## 6. ISRAEL

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## **Major Changes**

- The Israeli intelligence community is now augmented by the launch of the Ofek-7 reconnaissance satellite (in June 2007) and the TecSAR radar reconnaissance satellite (In October 2007)
- Following the lessons of the second Lebanon war the IDF decided to invest in two
  separate short-range and ultra short range BMD systems: the "David Sling" against
  short range rockets and the "Iron Dome" against ultra short range rockets. In
  addition the IDF a third Arrow BMD battery, and upgrading some of its Patriot
  batteries to the PAC-3 standard.
- The Israeli Army is still absorbing its Merkava Mk IV MBTs, while withdrawing
  older MBTs from service. Meanwhile the Israeli Industry began producing and the
  IDF is introducing into service the new "Namer" IFV, which is based on the
  Merkava automotive system.
- Following the lessons of the second Lebanon war the IDF is equipping its MBTs with the "Trophy" APS.
- Delivery of the second order of 50 F-16I (Sufa) was concluded by the end of 2008.
- The IAF received its 5 Gulfstream G550 aircraft 3 of the SEMA version ("Eitam") and 2 of the CAEW version ("Shavit").
- $\bullet\,$  The IAF acquired the new Heron-2 HALE UAV ("Shoval") and the Heron TP UAV ("Eitan").
- The Navy will acquire two more Dolphin submarines from Germany
- The Navy is absorbing additional 4 "super Dvora" and 3 "Shaldag" fast patrol boats and acquired 8 "Defender" class patrol boats from the USA.

## **General Data**

Official Name of the State: State of Israel Head of State: President Shimon Peres Prime Minister: Benjamin Netanyahu Minister of Defense: Ehud Barak

Chief of General Staff: Lieutenant General Gabi Ashkenazi Commander of Army HQ: Major General Avi Mizrakhi Commander of the Air Force: Major General Ido Nehushtan

Commander of the Navy: Rear Admiral Eli Marom

Area: 22,145 sq. km, including East Jerusalem and its vicinity, and the Golan Heights.

**Population:** 7,200,000

#### **Demography**

Ethnic groups		
• Jews	5,680,000	80.2%
<ul> <li>Arabs, Druze, and others</li> <li>Religious groups</li> </ul>	1420,000	19.8%
• Jews	5,680,000	80.2%
Muslims	1,136,000	16.1%
Christians	142,000	2.1%
<ul> <li>Druze and others</li> </ul>	114,000	1.6%

#### **Economic Data**

Leonomic Data						
		2003	2004	2005	2006	2007
• GDP (current price)	\$ bn	118.0	126.0	133.0	144.0	164.0
<ul> <li>GDP per capita</li> </ul>	\$	20,500	21,655	23,207	24,755	26,323
<ul> <li>Real GDP growth</li> </ul>	%	1.8	5.0	5.1	5.2	5.4
<ul> <li>Consumer price index</li> </ul>	%	0.7	-0.5	1.4	2.1	0.5
<ul> <li>External debt</li> </ul>	\$ bn	72.0	79.0	78.0	87.0	90.0
Balance of payments						
<ul> <li>Exports fob</li> </ul>	\$ bn	30.19	36.66	40.0	43.0	50.0
• Imports fob	\$ bn	33.29	39.48	44.0	47.0	56.0
Current account balance	\$ bn	1.37	2.93	4.0	8.0	5.0
(including services and						
income)						
Government expenditure						
<ul> <li>Total expenditure</li> </ul>	\$ bn	44.12	44.93	46.28	63.67	53.7
<ul> <li>Defense expenditure</li> </ul>	\$ bn	10.05	10.22	12.52	11.73	12.47
<ul> <li>Real change in defense</li> </ul>	%	-1.5	1.7	22.9	-6.4	6.3
expenditure						
• Defense expenditure/GDP	%	8.5	8.1	9.4	8.2	7.6
Population	m	6.7	6.8	6.9	7.1	7.2
Official exchange rate	NIS:\$1	4.55	4.48	4.49	4.46	4.1

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

## **Foreign Military Cooperation**

Туре	Details
Foreign forces	USA (120), pre-positioning of \$200 million worth of stockpiled US military equipment, TPY-2 AMD radar
Cooperation in military training	US and Turkish use of Israeli airfields and airspace for training (2003); Israeli use of Turkish airspace and
Joint maneuvers	airfields for training (2005) Canada (2005), India (2006), Romania (2005), Turkey (2008), NATO (2007), US (2008)

