New Acquisitions by People's Liberation Army and Pakistan's Armed Forces

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India continues to develop and grow at a very fast rate and is likely to once again overtake China to become the fastest growing major economy of the world in the year 2018[1]. While the economic upswing will happen, India faces a number of geopolitical challenges in its neighbourhood, especially from China and, to an extent, Pakistan. China, in the pursuit of its global superpower ambitions, continues to modernise its armed forces in terms of both organisation and equipment. In all, 11 reorganisations have been undertaken since 1952, with a focus on reducing manpower and inducting new and cutting edge technology. China's aim is to be the great superpower by 2049, and, therefore, it is investing in various means of power projection. Regionally, the focus is maintained on Taiwan and domination of the first island chain by acquiring counter-intervention capabilities, while capacities in the cyber, space and electronic warfare domains are also being enhanced.

Pakistan, on the other hand, is a state being torn apart by religious extremism, political corruption, a stalled economy, a depleting list of allies, and near total dependence on China for sustenance – diplomatically, economically and militarily. The all powerful Pakistani defence establishment has adopted a wait and watch policy by refusing to intervene on behalf of the elected government in Islamabad's 'Dharna Crisis' in November 2017. Notwithstanding, the military modernisation

continues, with the sole objective of acquiring capabilities with an anti-India outlook, sometimes as largesse in the garb of the Global War on Terror (GWoT).

PLA Acquisitions

Based on robust economic growth, the People's Liberation Army (PLA) has undertaken a comprehensive modernisation programme, and has remarkably improved every component of its conventional and asymmetric warfare capabilities across all domains of warfare. China has steadily moved up to become the second largest defence spender in the world, overtaking Russia, Japan, the UK and France. China's officially disclosed military budget grew at an average of 8.5 percent per year in inflation adjusted terms from 2007 through 2016[2]. *Jane's Defence Budgets* expects China's defence budget to increase by an annual average of 7 percent, growing to $260 billion by 2020[3]. However, China does not divulge specific details of funds spent on weapons procurement. Although the majority of weapons and equipment is procured domestically, China does import a significant amount of weapons involving advanced technology[4]. China has acquired/plans to acquire a number of new weapon systems and the major ones are discussed in the succeeding paragraphs.

- **PLA Army (PLAA)**

  The year 2016 was the PLA Army's first as a separate Service within the PLA. In 2016, the PLAA focussed on mechanisation, and the procurement of advanced Command, Control, Communication, Computers, and Intelligence (C4I) equipment, helicopters, tracked and wheeled artillery and armoured systems, Anti-Tank Guided Missiles (ATGMs) and air defence systems.

Table 1

Name	Type	Quantity	Origin	Picture	Notes
ZTZ 96B[5] (improved variant of ZTZ 96A)	Main battle tank	20+ (1,000+ on order)	Chinese		125 mm smooth bore gun, capable of firing ATGMs and depleted uranium rounds
ZTQ-15[6]	Light tank	NK (Likely to replace Type-62[7] which are 250 in number[8]	Chinese		105mm tank gun, 35mm AGL, 12.7 mm HMG. Specifically designed for operations in mountainous terrain and the TAR

ZBD-04A	Infantry fighting vehicle	300[9]	Chinese		Main Armaments 100 mm rifled gun, 30mm auto cannon Operational Range 500 km Personnel Crew-03 Stick-07
HJ-12[10] (Hong Jian-12, literally means Red Arrow-12)	Man-portable anti-tank guided missile	NK	Chinese		Effective Range 4 km-day 2 km-night Type of Warhead Tandem HESH HEAT Guidance IR homing, CCD Claimed Penetration 1,100 mm of ERA
HQ-17 (Hong Qi-17 literally, means Red Flag 17)	Short range surface-to-air-missile (SRSAM)	18 units[11]	Chinese copy of Russian Tor M1 SA-15 Gauntlet	(Unlike the Tor system, the HQ-17 incorporates an IFF array on top of an electronically scanned array radar, modernised electronics, a new all-terrain launcher, and the ability to data link with other systems)[12] 	All-weather low to medium altitude, SRSAM system designed for engaging airplanes, helicopters, cruise missiles, PGMs, UAVs and short-range ballistic threats (anti-munitions) range-12 km

