# 7. JORDAN

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# **Major Changes**

- The Royal Jordanian air force is receiving 20 F-16C/Dfrom Belgium and Holland. Meanwhile the RJAF upgrades it older F-16A/B to the C/D standard, in Turkey.
- The Royal Jordanian air force sold 15 of its ageing F-5E/F combat aircraft to a foreign customer.
- The Jordanian armed forces are acquiring both Kornet ATGMs and Igla-S SAMs from Russia. Both types of missiles will be mounted on lightly armored vehicles.
- The Jordanian armed forces received 340 Ratel IFVs from South Africa.

#### **General Data**

Official Name of the State: The Hashemite Kingdom of Jordan

Head of State: King Abdullah bin Hussein al-Hashimi

Prime Minister: Nader al-dahabi Minister of Defense: Faisal al-Fayez

Inspector General of the Armed Forces: Major General Abd Khalaf al-Najada Chief of the Joint Staff of the Armed Forces: Lieutenant General Khalid

Saravrah

Commander of the Air Force: Major General Hussein al-Biss Commander of the Navy: Commodore Ali Mahmoud al-Khasawna

**Area:** 90,700 sq. km. Population: 5,900,000

# Demography

Ethnic groups		
<ul> <li>Arabs</li> </ul>	5,782,000	98.0%
<ul> <li>Circassians and Armenians</li> </ul>	118,000	2.0%
Religious groups		
Sunni Muslims	5,664,000	96.0%
<ul> <li>Greek Orthodox and other Christians</li> </ul>	236,000	4.0%

## **Economic Data**

		2003	2004	2005	2006	2007
GDP (current prices)	\$ bn	10.2	11.4	12.6	14.1	15.8
GDP per capita	\$	1,962	2,150	2,291	2,474	2,678
<ul> <li>Real GDP growth</li> </ul>	%	4.2	8.4	7.3	6.3	6.0
<ul> <li>Consumer price index</li> </ul>	%	2.9	3.8	4.2	7.4	5.7
External debt	\$ bn	8.3	8.1	7.7	8.0	8.1
Balance of payments						
• Exports fob	\$ bn	3.1	3.9	4.3	5.2	5.7
• Imports fob	\$ bn	-5.1	-7.3	-9.3	-10.3	-12.0
<ul> <li>Current account balance (including services and income)</li> </ul>	\$ bn	1.2	0.089	-2.2	-1.6	-2.8
Government expenditure						
Total expenditure	\$ bn	3.7	4.4	5.0	5.5	6.5
Defense expenditure	\$ bn	0.65	0.6	0.6	0.66	0.98
<ul> <li>Real change in defense expenditure</li> </ul>	%	14.0	-7.7	0.0	10.0	48.0
• Defense expenditure/GDP	%	6.4	5.3	4.7	4.7	6.2
Population	m	5.2	5.4	5.5	5.7	5.9
Official exchange rate	JD: \$1	0.709	0.709	0.709	0.709	0.709

Sources: EIU Quarterly Report, EIU Country Profile, IMF International Financial Statistical Yearbook, SIPRI Yearbook

# Foreign Military Cooperation

Туре	Details
Cooperation in military training	Turkey (use of facilities and airspace for training of pilots) , UK
<ul> <li>Foreign forces</li> </ul>	US (1,000 troops as of 2006), UK
<ul> <li>Forces deployed abroad</li> </ul>	Congo (MONUC), Ethiopia and Eritrea (UNMEE), observers in Georgia (UNOMIG), Haiti (MINUSTAH), Ivory Coast (UNOCI), Kosovo (UNMIK), Liberia (UNMIL), Sudan (UNMIS), Darfur (UNAMID)
• Joint maneuvers	Egypt (2005), France, GCC (2005), Oman, Qatar, Turkey, UAE, UK, US
<ul> <li>Security agreements</li> </ul>	NATO (2007), Saudi Arabia (2001), Turkey, US