## **Arms Trade**

**Arms Procurement and Security Assistance Received** 

Country	Туре	Details
Canada	<ul> <li>Arms transfers</li> </ul>	Upgrading of C-130H (2008)
Germany	<ul> <li>Arms transfers</li> </ul>	Dolphin submarines (2006)
	• Assistance	Partial financial support for submarines constructed in Germany (2006)
India	<ul> <li>Arms transfers</li> </ul>	Dhruv helicopter (2004)
UK	<ul> <li>Military training</li> </ul>	Trainees in Britain
US	Arms transfers	F-16I combat aircraft (2005), AH-64D
		Longbow helicopters (2005), King Air B200-
		T aircraft (2004), Patriot PAC-3 SAMs
		(2008), JDAMs guided bombs (2007), D9R
		bulldozers (2004), Gulfstream G550 aircraft
		(2007), flight simulators (2004), HMMWV's
		(2004), engines for PBs (2006), M113A3
		APCs (2004), A-36 training craft (2004),
		Tatra tracks (2005), GBU-28 bombs (2007),
		Defender PBs (2005), David LAVs (2006),
		BLU-109 bombs (2007), Paveway-2 bombs
		(2007), Sidewinder AAMs (2007),
		AMRAAM AAMs (2007), Harpoon SSMs
		(2007), TOW-2A ATGMs (2007), Hellfire
		ATGMs (2007), D-9 (2007), C-130J aircraft
		(2008), T-6 aircraft (2008), GBU-39 bombs
		(2008)
	<ul> <li>Assistance</li> </ul>	\$2.55 billion annual military aid in FY09
		(2008), \$200 million in special military aid
		(2008)
	<ul> <li>Military training</li> </ul>	Trainees abroad

<sup>\*</sup> According to foreign publications, as cited by Israeli publications.

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

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Country	Туре	Details	
Angola	<ul> <li>Arms transfers</li> </ul>	upgrading of L-39 aircraft (2005)	
Australia	<ul> <li>Arms transfers</li> </ul>	naval guns (2005), Litening AT pods (2005),	
		Skylark UAV (2008), Heron UAV (2005), I-	
		view mini-UAVs (canceled - 2008)	
Azerbaijan	<ul> <li>Arms transfers</li> </ul>	Hermes-450 UAVs (2008)	
Belgium	<ul> <li>Arms transfers</li> </ul>	RCWS for IFVs (2007)	
Brazil *	<ul> <li>Arms transfers</li> </ul>	Airborne systems (2005), Derby AAMs	
		(2006)	

Country	Туре	Details
Bulgaria	Arms transfers	Upgrading of helicopters (2006 – cancelled)
Cameroon	<ul> <li>Arms transfers</li> </ul>	Cardom mortars (2007)
Canada	<ul> <li>Arms transfers</li> </ul>	Skylark UAVs (2006), Heron UAVs (2008)
Chad	<ul> <li>Arms transfers</li> </ul>	Raam APCs (2006), upgrading of helicopters
		(2006)
Chile*	• Arms transfers	Upgrading of F-5 combat aircraft (2004), Litening pods (2004)
Colombia	• Arms transfers	Avionics for Super Tucano aircraft (2006), Kfir aircraft (2008)
Croatia	<ul> <li>Arms transfers</li> </ul>	Armor for MBTs (2005)
Czech	<ul> <li>Cooperation in</li> </ul>	RCWS and Spike ATGMs (2006)
Republic	arms production,	, , , , , , , , , , , , , , , , , , ,
P	assembly, R&D	
Ecuador	• Arms transfers	Heron UAVs (2008), Searcher-2 UAVs (2008), EL/M-2022 MP radars (2008)
Equatorial	<ul> <li>Arms transfers</li> </ul>	Shaldag PB's (2004), MFPBs (2004),
Guinea		armored vehicles (2008)
Ethiopia	<ul> <li>Arms transfers</li> </ul>	UAVs (2005)
Finland	Arms transfers	thermal imaging systems (2005), Spike
1 11114114	- Thins transfers	ATGMs (2006), Litening designator pods
		(2008)
France	Arms transfers	Mine-clearing system (2004), Skylark UAV (2008)
	<ul> <li>Cooperation in</li> </ul>	Litening designator pods (2004), Eagle I
	arms production, assembly, R&D	UAV (2004), imaging satellite (2005)
Germany	• Arms transfers	Lahat ATGMs (2004), Litening targeting pods (2007), laser designators (2006)
	<ul> <li>Cooperation in</li> </ul>	Missile components (2004), EW systems for
	arms production,	helicopters (2004), electro-optical systems
	assembly, R&D	(2004), Spike ATGMs (2004)
Greece	<ul> <li>Arms transfers</li> </ul>	Helmet-Mounted Cueing Systems (2005),
Greece .	- Thing transfers	Spice AGMs (2006)
	<ul> <li>Cooperation in</li> </ul>	Armor for HMMWV's (2004)
	arms production, assembly, R&D	
Georgia	• Arms transfers	Light armament (2004), Hermes-450 UAVs (2007)
Hungary	<ul> <li>Arms transfers</li> </ul>	Litening designation pods (2006)
India*	Arms transfers	Searcher-2 and Heron UAVs (2006),
-		communication equipment (2004), Super-
		Dvora patrol boats (2003), Barak-8 SAMs
		(2008), avionics for Tu-142 aircraft (2004),
		surveillance system (2004), Phalcon AEW