- **PLA Navy (PLAN)**

  Submarine force modernisation remains a top Chinese priority, with its Navy projected to possess 69 to 78 submarines by 2020. The Pentagon infers that four Jin class SSBNs (nuclear-powered ballistic missile submarines) have recently been made operational. Further, in the coming 8-10 years, five more may be commissioned. China is also developing its next-generation SSBN, the Type 096, to be equipped with JL-3 Submarine-Launched Ballistic Missiles (SLBMs). China may also construct a new Type 095 SSGN (nuclear-powered, guided-missile attack submarine), improving the anti-surface combatants' capability and clandestine land attack capability. Also, four additional SHANG class SSNs (nuclear-powered submarines) (Type 093) will eventually join the two already in service."[13]

Table 2

Name	Type	Quantity	Origin	Picture	Notes
Type-094 submarine	SSBN	4 + 4	Chinese		Weight -11,000 tons submerged range-unlimited missiles-12 JL-2 SLBMs with a range of 7,400 km and estimated MIRV capability[14]
Type 052C destroyer Luyang II Class	Guided missile destroyer	4 + 8[15]	Chinese	 Displacement-7,000 tons Envisaged for fleet air defence roles	Multipurpose vertical launch system capable of launching C-805 &YJ-62 ASCMs, HHQ 9 SAMs, and anti-submarine missiles
Type 055	Cruiser	4 (being built) Estimated to be inducted by 2018[16]	Chinese	 (Artist's impression) multi-role cruiser to perform air defence, anti-ship, anti-missile and anti-submarine operations	To be equipped with HQ9B SAMs with terminal ABM capability, HQ-26 ABM YJ-18,18A & CJ-10LACM YJ-100 ASCM CY-5 Anti-Submarine Missiles [17]
Type-071[18]	Amphibious transport dock (LPD)	Built-04 Building-02 Planned-06	Chinese	 Displacement 25,000 tons (fully loaded)	The ship may embark 600 to 800 troops and can house up to four Z-8 helicopters. Can carry up to four Type 726 air-cushioned landing craft

- **PLA Air Force (PLAAF)**

  In 2016, the PLAAF established five new theatre Air Force Headquarters and adapted its mission and structure to align with the PLA's ongoing reforms. It inducted the Y-20 military transport aircraft in July and the J-20 stealth fighter in November 2016[19].

Table 3

Name	Type	Quantity	Origin	Picture	Notes
J-20[20]	Fifth generation stealth fighter aircraft	8 prototype in service 20+ initial production	Chinese	 Air superiority fighter believed to house the Type 1475 (KLJ-5) Active Electronically Scanned Array (AESA) radar	The main weapon bay is capable of housing both short and long-range Air-to-Air Missiles (AAM) (PL-9, 12C/D & PL1-21)
Y-20[21] Kunpengor Chubby Girl	Strategic airlifter	NK (*Jane's* suggests that Chinese military may ask for upto 1,000 aircraft)	Chinese		First cargo aircraft claimed to have employed 3D printing. Capability to lift 50 tons[22]
SU-35[23]	Air superiority fighter	14 received of 24 contracted	Russia	 Powered by a pair of Saturn AL-41F1S, which experts believe is the primary reason that China has acquired this aircraft	Capable of detecting an aerial targets up to 400 km and can track 30 airborne targets and engage 8 of them simultaneously; in addition, the multi-function radar is capable of providing high-resolution images of the ground using synthetic aperture mode
CH-5 Rainbow5	UCAV	NK	Chinese	 Planned to undergo mass production starting July 2017[24]. The CH-5 is China's most heavily armed UAV to date, with the capacity to carry 16 air-to-surface munitions[25]	Latest UCAV of the Rainbow series with a wingspan of 21 metres, a payload of 1,000 kg, a maximum take-off weight of over 3 tons, a service ceiling of 9 km, an endurance of up to 60 hours and a range of 10,000 km[26]

