11. MOROCCO

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Major Changes

- The Moroccan air force is upgrading its aged Mirage F-1 combat aircraft. Meanwhile the Moroccan air force received all of its new 24 F-16C/D combat aircraft, as well as all of its 24 T-6C training aircraft.
- The Moroccan received its three Sigma type frigates as well as one OPV-70 patrol vessel.

General Data

Official Name of the State: ${\it Kingdom\ of\ Morocco}$

Head of State: King Mohammed VI Prime Minister: Abdelilah Benkirane

Ministry-Delegate to the Prime Minister for National Defense: Abdul Latif

Loudiyi

Commander-in-Chief of the Armed Forces: King Mohammed VI Inspector General of the Armed Forces: General Bouchaib Arroub Inspector of the Royal Air Force: Major General Ahmed Boutaleb Inspector of the Royal Navy: Vice Admiral Mohamed Laghmari

Area: 622,012 sq. km., including the former Spanish Sahara

Population: 32,500,000

Foreign Military Cooperation

Туре	Details		
Forces deployed abroad	Active Endeavor (NATO), Afghanistan (ISAF), Congo		

Туре	Details
	(MONUC), Kosovo (KFOR)
 Joint maneuvers 	Algeria (2004), France (2004), NATO (2010), Spain
	(2004), UK (2003) , US (2012)
 Security agreements 	NATO (2008), Qatar (2010), Tunisia, US

Arms Trade

Arms Procurement and Security Assistance Received

Country	Туре	Details
Belgium	Arms transfers	155mm M109 guns (2008), YPR-765 APCs (2009)
Canada	 Arms transfers 	Bombardier CL-415 aircraft (2013)
France	• Arms transfers	Upgrading of Mirage F1 aircraft (2010), FERMM frigate (2011), Damocles targeting pods (2009), AASM guided bombs (2010), OPV-70 (2012)
Italy	 Arms transfers 	C-27J Spartan aircraft (2011)
Netherlands	 Arms transfers 	Sigma corvettes (2012)
Russia	 Arms transfers 	Tunguska SAM (2008)
Spain	 Arms transfers 	M60 MBTs (2009)
UK	 Arms transfers 	Griffon 500TD hovercraft (2011)
US	Arms transfers	155mm M109A5 gums (2012), F-16 C/D aircraft (2012), T-6C aircraft (2012), CH-47D helicopters (2009), AIM-120 AMRAAM (2009), AIM-9X Sidewinder (2012), AGM-65 Maverick (2009), AGM-88 HARM (2009), JDAM (2009), GBU-24 guided-bombs (2009), GBU-12 guided-bombs (2009), GBU-10 guided-bombs (2009), AAQ-33 SNIPER pods (2009), DB-110 reconnaissance pods (2009), G550 VIP aircraft (2009), ACES defensive-aids suite (2009), MIM-23B Hawk SAMs (2010), MPQ-64 radars (2011), M1A1 MBTs (2012)
	 Assistance 	\$9 million military aid (2010)

Arms Sales and Security Assistance Extended

Country	Туре	Details	
US	 Facilities 	Use of Sidi Slimane, Marrakech and	
		Casablanca airfields in emergency;	
		permission for space shuttle to land at	
		Marrakech AFB; use of communications	
		center at Kenitra; storage and use of naval	

Country	Туре	Details	
		facilities at Mohammedia, Tantan	

Defense Production

	M	Р	Α
Army equipment			
 Small arms ammunition 	$\sqrt{}$		
 Assembly of trucks 			$\sqrt{}$

Note: M - manufacture (indigenously developed)

P - production under license

A - assembly

Strategic Assets

NBC Capabilities

Nuclear capability

No nuclear capability. Party to the NPT.

Request for small scale nuclear research reactor approved by US government.

Chemical weapons and protective equipment

No known CW activity. Party to the CWC.

Biological weapons

No known BW activities. Signed but not ratified the BWC.

Armed Forces

Order-of-Battle

Year	2009	2010	2011	2012	2013
General data					
 Personnel 	198,500	198,500	198,500	198,500	198,500
(regular)					
Ground Forces					
 Number of 	6	6	6	6	6
brigades					
 Tanks 	345	345 (640)	345 (640)	345 (640)	345 (640)
	(640)*				
 APCs/AFVs 	1,450	1,450	1,450	1,450	1,450
	(1,500)*	(1,500)	(1,500)	(1,500)	(1,500)
 Artillery 	1,142	1,142	1,197	1,197	1,197
(including					
MRLs)					
Air Force					
 Combat aircraft 	58 (72)	58 (72)	58 (72)	79 (89)	82 (89)
 Transport 	41 (43)	42 (44)	43 (45)	44 (46)	46 (48)

Year	2009	2010	2011	2012	2013
aircraft					
 Helicopters 	120 (130)	120 (130)	120 (130)	120 (130)	120 (130)
Air Defense					
Forces					
 Light SAM 	49	49	49	49	49
launchers					
Navy					
 Combat vessels 	15	15	15	18	18
 Patrol craft 	62	62	63	63	63

^{*} Due to change in estimate.