Country	Type	Details
		aircraft (2008), avionics for Jaguar aircraft (2004), upgrading of APCs (2004), Lahat ATGMs (2004), satellite imagery (2004), Derby AAMs (2007), upgrading of Harrier
		aircraft (2008), ATMOS artillery (2006), Spyder SAMs (2008), AEW aerostats (2008), EL-2248 radar for MFPBs (2006)
	• Cooperation in arms production, assembly, R&D	Fast attack crafts (2004), EW for aircraft (2006), upgrading of air defense systems (2004), tank shells (2005), UAVs (2005), Barak-NG, MR-SAM SAMs (2008)
	Military training	Instructors training Special Forces in India (2008)
Indonesia	<ul> <li>Arms transfers</li> </ul>	Searcher UAVs (2006)
Italy	<ul> <li>Cooperation in arms production</li> </ul>	Developing of EW system (2007)
Ivory Coast	Arms transfers	Upgraded Puma helicopters (2004), Aerostar UAV's (2004), Fast patrol boats (2004)
Japan	<ul> <li>Military training</li> </ul>	Training of security officers (2004)
Kazakhstarn	<ul> <li>Arms transfers</li> </ul>	Orbiter UAV (2008)
	<ul> <li>Cooperation in arms production</li> </ul>	Nazia MRL (2008), 120mm Abiat mortar (2008), 120mm Semser gun (2008)
Lithuania	<ul> <li>Arms transfers</li> </ul>	Costal C <sup>4</sup> I system (2007)
Macedonia Mexico	<ul><li>Arms transfers</li><li>Arms transfers</li></ul>	Upgrading of Mi-17 helicopters (2006) MD500 helicopters (2004), Hermes UAVs (2008), Skylark UAVs (2008)
Netherlands	Arms transfers	Eros-A satellite imagery (2004), Reclite reconnaissance systems (2005), Litening targeting pods (2006), Skylark UAVs (2006) Battle management system (2007)
Nigeria	<ul> <li>Arms transfers</li> </ul>	Aerostar UAVs (2006)
Poland	• Arms transfers	thermal imaging systems (2005), RCWS (2005), Orbiter UAVs (2007)
	<ul> <li>Cooperation in arms production, assembly, R&amp;D</li> </ul>	Reconnaissance systems (2005), Skylark mini-UAVs (2006)
Portugal	• Arms transfers	RCWS (2006), Helmet Mounted Cueing- system (2007), Cardom mortars (2006)
PRC	• Arms transfers	Upgrading of UAVs (2004), Eros-B satellite imagery (2007)
Romania	• Arms transfers	Flight simulators (2004), LAR-160 MRLs (2005), F-16 aircraft (2005), RCWS (2007)
	<ul> <li>Cooperation in arms production,</li> </ul>	IAR-99 trainer aircraft (2006), upgrading of IAR-330 Puma helicopters (2005)

Country	Туре	Details
	assembly, R&D	
Russia	<ul> <li>Arms transfers</li> </ul>	UAV's (2004)
Serbia	<ul> <li>Arms transfers</li> </ul>	Orbiter UAVs (2008)
Singapore*	<ul> <li>Arms transfers</li> </ul>	Protector USVs (2005), Hermes 450 UAVs
		(2007), G550 CAEW aircraft (2007)
	<ul> <li>Cooperation in</li> </ul>	Golden Eagle UAV's (2004)
	arms production,	
	assembly, R&D	
Slovenia	<ul> <li>Arms transfers</li> </ul>	Armor for MBTs (2005), ATMOS artillery
		(2006), RCWS (cancelled - 2008), Spike
		ATGMs (cancelled - 2008)
South Korea*	<ul> <li>Arms transfers</li> </ul>	EHUD debriefing systems for air combat
		training (2004), avionics for helicopters
		(2005), K-52 helicopters (2005),
		reconnaissance systems (2005), Skylark-2
		UAVs (2007)
Spain	<ul> <li>Arms transfers</li> </ul>	Spike ATGMs (2007), Searcher-2 UAVs
		(2007)
Sri Lanka	<ul> <li>Arms transfers</li> </ul>	CoMPAS reconnaissance systems (2004)
Sweden	<ul> <li>Arms transfers</li> </ul>	Skylark UAVs (2007), Litening II targeting
		pods
Switzerland	<ul> <li>Arms transfers</li> </ul>	C <sup>4</sup> I system (2006), upgrading of Super Puma
		helicopters (2006)
Turkey	<ul> <li>Arms transfers</li> </ul>	upgrading of M-60 tanks (2006), Delilah
		anti-radar missile (2006), Harpy drones
		(2004), Litening targeting pods (2005)
	<ul> <li>Cooperation in</li> </ul>	Heron UAVs (2005)
T.T. 1	arms production	ATTM FOR (11) (2006)
Uganda	Arms transfers	ATMOS artillery (2006)
Ukraine	Arms transfers	Light armored vehicles (2007)
UK	• Arms transfers	Hermes UAV's (2007),
	<ul> <li>Cooperation in</li> </ul>	ESM systems (2005), weapon station (2005),
	arms production,	Litening III targeting pods (2006)
***	assembly	
US	<ul> <li>Arms transfers</li> </ul>	Air Force equipment: Helmet Mounted
	and cooperation	Cueing-system (2007), Litening designation
	in arms	pods (2008), upgrading UH-1 helicopters
	production	(2006), I-TALD (2008), Hunter UAV's
		(2007), upgrading of AGM's (2004), avionics
		for aircrafts (2005), upgrading of helicopters
		(2005), production of training aircraft (2004)
		Ground Forces equipment: tactical radio
		(2004), tactical computers (2005), Typhoon
		and Mini-Samson RCWS (2007), search and

Country	Туре	Details
		rescue systems (2004), D9R bulldozers
		(2004), armor for APCs (2008), Golan APCs
		(2007), Cardom mortars (2006)
Venezuela	<ul> <li>Arms transfers</li> </ul>	Defender SAMs (2006 - suspended)
Vietnam	<ul> <li>Arms transfers</li> </ul>	EW systems (2005)

<sup>\*</sup> According to foreign publications, as cited by Israeli publications.