# **Arms Trade**

**Arms Procurement and Security Assistance Received** 

Country	Туре	Details
Belgium	<ul> <li>Arms transfers</li> </ul>	F-16 aircraft (2008)
France	<ul> <li>Arms transfers</li> </ul>	EC-635 helicopters (2007)
	<ul> <li>Military training</li> </ul>	Instructors for Special Forces (2004)
Netherlands	<ul> <li>Arms transfers</li> </ul>	F-16 aircraft (2008)
PRC	<ul> <li>Arms transfers</li> </ul>	120mm mortars (2008)
	<ul> <li>Military training</li> </ul>	Training of nuclear technicians (2008)
Russia	Arms transfers	IL-76 transport aircraft (2007), AT-14
		ATGMs (2008), SA-18 Igal SAMs (2008)
	<ul> <li>Cooperation in</li> </ul>	KA-226 helicopters (2007), RPG-32 ATRLs
	Arms Production	(2008)
South Africa	<ul> <li>Cooperation in</li> </ul>	Ratel-20 IFVs (2008), Marauder LAVs
	Arms Production	(2007), RG-12 APCs (2008)
Turkey	<ul> <li>Cooperation in</li> </ul>	AAPCs (2007), upgrading of F-16 aircraft
	Arms Production	(2008)
	<ul> <li>Military training</li> </ul>	Flight simulation, training of helicopter pilots
UK	<ul> <li>Arms transfers</li> </ul>	Challenger MBTs (2004), tactical
		communication systems (2004), Pinzgauer
		APCs (2004), Commander HETs (2004),
	<ul> <li>Cooperation in</li> </ul>	al-Jawad APCs (2008), al-Thalab RVs
	Arms Production	(2008), Hunter APCs (2008)
	<ul> <li>Military training</li> </ul>	Trainees abroad
Ukraine	<ul> <li>Arms transfers</li> </ul>	Turrets for APCs (2005)
US	<ul> <li>Arms transfers</li> </ul>	F-16 combat aircraft(2006), IFCS for MBT
		upgrade (2006), S-70 Blackhawk helicopters
		(2008), Missile warning systems (2004), $C^2$
		system (2004), AIM-120 AMRAAMs (2005)
		national C <sup>4</sup> I system (2005)
	<ul> <li>Assistance</li> </ul>	\$68 million military aid (2008)
	<ul> <li>Cooperation in</li> </ul>	Upgrading of M113 APCs (2005), Sama CH-
	arms production	2000 light aircraft (2004)
	<ul> <li>Facilities</li> </ul>	Construction of Special Forces training cente
		(2006), upgrade of AFB (2006)
	<ul> <li>Military training</li> </ul>	Advisers

## **Arms Sales and Security Assistance Extended**

Country	Туре	Details
Australia	• Facilities	Use of facilities for training of Iraqi Police (2004)
Brunei	<ul> <li>Arms transfers</li> </ul>	Armored vehicles (2008)
Ghana	<ul> <li>Arms transfers</li> </ul>	SB7 Seeker aircraft (2004)
Iraq	Arms transfers	UH-1H helicopters (2004), C-130 aircraft (2004), SB7 Seeker aircraft (2004), Sama CH2000 aircraft (2006), BTR-94 APCs (2004), Spartan APCs (2004), M113 APCs (2004)
	<ul> <li>Military training</li> </ul>	Training of Iraqi Security forces (2006)
Kenya	<ul> <li>Arms transfers</li> </ul>	F-5E aircraft (2007)
Kuwait	<ul> <li>Military training</li> </ul>	Training Kuwaiti special forces (2007)
Libya	<ul> <li>Arms transfers</li> </ul>	Desert Iris RVs (2004)
Mauritania	<ul> <li>Arms transfers</li> </ul>	Al-Thalab RVs (2006)
PA	<ul> <li>Military training</li> </ul>	Trainees in Jordan (2005)
Saudi Arabia	<ul> <li>Arms transfers</li> </ul>	Desert Iris RVs (2004)
South Africa	<ul> <li>Arms transfers</li> </ul>	SB7 Seeker aircraft (2004)
UAE	<ul> <li>Arms transfers</li> </ul>	Desert Iris RVs (2004)
	<ul> <li>Cooperation in arms production</li> </ul>	AB17 Tiger/ Nimr APCs (2007)
US	Facilities	Use of airfields by combat aircraft
Yemen	• Arms transfers	SB7 Seeker aircraft (2005), al-Jawad APCs (2008)