PLA Rocket Force (PLARF)

The PLARF is the erstwhile PLA Second Artillery Force (PLASAF) and was formally established as a service in reforms announced in December 2015. In 2016, China began fielding the DF-26 Intermediate-Range Ballistic Missiles

(IRBMs), which are capable of conducting conventional and nuclear precision strikes against ground targets and conventional strikes against naval targets in the western Pacific Ocean. Development of the new Multiple Independently Targetable Reentry Vehicle (MIRV) capable, road-mobile Intercontinental Ballistic Missile (ICBM), the CSS-X-20 (DF-41), continued in 2016[27].

Table 4

Name	Type	Quantity	Origin	Picture	Notes
DF-26 Dong Feng (literally means 'East Wind')	IRBM ASBM	16[28]	Chinese	 Mobile launcher of the DF-26 is based on Taian 12x12 special wheeled chassis. The vehicle has some degree of cross-country mobility. However, normally it is intended to operate on hard surface roads	The DF-26 is a two-stage solid-fuel missile. Its estimated range is approximately 3,000-4,000 km. It can carry a payload of 1,200 to 1,800 kg. This missile can be fitted with a nuclear warhead[29]. Claimed CEP 150-450 metres[30]
DF-41	ICBM	NK (Could be inducted in the first half of 2018)[31]	Chinese	It is believed to be capable of delivering a single one megaton warhead or 10 MIRVs with selectable 20, 90 or 150 KT payload[32]	Claimed to be the world's longest range missile with range between 12,000-15,000 km. Has a three-stage solid fuel rocket capable of delivering speeds up to 25 Mach[33]

- **PLA Strategic Support Force (PLA SSF)**

  The SSF is a new organisation established in late 2015 with an aim of enhancing the PLA's space, cyber, and Electronic Warfare (EW) capabilities. It is also to further strengthen the jointness efforts by implementing the concept of "system of systems fusion" reflecting the imperative that the PLA advance the jointness and compatibility of its Command, Control, Communication, Computers, Intelligence, Sureveillance, Reconnaissance (C4ISR) systems[34]. Some important aspects are discussed below.

- **Space and Counter-Space Capabilities**

  In 2016, China launched 22 Space Launched Vehicles (SLVs), of which 21 were successful. These launches orbited 33 spacecraft, including navigation, Intelligence, Surveillance, Reconnaissance (ISR), and test/

engineering satellites[35].China also launched the Long March 7 (LM-7) medium lift SLV in June and LM-5 heavy lift SLV in November 2016. These are intended to play an important role in the assembly of the Chinese Space Station starting around 2018[36]. In August 2016, China launched the first experimental quantum communications satellite, a remarkable advance in cryptography research and ensuring secure communications. The PLA is acquiring a range of technologies to improve China's counter-space capabilities. In addition to the research and possible development of directed-energy weapons and satellite jammers, China is also developing Anti-Satellite (ASAT) capabilities and probably has made progress on the anti-satellite missile system that it tested in July 2014.[37]

- **Cyber Capabilities**
  Establishing a cyber component in the PLA SSF represents the first step in developing a cyber force that creates efficiencies by combining cyber reconnaissance, attack, and defence capabilities into one organisation. In April 2016, the Pentagon acknowledged that the Chinese view advanced cyber attack capabilities as the key to informationised war and implementing an effective Anti-Access/Area Denial (A2/AD) strategy. Cyber ASAT also offers the plausible deniability that Beijing has been shown to favour in numerous instances like its deployment of a maritime militia made up of fishermen in the South China Sea[38].

