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## **Military Technologies**

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When people were born the theme of protection was actual. Many years people tried to make more and more powerful weapon to protect its people from attacks. In the XXI century people create dangerous and effective weapons. Many of us see parade when you can watch a lot of modern technologies on the street. It's something amazing when you see robots and military complexes with a lot of rockets. So why we need to know about these weapons? First of all, this information makes you more erudite because you can try to understand a mechanism how this system works. To understand this complex mechanism you need to know about electronics, physics, mathematics and so on.

First of all we want to tell you about rating in military sphere. These are the countries that spend the most money on armament!

### *1. The Indian Armed Forces.*

The Indian Armed Forces consisting of the Indian Army, the Indian Air Force, the Indian Navy and the Indian Coast Guard are India's shield and sword which keep our interests safe, our enemies at bay and the people of our country secure and free. They are respected and adored for their valor and sense of duty by the entire country. Many of us know about their triumphs and stellar contributions to civilian life [1].

Historically, the Indian Armed Forces (IAF) has generally relied on Soviet, British and French military craft and technology to support its growth. IAF's primary air superiority

fighter with the additional capability to conduct air-ground missions is Su-30MKI. The IAF have placed an order for a total of 272 Su-30MKI's of which 205 are in service as of May 2015. The MiG-29 is a dedicated air superiority fighter and constitutes a second line of defence after the Su-30MKI. At present, 66 MiG-29's are in service, all of which are being upgraded to the MiG-29UPG standard.

### *2. British Armed Forces and Weapons.*

The British Army is made up of the Regular Army and the Army Reserve. The army has a single command structure based at Andover and known as "Army Headquarters".

Deployable combat formations consist of two divisions (1st Armored and 3rd Mechanized) and eight brigades. Within the United Kingdom, operational and non-deployable units are administered by two divisions, Force Troops Command, and London District.

The Army has 50 battalions (36 regular and 14 reserve) of regular and reserve infantry, organized into 17 regiments. The majority of infantry regiments contains multiple regular and reserve battalions. Modern infantry have diverse capabilities and this is reflected in the varied roles assigned to them. There are four operational roles that infantry battalions can fulfil: air assault, armored infantry, mechanized infantry, and light role infantry. Regiments and battalions e.g.: the Parachute Regiment, exist within every corps of the Army, functioning as administrative or tactical formations.

### *3. Republic of China Weapons. (ROC)*

The US DoD estimated in 2006 that the PRC was developing ground- and air-launched cruise missiles that could easily be converted to carry nuclear warheads once developed.

The DongHai 10 (DH-10) is a cruise missile developed in the People's Republic of China. According to Jane's Defense Weekly, the DH-10 is a second-generation land-attack cruise missile (LACM), with over 4,000 km range, integrated inertial

navigation system, GPS, terrain contour mapping system, and digital scene-matching terminal-homing system. The missile is estimated to have a circular error probable (CEP) of 10 meters.

There are three missiles in HongNiao missile family: the HN-1, HN-2, and HN-3. Reportedly based on the Kh-SD/65 missiles, the Hongniao (or Red Bird) missiles are some of the first nuclear-capable cruise missiles in China. The HN-1 has a range of 600 km, the HN-2 has a range of 1,800 km, and the HN-3 has a range of 3,000 km.

#### 4. Russian Armed Forces.

3) TU-160 “Blackjack” and TU22M3 “Blackfire”. Russia is the only country other than the US to possess long-range strategic bombers. Both the swing-wing, supersonic bombers, were developed during the height of the Cold War and the Tu-22 and Tu-160 remain frontline aircraft even today.

The Tu-22 was designed for long range bombing and maritime strike mission. Projected as a carrier-killer, the Tu-22M used long-range Kh-22 supersonic anti-ship cruise missiles to counter the US Navy’s large aircraft carriers during the cold war and still retains the capability.

The Tu-160 was built as a long-range strategic bomber, designed to fly at supersonic speeds. It’s used as a **Strategic Missile Carrier** and its primary duty is to carry and fire long range cruise missiles like the Kh-101, from a standoff distance.

#### 2) Yasen Class SSN/SSGN

The Yasen class was designed to replace the *Victor* class SSN with an SSGN that could counter the newest American submarines. This 13,800 ton SSGN holds the distinction of being the most heavily armed attack submarine in the world, with its 32 vertically launched cruise missiles and 38 torpedoes. The cruise missiles can be a combination of the long-range Kalibr-NK land attack missiles or Onyx anti-ship missiles. This allows the Yasen to engage a large number of surface, land and sub-surface targets.

### 1) S-400 Air Defense System

Developed as a successor to the successful and widely deployed S300 air defense system, the S400 offers a significant increase in capabilities. Commonly mistaken to be a missile, the S400 refers to a whole family of radars and surface to air missiles, which work in unison to form a lethal air defense system. It is said that the system is capable of detecting, tracking and engaging stealth fighters and bombers.

#### 5. *US Army.*

The army employs various individual weapons to provide light firepower at short ranges. The most common weapons used by the army are the compact variant of the M16 rifle, the M4 carbine, as well as the 7.62×51mm variant of the FN SCAR for Army Rangers.

The M240 is the U.S. Army's standard Medium Machine Gun. The M2 heavy machine gun is generally used as a vehicle-mounted machine gun. In the same way, the 40 mm MK 19 grenade machine gun is mainly used by motorized units.

The U.S. Army utilizes a variety of direct-fire rockets and missiles to provide infantry with an Anti-Armor Capability. The AT4 is an unguided projectile that can destroy armor and bunkers at ranges up to 500 meters. The FIM-92 Stinger is a shoulder-launched, heat seeking anti-aircraft missile. The FGM-148 Javelin and BGM-71 TOW are anti-tank guided missiles.

In conclusion we would like to say that we need weapons only for protection. Everyone have to understand that we all want to live in peace.

#### References:

1. Mode of access: [www.scoopwhoop.com](http://www.scoopwhoop.com). – Date of access: 25.02.2017.