# **Defense Production**

	M	Р	Α
Army equipment			
<ul> <li>Upgrading of Khalid and al-Hussein MBTs</li> </ul>	$\checkmark$	$\checkmark$	
<ul> <li>Upgrading of M60 and Tariq MBTs</li> </ul>	$\checkmark$	$\checkmark$	
Upgrading of Scorpion light tanks	$\checkmark$		
<ul> <li>Conversion of M47 and M60 tanks to ARVs</li> </ul>	$\checkmark$		
<ul> <li>Conversion of Tariq to Temsah IFVs and MAP APCs</li> </ul>	$\checkmark$		
<ul> <li>Upgrading of M113 APCs to M113MK1J standard</li> </ul>		$\checkmark$	
<ul> <li>Upgrading of Ratel and RG-12 APCs</li> </ul>		$\checkmark$	
<ul> <li>Production of AB2 al-Jawad and Hunter APCs</li> </ul>		$\checkmark$	$\checkmark$
<ul> <li>Production of modified Land Rover APCs</li> </ul>		$\checkmark$	
<ul> <li>Production of Toyota Land Cruiser, Lenco, Marauder APCs</li> </ul>		$\checkmark$	$\checkmark$
<ul> <li>Production of AAPCs</li> </ul>			$\checkmark$
<ul> <li>Black Iris\ Desert Iris, al-Thalab and Tiger RVs</li> </ul>	$\checkmark$	$\checkmark$	
AB19 Self propelled 107mm MRLs		$\checkmark$	
Desert Ranger motorcycles		$\checkmark$	
• 120mm NM3 Semi-automatic SP mortars	$\checkmark$	$\checkmark$	

	M	Р	Α
60mm SP mortar on Desert Iris vehicle	✓		
• RPG-29/32 ATRLs		$\checkmark$	
<ul> <li>Predator RCWS for Temsah and Rooikat IFVs</li> </ul>	$\checkmark$		
• AB27 copula for M113 APCs	$\checkmark$		
Air Force equipment			
• I-wing, Jordan Falcon, Jordan Arrow, Silent Eye UAVs	$\checkmark$	$\checkmark$	
KA-226 helicopter			$\checkmark$
Sama CH-2000 Trainer aircraft			✓
• SB7L-360 Seeker and Blue Bird light observation aircraft			$\checkmark$
Naval equipment			
Light Craft SRB		$\checkmark$	
Electronics			
EW and ESM measures	$\checkmark$		
Aerial reconnaissance/ observation system			✓
• Upgrading of avionics (joint venture)	$\checkmark$		
Optronics			
Night vision equipment		$\checkmark$	

P - production under license

A - assembly

# **Strategic Assets**

# **NBC** Capabilities

## Nuclear capability

No known capability. Nuclear cooperation accords with Canada, China, France, UK, and USA. Party to the NPT.

#### Chemical weapons and protective equipment

No known CW activities. Personal protective and decontamination equipment. Party to the CWC.

#### Biological weapons

No known BW capability. Party to the BWC.