Pakistan Armed Force's Acquisitions

In the fiscal year 2017-18, Pakistan has allocated $8.78 billion for its armed forces of which 20.3 percent ($1.87 billion) will be allotted for defence production, which involves the procurement of arms, such as the JF-17 multi-role fighter, al-Khalid Main Battle Tank (MBT) and others[39]. Pakistan is currently undergoing a severe political crisis with the erstwhile Prime Minister Nawaz Sharif being ousted from office by the Supreme Court of Pakistan on charges of corruption, the Finance Minister virtually absconding to London, and the USA demanding that Pakistan should redouble its efforts to prevent terrorists seeking safe havens inside Pakistan. However, this has not inhibited the Pakistani defence establishment from going about its routine, unmindful of the brewing economic doom wherein the external debt touched $83 billion in June 2017[40] and according to a World Bank report, Pakistan needs $31 billion this year to stay afloat[41]. In this backdrop, the Pakistan Army has acquired/ is acquiring/wishes to acquire certain major weapons and equipment which are discussed below.

- **Pakistan Army**

Table 5

Name	Type	Quantity	Origin	Picture	Notes
Al-Khalid-I (literally 'The Immortal')	MBT	324(Al Khalid) 9 (Al Khalid-I)[42] **200 on order**[43] In 2015, Heavy Industries Taxila (HIT) informed the Pakistani Senate's Standing Committee on Defence Production that it had produced 310 Al Khalid MBTs[44]	Based on the P3 prototype of the MBT-2000 export version of the Type 90-IIM tank of **Chinese origin**	 Al Khalid-I is a upgraded variant with ammunition capacity increased to 49 125 mm rounds, 1,500 12.7 mm rounds and 7,100 7.62 mm rounds	Designed with a 125 mm smoothbore, 48 calibre main gun capable of firing APFSDS, HEAT FS, depleted uranium rounds and guided missiles. Weighing 46 tons, it has modular composite armour and ERA. It is equipped with a head mirror stabilised gunner-sight with a Wide Field-of-View (WFOV) of 10° and Narrow FOV (NFOV) of 6°. It has a magnification capability of 6x to 10x. HIT also confirmed that it is capable of rolling out 50-60 al Khalid-I MBTs per year[45]

HQ-7B/ FM90	AD	NK	**Chinese** (Reverse engineered French Crotale)[46]	The TELAR vehicle is operated by a crew of three. The armour of this vehicle provides protection against small arms fire and artillery shell splinters. It has improved mobility over previous versions, based on the 4x4 chassis. Hence, it is more versatile[47] 	Inducted in 2015, as yet, an unknown quantity is being procured. The missile is 3 m long and weighs 84.5 kg. It has a solid fuel rocket motor. It gives the missile a maximum speed of 900 m/s and a range of 15 km. It can engage helicopters, aircraft, cruise missiles, air-to-ground missiles and anti-radiation missiles at a range of up to 15 km. Minimum range of fire is 700 m. Maximum altitude is 6,000 m. The missile has a 15 kg High-Explosive Fragmentation (HE-FRAG) warhead with contact and proximity fuses. It is claimed that a hit probability with a single shot is more than 85 percent.[48]

Alcotán-100	Anti-tank RL	158 systems and 1,430 missiles procured in the year 2016[49]	**Spain**	The VOSEL fire system gives the Alcotán-100 a high hit probability. It incorporates night vision that allows the operator to identify a target up to 1,200 m in the night, a laser rangefinder with a range up to 2,000 m and a ballistic computer[50] 	It is a recoilless, one-man portable, single-use anti-tank rocket launcher used by the infantry. Fires a 3.94-inch (100mm) calibre HEAT charge, in addition to HE/FRAG and HEDP (dual-purpose) rounds. The weapon also has a laser range finder and a ballistic computer[51]
MI-35M Hind E	Attack helico-pter	04 (Delivered in August 2017)[52]	**Russia**		Max speed 335 km/h Range 450 km Service ceiling 4,900 m Capable of carrying variety of guns, bombs and missiles. It can also carry 08 passengers[53]
Z-10/WZ-10 Fierce Thunderbolt	Attack Helico-pter	03 (Delivered for trials) Option for ordering 17 more[54,55]	Chinese (Based on the Kamov design bureau of Russia)		Max speed 270 km/h Range 800 km Service ceiling 6,400 m Capable of carrying a variety of guns, bombs and missiles.[56]
TAI/ AgustaWestland T129 ATAK	Attack helico-pter	30 (Pakistan is likely to choose this aircraft over the Z-10 to replace ageing AH-1 F/S Cobras)[57]	**Turkey**		Max speed 278 km/h Range 561 km Service ceiling 6,096 m Capable of carrying a variety of guns, bombs and missiles[58]