## **Defense Production**

	M	Р	Α
Ground Forces equipment			
THEL system	$\checkmark$		
Merkava MBTs	$\checkmark$		
Self propelled and towed artillery pieces	$\checkmark$		
Self propelled mortars	$\checkmark$		
LORA, EXTRA Heavy artillery rockets, MRLs	$\checkmark$		
Several types of ACVs (some based on old tank hulls)	✓		
Light armored vehicles	✓	$\checkmark$	
Unmanned ground vehicles (UGV)	✓		
Tank guns	✓		
NT-G, NT-S, NT-D and Lahat ATGMs	✓		
ATRLs	✓		
Overhead weapon systems for IFVs	✓		
Carpet mine-clearing system	✓		
Tread-width mine plows for tanks (TWMP)	✓		
Tank-towed bridges (TAB)	✓		
Upgrading of M60 tanks	✓		
Mines	✓		
Small arms	✓		
Simulators	✓		
Fire ball, Rakefet Laser-guided mortar Shells	✓		
Artillery, mortar and small arms ammunition	✓		
Trophy, Iron Fist APS	✓		
Add on armor kits	✓		
Air force equipment			
Arrow ATBM	✓		
G150 business jet		✓	
Upgrading of combat aircraft	✓		
Upgrading of helicopters	✓		
AEW aircraft conversion	✓		
ADAMS, Defender, SPYDER air defense system	✓		
Iron Dome and David Sling ABM systems	✓		
ALCMs	✓		
AAMs	✓		
Updated on 17/06/2009		8	

	М	Р	Α
AGMs	✓		
CBUs	$\checkmark$		
TV and laser guided bombs	$\checkmark$		
ELINT and target designation pods	$\checkmark$		
UAVs and mini-UAVs	$\checkmark$		
Harpy anti-radiation drone	$\checkmark$		
Air-launched decoys	$\checkmark$		
Operational flight trainer systems	$\checkmark$		
Radars	$\checkmark$		
Refueling system for aircraft	$\checkmark$		
Helicopter parts		✓	
Flight simulators	✓		
Combat aircraft parts		✓	
Navy equipment			
LCTs	$\checkmark$		
MFPBs	$\checkmark$	$\checkmark$	
PBs	✓		
Predetor, Sea Star and Silver Marine USVs	✓		
Torpedo components		✓	
Electronics			
Radars – early warning, missile detection, Ship born AD,	✓		
ground surveillance, Naval surveillance, SAR			
Search and rescue system	✓		
ELINT equipment	✓		
ESM	✓		
EW jammers	✓		
Audio/video microwave transceivers	✓		
Radio voice scramblers and encryption units	✓		
Airborne ESM systems	✓		
Command and control system			
APC simulator	✓		
Optronics			
Night vision devices	$\checkmark$		
Laser rangefinders and target designators	$\checkmark$		
Space			
Shavit/Ofeq satellite launcher			
Ofeq series imaging satellite	$\checkmark$		
Amos/MILCOM communications satellite	✓		
EROS imaging satellite	✓		
TECHSAR radar imaging satellite			

M - manufacture (indigenously developed)
P - production under license
A - assembly

## **Strategic Assets**

#### **NBC Capabilities**

#### Nuclear capabilities

Two nuclear research reactors; alleged stockpile of nuclear weapons\*. Nuclear-safety cooperation agreement with the USA. Not a party to the NPT.

#### Chemical weapons and protective equipment

Personal protective equipment; Unit decontamination equipment. Fuchs (Fox) NBC detection vehicles (8 vehicles); SPW-40 P2Ch NBC detection vehicles (50 vehicles); AP-2C CW detectors. Signed but not yet ratified the CWC.

#### BW capabilities

Not a party to the BWC.

#### **Ballistic Missiles**

Model	Launchers	Missiles	Since	Notes
• MGM-52C (Lance)	12		1976	
• Jericho Mk 1/2/3 SSM *	+			Upgraded
Black/ Blue Sparrow	+			Target decoy
Total Future procurement	+			
• LORA	+			Under negotiations

<sup>\*</sup> According to foreign publications, as cited by Israeli publications.

#### **Space Assets**

Model	Туре	Notes
Satellites		
<ul> <li>Amos</li> </ul>	Communication	Civilian, currently deployed Amos 3.
• Ofeq	Reconnaissance	Currently deployed Ofeq-5 and Ofeq-7
• Eros	Reconnaissance	Civilian derivate of Ofeq, currently Eros-1B
• TECHSAR	Reconnaissance	SAR imagery satellite, 260kg, 550km in orbit
<ul> <li>TechSat</li> </ul>	Research	Civilian
Satellite launcher		
<ul> <li>Shavit</li> </ul>	SLV	
Future procurement		
• Amos-3/4	Communication	Civilian-owned satellites
<ul> <li>MILCOM</li> </ul>	Communication	
<ul> <li>David</li> </ul>	Remote sensing	

<sup>\*</sup> According to foreign publications, as cited by Israeli publications.