# **Armed Forces**

## Order-of-Battle

Year	2005	2006	2007	2008	2009
General data					
<ul> <li>Personnel</li> </ul>	100,700	100,700	100,700	100,700	100,700
(regular)					
<b>Ground Forces</b>					
<ul> <li>Divisions</li> </ul>	4	4	4	4	4
<ul> <li>Total number of brigades</li> </ul>	14	14	14	14	14
<ul> <li>Tanks</li> </ul>	921	927	927	927	927
	(1,223)*	(1,217)	(1,217)	(1,217)	(1,217)
<ul> <li>APCs/AFVs</li> </ul>	1,643	1,643	1,846	2,235	2,235
	(1,943)*	(1,943)	(2,056)	(2,295)	(2,295)
<ul> <li>Artillery (including MRLs)</li> </ul>	853 (878)	853 (878)	853 (878)	853 (878)	853 (878)
Air Force					
<ul> <li>Combat aircraft</li> </ul>	96 (105)	96 (105)	94 (108)	80 (106)	80 (106)
<ul> <li>Transport aircraft</li> </ul>	16	16	16	18	18
<ul> <li>Helicopters</li> </ul>	74 (90)	67	67	79	79
Air Defense					
Forces					
<ul> <li>Heavy SAM batteries</li> </ul>	17	17	17	17	17
<ul> <li>Medium SAM batteries</li> </ul>	12	12	12	12	12
<ul> <li>Light SAM launchers</li> </ul>	50	50	50	50	50
Navy					
<ul> <li>Patrol craft</li> </ul>	10	17	17	17	17

<sup>\*</sup> Due to change in estimate.

# Personnel

	Regular	Reserves	Total
Ground Forces	88,000	60,000	148,000
Air Force	12,000		12,000
Navy	700		700
Total	100,700	60,000	160,700
Paramilitary			
<ul> <li>General</li> </ul>	25,000		25,000
Security Forces			
(including			
Desert Patrol)			
<ul> <li>Popular Army</li> </ul>		200,000-250,000	200,000-250,000

Note: The Popular Army is not regarded as a fighting force.

# **Ground Forces**

## **Formations**

	Divisions	Independent brigades / groups	Brigades in divisions
Armored	2		3 armd., 1 aty., 1 AD each
Mechanized	2		1 Inf., 2 mech., 1 aty., 1 AD each
Infantry/Royal Guard		1	
Special forces		3	
Artillery		5	
Total	4	7	

# Tanks

Model	Quantity	In service	Since	Notes
MBTs				
High quality				
Al-Hussein	390	390	1999	Challenger I
<ul> <li>Khalid</li> </ul>	275	275	1984	Improved Chieftain
Subtotal	665	665		
Medium and low				
quality				
Tariq	290	0	1995	Improved Centurion
<ul> <li>M60 Phoenix</li> </ul>	182	182	2003	Upgraded M60
<ul> <li>M60 A1/ A3</li> </ul>	80	80	1980	Being upgraded
Subtotal	552	262		
Total	1,217	927		
Future procurement				
• al-Hussein	+	+		To be upgraded with Hybrid torrent

# APCs/AFVs

Model	Quantity	In service	Since	Notes
APCs				
• M113 A1/A2	1,000	1,000	1968	To be upgraded; including M106 M- 30, M901 ITV
• M113Mk1J	255	255	2004	
• YPR-765	60	60	2005	Including 45 YPR ITV.
• Engesa EE-11	100	100	1987	With General Security Forces
• Spartan	55	55	2000	26 Transferred to Iraq
Subtotal	1,470	1,470		•
IFVs				
<ul> <li>Ratel 20</li> </ul>	341	341	2003	
• BMP-2	35	35	1989	
Subtotal	376	376		
Reconnaissance				
• Scorpion	35	35	2002	Converted from Light Tanks
<ul> <li>Scimitar</li> </ul>	175	175	2005	
<ul> <li>Saladin/ Saracen</li> </ul>	60	0	1963	
Subtotal	270	210		
Light armored vehicles				
<ul> <li>AB5 Defender 110</li> </ul>	14	14	2001	

Model	Quantity	In service	Since	Notes
AB2 al-Jawad	65	65	2001	
• Al-Thalab	50	50	2006	Armor-protected variant
• Ferret Hybrid	50	50	2007	Upgraded from obsolete vehicles
Subtotal	179	179		
Total	2,295	2,235		
<b>Future procurement</b>				
• AAPC	100			
<ul> <li>Al-Thalab</li> </ul>	96			Being delivered
• RG-12	40			
<ul> <li>M113 Mk1J</li> </ul>	1,000			Upgraded from kits
<ul> <li>Matador</li> </ul>	25			
<ul> <li>Marauder</li> </ul>	25			

