launching of [Kwangmyŏngsŏng-3](http://en.wikipedia.org/wiki/Kwangmy%C5%8Fngs%C5%8Fng-3) and [Kwangmyŏngsŏng-3 Unit 2](http://en.wikipedia.org/wiki/Kwangmy%C5%8Fngs%C5%8Fng-3_Unit_2) in 2012
* [List of Korea-related topics](http://en.wikipedia.org/wiki/List_of_Korea-related_topics)

This page was last modified on 10 April 2013 at 17:54.