Personnel

	Regular	Reserves	Total
Ground Forces	175,000	150,000	325,000
Air Force	13,500		13,500
Navy and Marines	10,000		7,000
Total	198,500	150,000	348,500
Paramilitary			
Gendarmerie Royale	20,000		10,000
Force Auxiliere	25,000		25,000
 Mobile Intervention 	5,000		5,000
Corps			

Ground Forces

Formations

	Independent brigades / groups	Independent battalions
Armored		10
Mechanized	3	19
Infantry		35
Light Security	1	
Camel Corps		5
Paratroops/ Airborne/	2	6
Commando		
Marines		2
Artillery		12
Air Defense		1
Total	6	90

Tanks

Model	Quantity	In service	Since	Notes
MBTs				
High quality				
• T-72	100	40	2000	
Medium and low				
quality				
• M60 A1/A3	250	250	1981/93	
• M48 A5	185	0	1974	
Subtotal	435	250		
Light tanks				
• SK-105 (Kürassier)	105	45	1985	
Total	640	345		
Future procurement				
• M1A1 SEP	200			Under negotiations

APCs/AFVs

Model	Quantity	In service	Since	Notes
APCs				
• M113 A1/A2	625	625	1979	Including 23 M901 Also listed under Anti-Tank Weapons
• UR-416	55	55	1977	Also listed under Anti-Tank Weapons
Subtotal	680	680		•
IFVs				
• YPR-765	120	120	2009	Including 19 also listed under Anti- Tank Weapons
 Ratel 20/90 	60	60	1981	•
 VAB -VCI/VTT 	290	290	1979	
Subtotal	470	470		
Reconnaissance				
 AMX-10 R/CM 	110	110	1981	
• BRDM-2	50	0	1992	Including 36 listed under Anti-Tank Weapons
• EBR-75	16	16	1970	•
• AML-90/AML-60	175	175	1966	
Subtotal	350	300		
Total	1,500	1,450		

Artillerv

Model	Quantity	In service	Since	Notes
Self-propelled guns	-			
and howitzers				
• 155mm M109 A5	60	60	2012	From US drawdown
• 203mm M110 A2	60	60	1996	
• 155mm M109 A1	123	123	2004	
• 155mm Mk F-3 (AMX)	100	100	1980	
Subtotal	343	343		
Towed guns and				
howitzers				
• 155mm FH-70	30	30	1993	
• 155mm M114	20	20	1976	
• 155mm M198	35	35		
• 130mm M-46	18	18	1981	
• 105mm L-118	30	30	1980	To be upgraded
• 105mm M-1950	35	35	1972	
• 105mm M101	18	18	1970	
Subtotal	186	186		
Mortars, under				
160mm				
• 120mm	600	600	1972	20 SP mounted on VAB
• 107mm M30 SP	32	32	2000	Mounted on M106
Subtotal	632	632		
MRLs				
• 122mm BM-21	36	36	1980	
Total	1,197	1,197		

Ground Radars

Model	Quantity	In service	Since	Notes
Artillery/mortar locating radars				
• RATAC	12	12	1980	Mounted on VTT chassis

Logistics and Engineering Equipment

M578 recovery vehicles (60), SK-105 ARVs (10), M728 ENG (6)

Anti-Tank Missiles

Model	Quantity	In service	Since	Notes
• BGM-71A TOW	150	150	1978	
• M901 ITV	23	23	1999	Also listed under APCs
• AT-3 (Sagger) SP	36	0	1992	Mounted on BRDM-2
• Cobra SP	42	42	1979	Mounted on UR- 416
 M47 Dragon 	480	480	1978	
• MILAN	100	100	1982	Including 19 mounted on YPR- 765 chassis
Total	830	795		

Air Force

Order-of-Battle

Category	Quantity	In service	Notes
Combat	89	82	_
Transport	48	46	
Helicopters	130	120	

Combat Aircraft

Model	Quantity	In service	Since	Notes
Advanced Multi-role	-			
• F-16 C/D	24	24	2011	
 Mirage MF2000 	12	12	2010	Being delivered
Subtotal	36	36		
Multi-role				
• F-5E/F	22	15	1981	Upgraded
 Mirage F1 	15	15	1979	Being upgraded
Subtotal	37	30		
Ground attack				
 OV-10 Bronco 	3	3	1981	
Obsolete				
• F-5A/B	13	13	1967	
Total	89	82		
Future procurement				
• Mirage MF2000	27			Upgrade of Mirage F1