## **Armed Forces**

#### Order-of-Battle

Year	2005	2006	2007	2008	2009
General data					
Personnel	176,500	176,500	176,500	176,500	176,500
(regular)					
SSM launchers	+	+	+	+	+
Ground Forces					
Divisions	16	16	16	16	16
<ul> <li>Total number</li> </ul>	76	76	78	78	78
of brigades					
Tanks	3,510	3,510	3,400	3,360	3,360
	(3,890)	(3,890)	(3,800)	(3,740)	(3,740)
<ul><li>APCs/AFVs</li></ul>	6,750	6,750	6,930	7,070	7,070
<ul><li>Artillery</li></ul>	+	+	+	+	4
(including					
MRLs)					
Air Force					
<ul> <li>Combat aircraft</li> </ul>	494 (845)	494 (845)	520 (875)	541 (874)	541 (874)
<ul> <li>Transport aircraft</li> </ul>	60 (75)	60 (75)	71 (84)	66 (76)	66 (76)
<ul> <li>Helicopters</li> </ul>	183 (291)	183 (291)	184 (286)	172 (285)	172 (285
Air Defense					
Forces					
<ul> <li>Heavy SAM</li> </ul>	25	25	25	25	25
batteries					
<ul> <li>Light SAM</li> </ul>	~70	~70	~70	~70	~7(
launchers					
Navy					
<ul> <li>Submarines</li> </ul>	3	3	3	3	3
<ul> <li>Combat vessels</li> </ul>	15	15	15	15	15
<ul> <li>Patrol craft</li> </ul>	42	42	50	52	52

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

## Personnel

	Regular	Reserves	Total
Ground Forces	133,000	380,000	513,000
<ul> <li>Air Force</li> </ul>	34,000	55,000	89,000
<ul> <li>Navy</li> </ul>	9,500	10,000	19,500
Total	176,500	445,000	621,500
Paramilitary			
<ul> <li>Border Police</li> </ul>	7,650		7,650

#### **Ground Forces**

#### **Formations**

	Corps/HQ	Divisions	Independent brigades/groups	Brigades in divisions
All arms	3*			
Armored		12		2-3 armd., 1 mech., 1 aty. Each
Mechanized/ Infantry/ Territorial		4	13	
Airborne			4	
Total		16	16	

Anti-guerrilla HQ: 3 divisional HQ for control of units engaged in anti-guerrilla activities in Judea, Samaria and on the Gaza and Lebanese borders. In emergency, the HQ will be reinforced by armor, infantry, helicopters, engineering and anti-tank forces. \* According to foreign publications, as cited by Israeli publications.

#### **Tanks**

Model	Quantity	In service	Since	Notes
MBTs				
High quality				
• Merkava Mk 4	250	250	2003	Some with Trophy ADS installed
<ul> <li>Merkava Mk 3</li> </ul>	780	780	1989	
Subtotal	1,000	1,000		
Medium and low quality				
• Merkava Mk 1/2	580	580	1979/1983	In operational storage
<ul> <li>M60 A3/upgraded M60/Magach 7</li> </ul>	1,040	1,040	1980	313140
• M60/M60 A1	360	310	1970	In operational storage
• M48 A5	200	0		In operational storage
Centurion/upgraded     Centurion	560	430	1965	In operational storage
Subtotal	1,740	2,360		C
Total	3,740	3,360		
Future procurement	,	,		
<ul> <li>Merkava Mk 4</li> </ul>	300			Being delivered

Note: Old MBT chassis are being converted into AFVs.

## APCs/AFVs

Model	Quantity	In service	Since	Notes
<ul> <li>Achzarit</li> </ul>	215	215	1994	
<ul> <li>Namer</li> </ul>	15	15	2008	Being Delivered
<ul> <li>M113 (various marks)</li> </ul>	5,500	5,500		Some being upgraded
<ul> <li>Nagmashot*</li> </ul>	}		1989	
<ul> <li>Nagmachon</li> </ul>	}	400		
<ul> <li>Nakpadon</li> </ul>	}			
<ul> <li>M2/M3 halftrack</li> </ul>	600	600		Some phased out
Subtotal	6,730	6,730		•
Light armored vehicles				
<ul> <li>Akrep</li> </ul>	30	30	1998	
<ul> <li>M1114 up-armored HMMWV</li> </ul>	120	120	2004	
• Ze'ev	190	190	2004	
Subtotal	340	340		
Total	7,070	7,070		
Future procurement				
• Namer	45			Current order. Total requirement up to 250
• David	200			Armored Defender-
• Sufa-2	500			Armored version
<ul> <li>Dingo</li> </ul>	103			Possibly suspended

<sup>\*</sup> According to foreign publications, as cited by Israeli publications.