# Artillery

Model	Quantity	In service	Since	Notes
Self-propelled guns				
and howitzers				
• 203mm M-110 A2	128	128	1980	
• 155mm M-109 A2	220	220	1980	
Subtotal	348	348		
Towed guns and				
howitzers				
• 203mm (8") M-115	25	0	1965	
• 155mm M-114	30	30	1970	
• 155mm M-59 (Long	10	10	1965	
Tom)				
• 105mm M102 A1	50	50	1970	
Subtotal	115	90		
Mortars, under				
160mm				
• 120mm	300	300	1975	
• 107mm M-30	100	100	1975	50 M106 SP
Subtotal	400	400		
MRLs				
• 107mm AB-19	15	15	2002	mounted on
				HUMMWV/ Desert
	0=0	0.50		Iris chassis
Total	878	853		
Future procurement				CI.:
• 1200mm SP	+	+		Chinese mortars under negotiations

#### **Ground Radars**

Model	Quantity	In service	Since	Notes
Artillery/mortar				
locating radars				
• AN/TPQ-36/37	7	7	1990	
Future procurement				
<ul> <li>Border control</li> </ul>	+	+	2000	Including ground
system				radars, IR cameras and aerostats

# **Logistic and Engineering Equipment**

Aardvark Mk 2 flail (6), Aardvark Mk 3 flail (6) , bridges, mine-clearing plows and bulldozers, UDK-1, HETs (200), M-578 recovery vehicles (30), Chieftain ARVs (6) , Scammell Commander HETs (59)

Future procurement:

M60 ARVs (20) , M1070 HETs (10), Commander HETs (41)

#### **Anti-Tank Guided Missiles**

Model	Launchers	Missiles	Since	Notes
• BGM-71E TOW 2A	285		2004	
<ul> <li>M901 ITV</li> </ul>	93		1988	
• Milan ITV	45		2005	Mounted on YPR chassis
<ul> <li>M47 Dragon</li> </ul>	310		1976	
<ul> <li>Javelin</li> </ul>	30	135	2002	
• 155mm Copperhead		100		Artillery projectiles
Total	763			
Future procurement				
• AT-14 Kornet SP	200			Mounted on HMMWV chassis

# **Air Force**

## Order-of-Battle

Category	Quantity	In service	Notes
Combat	106	80	
Transport	18	18	
Helicopters	79	79	

## **Combat Aircraft**

Model	Quantity	In service	Since	Notes
Advanced multi-role				
• F-16 A/B	32	20	1997	Being upgraded to Block 40 standard
• F-16 C/D	11	11	2007	MLU standard
Subtotal	43	31		
Multi-role				
<ul> <li>Mirage F1-C/E</li> </ul>	28	24	1981	
• F-5 E/F	35	25	1975	
Subtotal	63	49		
Total	106	80		
Future procurement				
• F-16 C/D	22			Being delivered; from Dutch and Belgium AF drawdown

**Transport Aircraft** 

Transport 7 in orare				
Model	Quantity	In service	Since	Notes
• C-130H Hercules	5	5	1972	Upgraded
<ul> <li>CASA C-212</li> </ul>	2	2	1975	
<ul> <li>Challenger 604</li> </ul>	2	2	2001	VIP role
• CN-235	2	2	1998	
• CN-295	2	2	2004	
<ul> <li>Gulfstream III/IV</li> </ul>	2	2	1986	
• IL-76MF	2	2	2006	
• L-1011-500	1	1	1984	
Total	18	18		

**Training and Liaison Aircraft** 

Model	Quantity	In service	Since	Notes
Jet trainers				
• CASA C-101	10	10	1987	
Piston/Turbo-prop				
• TB-20 Socata	2	2	2000	
<ul> <li>T67M Firefly</li> </ul>	16	16	2002	
• BAe-SA-3-125	15	15	1974	
Bulldog				
Subtotal	33	33		
Total	46	46		
<b>Future Procurement</b>				
<ul> <li>SB7L Seeker</li> </ul>	6			