Transport Aircraft

Model	Quantity	In service	Since	Notes
King Air 100	5	5	1975	
• King Air 200	5	5	1983	
• King Air 300	1	1	1991	
 Gulfstream G550 	1	1	2010	VIP aircraft
 Boeing 707 	2	2	1982	
 C-27J Spartan 	4	4	2010	
• C-130H Hercules	15	15	1974	Including 2 employed in electronic surveillance and 2 tankers
• CN-235	7	7	1990	
 Dornier DO-28 D-2 	3	2	1981	
 Gulfstream II/III 	2	1	1976	
 Mystère-Falcon 50 	1	1	1980	
 Mystère- Falcon 20 	2	2	1968	Electronic
-				countermeasures
Total	48	46		

Training and Liaison Aircraft

Model	Quantity	In service	Since	Notes
Jet trainers				
• Cessna 318 (T-37)	14	14	1996	
 Alpha jet 	22	22	1979	
 Beechcraft T-34C 	12	10	1977	
 CM-170 Fouga 	22	22	1964	
Magister				
Subtotal	70	68		
Piston/Turbo-prop				
• T-6C Texan	24	24	2011	
 AS-202/18A Bravo 	10	10	1978	
• CAP 10/232	9	9	1983	Aerobatic team
Subtotal	43	43		
Total	113	111		

Helicopters

Model	Quantity	In service	Since	Notes
Attack helicopters				
• SA-342 Gazelle	22	22	1976	Of which 6 with gendarmerie
Heavy transport				
• CH-47C Chinook	8	8	1979	

Model	Quantity	In service	Since	Notes
Medium transport				
• SA-330 Puma	25	25	1976	To be upgraded
• AB-205	31	31	1969	
• AB-212	5	5	1973	
• AS-365 Dauphin II	2	2	1983	With gendarmerie
Subtotal	63	63		
Light transport				
• Alouette II / III	5	5	1981	With gendarmerie
 Bell 206 JetRanger 	26	16	1975	_
• SA-315B Lama	3	3		With gendarmerie
Subtotal	34	24		C
Naval Attack				
 AS-565MB Panther 	3	3	2003	
Total	130	120		
Future procurement				
 CH-47D Chinook 	3			
 SA-330 Puma 	25			To be upgraded

Miscellaneous Aircraft

Model	Quantity	In service	Since	Notes
Reconnaissance				
• RF-5	2	1	1981	Also listed under Combat Aircraft
• C-130H	2	2	1974	Also listed under Transport Aircraft
Tanker				
• KC-130	2	2	1974	Also listed under Transport Aircraft
Electronic warfare				
• Mystère 20F	2	2	1968	Also listed under Transport Aircraft
Maritime surveillance				
BN-2T Defender	7	7	1993	Possibly in fishery protection role
Fire fighters				-
• CL-415	3	3	2011	

Model	Quantity	In service	Since	Notes
UAVs and mini-				
UAVs				
• Skyeye R4E-50	+	+	1990	
Future procurement				
• CL-415	2			Being delivered

Advanced Armament

Air-to-air-missiles

AIM-9J/M Sidewinder (350), R-530, R-550 Magic (300), Super 530D

Air-to-ground-missiles

AGM-65 Maverick (380), HOT

Reconnaissance/targeting pods

COR-2/Hares reconnaissance pods, Litening-2 targeting pods, Damocles targeting pods, ELT/555 ECM pod, ATLIS targeting pod

Future procurement

AIM-120 AMRAAM (30), AIM-9X Sidewinder, AGM-88 HARM (20), JDAM (50), GBU-24 guided-bombs (20), GBU-12 guided-bombs (150), GBU-10 guided-bombs (50), AAQ-33 SNIPER pods (6), DB-110 reconnaissance pods (4), AGM-65D Maverick (28), AGM-65H Maverick (45), Enhanced GBU-12 (120), AASM guided-bombs

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

Air Force Infrastructure

Military	airfields	10
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Agadir, Casablanca (Nouasseur), Fez, Kenitra, Larache, L'Ayoun, Marrakech, Meknes, Rabat, Sidi Slimane

Air Defense Forces

Surface-to-Air Missiles

Model	Batteries	Launchers	Since	Notes
Light missiles				
 Tunguska-M1 (SA- 		12	2008	
19)				
• MIM-72A		37	1977	
Chaparral				
Total		49		
Shoulder-launched				
missiles				
• SA-7 (Grail)		70	1978	
Future procurement				
MIM-23B Hawk	9			From US

Model	Batteries	Launchers	Since	Notes
				drawdown

Other Air Defense Systems

Model	Quantity	In service	Since	Notes
Short-range guns				
• 37mm M-1939	100	14	1972	
• 23mm ZU 23x2	90	30	1986	
• 20mm M163	115	115	1983	
Vulcan SP				
 20mm M167 SP 	40	40	1993	
Total	345	199		
Radars				
 AN/TPS-43 	8	8		
 AN/TPS-63 	8	8		Upgraded
Future procurement				
• AN/MPQ-64	8			Under negotiations