## Artillery

Model	Quantity	In service	Since	Notes
Self-propelled guns				
and howitzers				
• 203mm M110	36	36	1975	
• 175mm M107	140	70	1974	
• 155mm M109 variants	600	600		
• 155mm M-50/ 155mm L-33	120	120		
Subtotal Towed guns and howitzers	896	756		
• 155mm M-71	+	+		
• 130mm M-46	+	+		

Model	Quantity	In service	Since	Notes
• 122mm D-30	+	+		
Subtotal	+	+		
Mortars, over 160mm				
• 160mm SP	+	+		Phased out
Mortars, under 160mm				
• 120mm Cardom SP	60	60	2006	
• 120mm	250	250		
MRLs				
• 240mm	+	+	1974	
• 140mm	+	+		
• 122mm BM-21	+	+		
<ul> <li>227mm MLRS</li> </ul>	48	48		
<ul> <li>290mm MAR 290</li> </ul>	+	+		
Specialized missiles				
<ul> <li>Keres anti-radar missile</li> </ul>	+	+		
<ul> <li>Kachlilit anti-radar missile</li> </ul>	+	+		
Future procurement				
• 155mm ATMOS	18			Under negotiations

#### **Ground Radars**

Model	Quantity	In service	Since	Notes
Artillery/ mortar-locating	radars			
<ul> <li>Skystar 300 aerostat</li> </ul>	+	+	2007	
• AN/TPQ-37	+	+		
• AN/PPS-15	+	+		
• Shilem	+	+		
<ul> <li>Stalker II</li> </ul>	+	+		

## **Logistic and Engineering Equipment**

Gilois motorized bridges, M-123 Viper minefield crossing system, M60 AVLB, mineclearing rollers, mine layers, Pomins II portable mine neutralization system\*, Puma ECVs, TAB (towed assault bridge, towed by tanks), TLB (trailer-launched bridge), TWMP (tread-width mine ploughs), M-1000 heavy equipment transporters, Namer ARV, D9R bulldozers (100), M88 ARV, Lioness ECV, CX-1

<sup>\*</sup> According to foreign publications as cited by Israeli publications.

## **Anti-Tank Missiles**

Spike missiles (NT-S, NT-G, NT-D), BGM-71A/C TOW, Israeli improved BGM-71C TOW, Mapats SP, Nimrod, M-47 Dragon, AT-3 (Sagger)

## **Air Force**

#### Order-of-Battle

Category	Quantity	In service	Notes
• Combat	874	541	Including aircraft in operational storage
<ul> <li>Transport</li> </ul>	76	66	
<ul> <li>Helicopters</li> </ul>	285	172	

#### **Combat Aircraft**

Model	Quantity	In service	Since	Notes
Advanced multi-role				
• F-16 I (Soufa)	101	101	2004	Being delivered
• F-16 C/D (Barak)	136	136		Upgraded
• F-16 A/B (Netz)	108	108	1980/1986	
• F-15I (Ra'am)	25	25	1998	
Subtotal	370	370		
Advanced interceptors				
• F-15 A/B/C/D	72	72	1976	Upgraded
(Baz)				
Obsolete				
• F-4E Phantom 2000	120	50	1969	In operational
				storage
<ul> <li>A-4 Skyhawk</li> </ul>	174	44	1967	Used for
				advanced
				training. The rest
				are in operational
• Kfir C-2/ TC-2/ C-	140	5	1976	storage. Small contingency
7/ TC-7	140	3	1970	force, some in
// IC-/				operational
				storage, for sale
Subtotal	434	99		storage, for said
Total	874	541		
Future procurement				
• F-35 JSF	25			Under
				negotiations Total
				requirement up to

<sup>\*</sup> According to foreign publications, as cited by Israeli publications.

## Israel

Model	Quantity	In service	Since	Notes
				a 100

**Transport Aircraft** 

Model	Quantity	In service	Since	Notes
• Arava	9	9	1984	To be phased out
<ul> <li>Dornier Do-28</li> </ul>	8	0		In storage
• Boeing 707	13	13	1973	Some in tanker role
• C-130E/H Hercules	18	15	1970	Some in Tanker role, 3 in storage
• Beech King Air B- 200/200T	29	29	1990	Some in surveillance role
Total	76	66		
Future procurement				
• C-130J	9			Under negotiations
• C-27J	10			Under negotiations

**Training and Liaison Aircraft** 

Model	Quantity	In service	Since	Notes
Jet trainers				
<ul> <li>CM-170 Fouga Magister (Tzukit)</li> <li>Piston/Turbo-prop</li> </ul>	79	39	1960	The rest are in operational storage
• Bonanza A-36 (Hofit)	22	22	2005	
<ul> <li>Socata Trinidad TB- 21 (Pashosh)</li> </ul>	22	22	1995	To be phased out
• Cessna U-206 (Stationair-6)	21	0		In storage, for sale
• G 120A (Snunit)	27	27	2003	Trainers are privately owned.
Subtotal	92	71		
Total	172	111		
Future procurement				
• T-6A (Efrony)	25			To be supplied from 2009

#### **Helicopters**

Model	Quantity	In service	Since	Notes
Attack				
<ul> <li>AH-64A Apache</li> </ul>	28	28	1990	
<ul> <li>AH-64D Apache</li> </ul>	17	17	2005	Being upgraded
<ul> <li>AH-1G/S Cobra</li> </ul>	63	33	1981	To be upgraded
• 500MD Defender	30	2	1979	In operational storage, For sale.
Subtotal	138	80		
Heavy transport				
• CH-53-2000	38	38	1970	Being upgraded to CH-53-2025
Medium transport				
• Bell 212	55	0		In storage for sale
<ul> <li>S-70A Blackhawk</li> </ul>	49	49	1994/2002	
Subtotal	104	49		
Naval combat				
<ul> <li>AS 565SA Panther</li> </ul>	5	5	1995	
Total	285	172		