**Helicopters** 

Model	Quantity	In service	Since	Notes
Attack				
<ul> <li>AH-1G/F/S Cobra</li> </ul>	25	25	1985	
Medium transport				
<ul> <li>S-70A Black Hawk</li> </ul>	14	14	1987	
<ul> <li>AS-332 Super Puma</li> </ul>	12	12	1986	
Subtotal	26	26		
Light transport				
• EC-635	13	13	2003	
<ul> <li>Alouette III</li> </ul>	1	1	1977	
• MD 500D	8	8	1980	
• MBB BO-105	3	3		With general security forces
• BK-117	3	3		security forces
Subtotal	28	28		
Total	79	<b>79</b>		

#### **Advanced Armament**

Air-to-air-missiles

AIM-9J/M/P Sidewinder (750), AIM-7M Sparrow (96), R-550 Magic

Air-to-ground-missiles

AS-30L (10), AGM-65C Maverick (60)

Bombs

Belouga CBU, Durandal anti-runway bombs

Future procurement

Night vision systems, AIM-120 AMRAAM (50)

Note: Number in parentheses refers to the quantity of missiles purchased, not to current inventory levels.

## Air Force Infrastructure

Aircraft shelters
For all combat aircraft

Military airfields

Amman (Marka), Azrak, H-4, H-5, Jaafar, Mafraq

# **Air Defense Forces**

## **Surface-to-Air Missiles**

Model	Batteries	Launchers	Since	Notes
Heavy missiles				
• Patriot PAC-3	3		2003	American personnel
<ul> <li>MIM-23B Improved HAWK</li> </ul>	14		1978	1
Total	17			
Medium missiles				
• SA-8 (Osa)	12	50	1982	
Total		50		
Light missiles				
• SA-13 (strela-10)		50	1986	
Total		50		
Shoulder-launched				
missiles				
<ul> <li>Javelin</li> </ul>		+		
<ul> <li>MIM-43A Redeye</li> </ul>		270	1977	
• SA-14 (Strela-3)		300	1987	
• SA-18 (Igla)		240	1991	
Total		810		
<b>Future Procurement</b>				
• SA-24 (Igla-S)		200		Mounted on Land Cruiser chassis

**Other Air Defense Systems** 

Model	Quantity	In service	Since	Notes
Short-range guns				
• 40mm M-42 SP	200	0	1966	To be phased out
• 23mm ZSU 23x4 SP (Gun Dish)	45	16	1983	
• 20mm M163 Vulcan SP	100	100	1976	
Total	345	116		
Radars				
<ul> <li>AN/TPS-43</li> </ul>	2	2		
• AN/TPS-63	5	5		
• S-711	5	5		
<b>Future Procurement</b>				
<ul> <li>RADIANT C<sup>4</sup>I</li> </ul>				
• FPS-117	2			

# Navy

# **Patrol Craft**

Туре	Quantity	Length (m.) / displacement (t.)	Notes / armament
Al-Hussein class (VT)	3	30.5/124	2x30mm guns
Hawk)			1x20mm gun
•			2x12.7mm MGs
<ul> <li>Al-Hashim class (type</li> </ul>	2	12.7/9	1x12.7mm MG
412)			
<ul> <li>Abdullah class</li> </ul>	4	13.2/14.5	2x12.5mm MGs
• Faysal class (Bertram)	4	11.6/8	1x12.7mm MG
• Feisal class	4	8.1/3.4	2x12.5mm MGs
(Commander)			
Total	17		

## **Special Maritime Forces**

Туре	Quantity	Length (m.) / displacement (t.)	Notes / armament
• 17ft Launch	4	5.1	
• 19ft GRP	4	5.7	
Future procurement			
Light Craft SRB	1	10m	For Special Forces

## **Naval Infrastructure**

Naval bases	2	
Aqaba, Hingat al-Ramat		