Navy

Combat Vessels

Туре	Quantity	Length (m.)/ displacement (t.)	Notes/armament
Missile frigates			
 Tarik Ben Ziyad 	3	98/2,100	Helicopter pad
(Sigma class)			MM40 Exocet SSMs
			VL-MICA SAMs
			76mm Guns
			MU90 torpedoes
 Floreal 	2	93.5/2,950	1 AS-565 Panther
			helicopter
			2xMM38 Exoset SSMs
			2x2 Simbad SAMs
			1x76mm gun
			2x20mm guns
 Descubierta 	1	88.8/1,233	4xMM38 Exocet SSMs
			1x8 Aspide SAMs
			6x324mm torpedoes
			1xSR 375 ASW mortar
			1x76mm gun
			1x40mm gun
Subtotal	6		

Туре	Quantity	Length (m.)/ displacement (t.)	Notes/armament
MFPBs			
 Lazaga 	4	58.1/524	4xMM38 Exocet SSMs
			1x76mm gun
			1x40mm gun
			2x20mm guns
Gunboats			
 Okba class (PR-72) 	2	57.5/375	1x76mm gun
			1x40mm gun
 Cormorant class 	6	58.1/425	1x40mm gun
(P-200D Vigilance)			2x20mm guns
Subtotal	8		
Total	18		
Future procurement			
 FREMM frigate 	1	142/5,800	MM40 Exocet SSMs
E		•	Aster 15 SAMs
			76mm Guns
			MU90 torpedoes

Patrol Craft

Туре	Quantity	Length (m.)/ displacement (t.)	Notes/armament
• Bir Anzarane (OPV 70)	1	70/800	Helicopter pad 1x 76mm gun
			1x 40mm gun 2x 14.5mm MGs
• Rais Bargech (OPV 64)	5	64/580	1x40mm gun
			1x20mm gun
			4x14.5mm MGs
 Osprey mk II 	4	54.8/475	2x20mm guns
 Al Wacil/Erraid (P-32) 	10	32/74	6 Al wacil class, 4
			Erraid class
			4 with customs/
			Coast Guard
			1x20mm gun
• VCSM (RPB 20)	10	20/40	RIHB launch
• Arcor 53	15	16/17	With customs/Coast Guard
			1x12.7mm MG
• Arcor 46	18	14.5/15	With customs/Coast
			Guard
			2x12.7mm MGs
otal	63		
uture procurement			
• OPV 70	3	70/800	Delivery suspended

Landing Craft

Landing Oran			
Туре	Quantity	Length (m.)/ displacement (t.)	Notes/armament
Batral LSM	3	80/750	140 troops, 12 vehicles Helicopter pod 2x81mm mortars 4x40mm guns
 CTM (LCM) 	1	23.8/59	200 troops
• Newport class LST	1	159.2/8,450	400 troops, 500-ton vehicles 4xLCVP/LCPL boats 1x20mm Phalanx gun
Total	6		

Auxiliary Vessels

Туре	Quantity	Length (m.)/ displacement (t.)	Notes/armament
al-Aigh support ship	1	77/1,500	2x14.5mm MGs
 Agor survey ship 	1	67.3/1,370	
(Robert D. Conrad)			
 Divers support ship 	1		
 Dakhla support ship 	1	69/2,160	
• Griffon 500TD	2	8.4m	With Coast Guard/
hovercraft			ministry of fishing
 SAR craft 	4	19.4/40	With Coast Guard/
			ministry of fishing
 SAR craft 	2	20.7/70	With Coast Guard/
			ministry of fishing
 SAR craft 	2	15.75/ 68	With Coast Guard/
			ministry of fishing

Naval Infrastructure

Naval bases

Agadir, Casablanca, Dakhla, al-Hoceima, Ksar Sghir, Kenitra, Safi, Tangier, Tantan Ship maintenance and repair facilities

156-meter dry-dock at Casablanca, repair ships of up to 10,000 dwt; facility for minor repairs at Agadir

Major Non-Governmental Paramilitary Forces

Personnel

	Regular	Reserves	Total
SPLA	5,000	5,000	10,000

Equipment

Organization	Category	System	Quantity	Notes
SPLA	Tanks	• T-62	20	
		• T-55	50	
		• SK-105	4	
		Total	74	
	APCs	• AML-60/90	8	
		• BMP-1	60	
		• EE-9	20	
		 Panhard M3 	5	
		Total	93	
	Artillery	• 122mm D-30	12	
	MRLs	• 122mm BM-21	10	
	MORs	• 160mm	40	
		• 120mm	60	
	ATGMs	• 9K111 (AT-3)	40	
	AD	 Strela-2M 	100	