## **Miscellaneous Aircraft**

Model	Quantity	In service	Since	Notes
Reconnaissance				
• RF-4E	0	0		Also listed under Combat Aircraft
AEW/AWACS				
• Gulfstream G550 CAEW (Eitam)	2	2	2006	Systems are installed in Israel
ELINT and EW				
<ul> <li>Gulfstream G500 SEMA (Shavit)</li> </ul>	3	3	2005	
<ul> <li>King Air A200CT (RC-12D)</li> </ul>	6	6	1990	
<ul> <li>King Air B-200T</li> <li>Maritime surveillance</li> <li>aircraft</li> </ul>	10	10	2001	
Heron-2 (Shoval)	4	4	2006	MP radar payload
• Seascan (1124N) UAVs	3	3	2000	To be upgraded

Aerostar , Delilah/ Light Defender, Harpy anti-radiation drone\* , Hermes 450B, Hermes 450S, Hermes 1500 High Altitude\*, Heron-2 (Soval) , Heron TP (Eitan) , Hunter, Searcher I/II, Ranger, Pioneer

Model	Quantity	In service	Since	Notes
mini-UAVs				
I-view, Mini-V, Skylark, S Target drones	Skylite			
Beech AQM-37A; Beech I	BQM-107B,	MQM-74C Chi	uckar II, Tele	edyne Ryan 1241
Tankers				
<ul> <li>Boeing 707 tanker</li> </ul>	3	3	2002	Included in
				transport aircraft
<ul> <li>KC-130 tanker</li> </ul>	3	3	1976	Included in
				transport aircraft
Future procurement				
<ul> <li>Eitan UAV</li> </ul>	+			
<ul> <li>Gulfstream G550</li> </ul>	2			
<ul> <li>Skylite B UAV</li> </ul>	+			
<ul> <li>Skylark UAV</li> </ul>	+			

<sup>\*</sup> According to foreign publications, as cited by Israeli publications.

#### **Advanced Armament**

#### Air-to-air missiles

AIM-9L/M Sidewinder, AIM-7 Sparrow, Python 3, Python 4, Derby, AMRAAM AIM-120B

#### Air-to-ground missiles

AGM-78D Standard ARM, AGM-65 Maverick, AGM-62A Walleye, AGM-45A/B Shrike, AGM-114 Hellfire, AGM-142 Popeye\*, Spike (NT-S, NT-G, NT-D) ATGM\*
Rombs

CBU (including Tal-1, ATA-1000, ATA-500), Delilah ALCM, runway-penetration bombs, Griffin, Guillotine, JDAMs guided bombs (228), Opher, Pyramid, Spice EW and CEW

Chaff and flare dispensers for combat aircraft, Delilah ALCM , Samson AN/ADM-141 TALD, EL/L-8202 ECM pod, EL/L-8230 ECM system, EL/L-8231 ECM system, EL/L-8240 ECM system, EL/M-2160 warning system, LWS-20 system, SRS-25 airborne receiver, SPS-20 self protection system, SPS-65 self protection system, SPS-200 airborne self protection system, SPS-1000 EW system, SPS-2000 self protection system, Sky-Jam 200 jammer , AN/ALQ 131 electronic countermeasure systems (20); EL/M-2022 MP radar

#### **Future procurement**

AIM-9M AAMs (500), Star-1 AGM/cruise missile (under development), AMRAAM AIM-120C AAMs (200), JDAMs guided bombs (10,000), BLU-109 guided bombs (2,000), GBU-28 guided bombs (50), Paveway 2 guided bombs (4,000), AGM-114L3 Hellfire II AGMs (480), Lizard-3, Spice, GBU-39 guided bombs (1,000)

<sup>\*</sup> According to foreign publications, as cited by Israeli publications.

#### Air Force Infrastructure

Aircraft shelters

In all operational airfields, for combat aircraft

Military airfields

11

Haifa, Hatzerim, Hatzor, Lod, Nevatim, Palmachim, Ramat David, Ramon, Tel Aviv, Tel Nof, Uvda

Aircraft maintenance and repair capability

Maintenance on all models in service, partly in airfields, partly at Israel Aircraft Industries facilities

## **Air Defense Forces**

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

Model	Batteries	Launchers	Since	Notes
Heavy missiles				
<ul> <li>MIM-23B Improved HAWK</li> </ul>	17		1965	
MIM-104 Patriot	2		1991	
• MIM-104 Patriot PAC-2	4		2000	3 of which are scheduled to be upgraded
• Arrow ATBM	2	16	1998	Including Green Pine radar and Citrus Tree command post
Total	25			1
Light missiles				
<ul> <li>MIM-72A Chaparral</li> </ul>		~50		
• Stinger		~ 20	1997	Part of Mahbet AD system
Total Shoulder-launched missiles		~70		·
• FIM-92C Stinger		500		
<i>8</i> .		missiles		
<ul> <li>MIM-43A Redeye Future procurement</li> </ul>		+	1975	
<ul> <li>Iron Dome</li> </ul>	+			
<ul> <li>David Sling</li> </ul>	+			
• MIM-104 Patriot PAC-3	3			Upgrade for systems in service