Hatf -9 (Nasr)	TBM	NK	**Pakistan,** derived from the WS-2 Weishi rocket system developed by China[59]		Can carry a sub-kiloton tactical nuclear weapon or conventional warhead to a range of 60 km[60]. Last test-fired in July 2017[61]
Babur II	LACM	NK	**Pakistan,** similar to the Chinese DH-10 missile system[62]		Range-750 km Guidance includes inertial, Terrain Contour Matching (TERCOM), Digital Scene Matching Area Co-relation (DSMAC) and GPS/GLONASS Speed- 880 km/hr. Last test-fired in December 2016[63]

- **Pakistan Navy**

Table 6

Class	Type	Quantity	Origin	Picture	Notes
Agusta-90B class[64]	Attack submarine	**03** {PNS Khalid (S137) PNS Saad (S138) PNS Hamza (S139)}	**France / Pakistan**		Pak MoDP has signed a contract for mid-life upgradation of the Khalid class submarines with a Turkish firm, STM. The task might focus on on-board electronics[65]

Type-039B	Attack submarine	**08** (04 to be built in Pakistan and 04 in China, simultaneously)[66]	**Chinese**	 $5 billion deal inked in 2015	China's first air independent propulsion powered submarine and presumed to be one of the quietest diesel-electric submarine classes in service. Capable of achieving 20 knots and carry 6 X 533 mm torpedo tubes and anti-ship missiles[67]
ATR-72	MPA	**03** Converted[68]	**France** (Conversion carried out by German firm Rheinland Air Service)	 Operational Radius 600 Nautical Miles[69]	Presently, the ATR-72 is effectively the only new MPA platform in the Pakistan Navy's acquisition pipeline. Existing P-3Cs will continue to serve an integral role in the Navy's fixed-wing fleet, the ATR-72 could emerge as a key supplementary MPA.
Scaneagle[70]	UAV	NK	Boeing USA		Can be configured for a variety of EO equipment for day and night usage. Reportedly has a range of 1,500 km, endurance of over 28 hours, and maximum altitude of 4876 metres[71]

Babur III	SLCM	NK	**Pakistan**	 Claimed test launch from Agusta 90B Khalid class submarine in January 2017[72]	Range-450 km It has underwater controlled propulsion and advanced guidance and navigation features, duly augmented by global navigation, terrain and scene matching systems[73]

- **Pakistan Air Force**

Table 7

Class	Type	Quantity	Origin	Picture	Notes
JF-17 Thunder	MRCA	103 In service (70 Block I and 33 Block II [74] [75])	**Chinese**	 Operational radius 1,352 km[76]	The JF-17 can deploy diverse ordnance, including air-to-air and air-to-surface missiles, and a 23 mm GSh-23-2 twin-barrel auto cannon

Conclusion

China and Pakistan are continuing to modernise their armed forces albeit in a diametrically opposite fashion. While China is steadily acquiring technological prowess and striving to portray itself as an emerging superpower, Pakistan is but a puppet in Chinese hands, looking for largesse from China and the USA, with a single point anti-India agenda. China will continue to arm Pakistan to bog India down in the region while China pursues its global aspirations. India needs to remain alive to these developments and charter its own course accordingly.

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Notes

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