Updated on 17/06/2009

Model	Batteries	Launchers	Since	Notes
<ul> <li>Arrow ATBMs</li> </ul>	1			Total order of 3

**Other Air Defense Systems** 

Model	Quantity	In service	Since	Notes
Air Defense systems				
• Mahbet SP	20	20	2002	M-163 Vulcan with Stinger SAMs
Short-range guns				
• 40mm Bofors L70	+	+		
• 23mm ZU 23x2	+	+		
• 20mm TCM-20	+	+		
Hispano Suiza SP				
Total	~900	~900		
Radars				
• Ramit	+	+		
• FPS-100	+	+		
• AN/TPS-43	+	+		
<ul> <li>Green Pine</li> </ul>	+	+		
<ul> <li>Great Pine</li> </ul>	+	+		
• Alufa-3	+	+		
<ul> <li>Nautilus</li> </ul>	+	+		
Aerostats with				
airborne radars				
• Status				

# Navy

#### **Submarines**

Туре	Quantity	Length (m.)/ displacement (t.)	Notes/armament
Submarines			
• Dolphin (Thyssen)	3	57.3/1,900	Sub-Harpoon SSMs 6x533mm torpedoes total of 16 torpedoes/missiles
Future procurement			_
<ul> <li>Dolphin</li> </ul>	2		

Туре	Quantity c	Length (m.)/ lisplacement (t.)	Notes/armament
Missile corvettes			
• Eilat class (Sa'ar 5)  MFPBs	3	86.4/1,075	1xSA-536 helicopter 8xHarpoon SSMs 8xGabriel II SSMs 64xBarak-1 SAMs 1x76mm gun 2x25mm Sea Vulcans 6x324mm torpedoes
• Aliya class (Sa'ar 4.5)	2	61.7/498	1xSA 536 helicopter 8xHarpoon SSMs 4xGabriel II SSMs 2x20mm guns 1x20mm Vulcan Phalanx 2x12.7mm MGs
• Hetz class (Sa'ar 4.5)	8	61.7/488	8xHarpoon SSMs 6xGabriel II SSMs 32xBarak I SAMs 1x76mm gun 1x20mm Vulcan Phalanx 2x12.7mm MGs
Subtotal  ASW vessels	10		
• Reshef class (Sa'ar 4)	2	58/415	4xHarpoon SSMs 4-6xGabriel II SSMs 1-2x76mm guns 2x20mm guns 1x20mm Vulcan Phalanx
I Indated o	n 17/06/20	nα	22

Updated on 17/06/2009

Туре	Quantity	Length (m.)/ displacement (t.)	Notes/armament
			2x12.7mm MGs
			In ASW role:
			2-3x324mm torpedoes
			sonar
Total Future procurement	15		
<ul> <li>Future corvette</li> </ul>	3-5		Under negotiations

#### **Patrol Craft**

Туре	Quantity	Length (m.)/ displacement (t.)	Notes/armament
• Shaldag-2	4	23.6/56	1x25mm Typhoon gun
<ul> <li>Super Dvora</li> </ul>	15	21.6/54	2x20mm or 2x25mm guns
Mk-I/II			2x12.7mm MGs
			1x84mm MRL
			depth charges
			2x324mm torpedoes
<ul> <li>Super Dvora</li> </ul>	7	27.4/72	1x25mm Typhoon gun
Mk-III			1X20mm gun
			2x324mm torpedoes
			depth charges
<ul> <li>Dabur</li> </ul>	15	19.8/39	2x20mm guns
			2x12.7mm MGs
			2x324mm torpedoes
			1x84mm MRL
			depth charges
• Stingray (Nahshol)	2	12/10.5	
<ul> <li>Defender class</li> </ul>	8	9.5/2.7	7.62mm gun
(Tzir'ah)			Radar
			Personal optical sensors
<ul> <li>Protector</li> </ul>	1	9/	USV under evaluation
Total	52		
Future procurement			
<ul> <li>Protector</li> </ul>	+		
• Shaldag-2	1		Total order of 3 to be
			delivered by 2009
• Super Dvora Mk III	1		Total order of 4 to be
			delivered by 2009

**Landing Craft** 

Туре	Quantity	Length (m.)/ displacement (t.)	Notes/armament
• LCM class	2		
<ul> <li>Ashdod class LCT</li> </ul>	1	62.7/400	In reserve
Total Future procurement	3		
Newport LST	1		Under negotiations

**Auxiliary Vessels** 

Туре	Quantity	Length (m.)/ displacement (t.)	Notes/armament
Bat Sheva	1	95.1/1,150	Support ship
• Stollergrund (Type 745 – Bat Yam)	2	38.6/450	Support ships
• Ro-Ro	1		

**Special Maritime Forces** 

Туре	Quantity	Length (m.)/ displacement (t.)	Notes/armament
• Mulit (RHIB)	+		
<ul> <li>Snunit</li> </ul>	+		
• Zaharon fast boats	12	12.5	
(Firefish)			
<ul> <li>Morena (RHIB)</li> </ul>	2	13	Search radar

#### **Naval Infrastructure**

Naval bases	3
Ashdod, Eilat, Haifa	
Ship maintenance and repair facilities	

Repair and maintenance of all naval vessels at Haifa, partly in conjunction with Israel Dockyards