

Data Sources and the Estimation of Military-owned Small Arms

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Research Note 34: Source Data for Selected Countries

Country	Service	Highest personnel	Total highest personnel	Year	Source	Ratio firearms / person	Estimated small arms	Estimated total military small arms	Alternate estimate source
Brazil	Army	221,800		2008	Dreyfus et al. (2010, pp. 106, 109)	1.3	299,300		
	Air Force	66,900		2007	Dreyfus et al. (2010, pp. 106, 109)	0.6	42,100		
	Navy	62,000		2007	Dreyfus et al. (2010, pp. 106, 109)	1.0	60,800		
	Reserves	825,000		2008	Dreyfus et al. (2010, pp. 106, 109)	1.1	914,100		
	Total	1,175,700	1,175,700	2008		1.1	1,316,300	1,300,000	Dreyfus et al. (2010); Aaron Karp, personal estimate
China	Army	2,110,000		1986	IISS (1986, p. 143)	4.8	10,128,000		
	Air Force	490,000		1986	IISS (1986, p. 145)	0.9	441,000		
	Navy	350,000		1986	IISS (1986, p. 143)	1.3	455,000		
	Reserves	5,377,000		1986	IISS (1986, p. 142)	1.0	5,377,000		
	Basic Militia	4,300,000		1986	IISS (1986, p. 145)	1.0	4,300,000		
	Total	12,627,000	12,627,000	1986		1.6	20,701,000	21,000,000	Aaron Karp, personal estimate
Colombia	Army	214,594		2006	Calvani, Dupuy, and Liller (2006, p. 50)	1.4	299,980		
	Air Force	12,483		2006	Calvani, Dupuy, and Liller (2006, p. 50)	0.8	9,523		
	Navy	30,501		2006	Calvani, Dupuy, and Liller (2006, p. 50)	1.4	41,186		
	Total	257,578	257,578	2006		1.4	350,689	350,000	Calvani, Dupuy, and Liller (2006, p. 50)
Czech Rep.	Army	12,833		2011	IISS (2012, p. 104)	12.1	155,878		
	Air Force	4,804		2011	IISS (2012, p. 104)	0.3	1,355		
	Total	17,637	17,637	2011	Note: The Czech total excludes Border Guards or Internal Security Forces, listed in IISS (2012, p. 104).	8.9	157,233	160,000	Czech Republic (2012)
Egypt	Army	320,000		1990	IISS (1990, pp. 102-03)	2.6	832,000		
	Air Force	30,000		1990	IISS (1990, pp. 102-03)	0.9	27,000		
	Air Defence	80,000		1990	IISS (1990, pp. 102-03)	0.9	72,000		
	Navy	20,000		1990	IISS (1990, pp. 102-03)	1.3	26,000		
	Reserves	623,000		1990	IISS (1990, pp. 102-03)	1.0	623,000		
	Total	1,073,000	1,073,000	1990		1.5	1,580,000	1,600,000	Aaron Karp, personal estimate
France	Army	296,480		1986	IISS (1986, p. 64)	2.6	770,848		
	Air Force	95,978		1986	IISS (1986, p. 65)	0.9	86,380		
	Navy	66,345		1986	IISS (1986, p. 65)	1.3	86,249		
	Reserves	391,000		1986	IISS (1986, p. 64)	1.0	391,000		
	Total	849,803	849,803	1986		1.6	1,334,477	1,300,000	Aaron Karp, personal estimate
Germany	Army	105,291		2011	IISS (2012, p. 118)	2.1	216,225		
	Air Force	44,565		2011	IISS (2012, p. 118)	1.2	51,309		

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	Navy	19,179		2011	IISS (2012, p. 118)	0.6	12,239		
	Reserves and SKB	97,891		2011	IISS (2012, p. 118) Note: German reserves include 40,396 reservists plus 57,495 active Streitkräftebasis (Joint Support Service, SKB) personnel, but not medical service personnel.	2.1	203,243		
	Total	266,926	266,926	2011		1.8	483,016	480,000	Germany (2012)
India	Army	1,129,900		2012	IISS (2012, p. 243)	1.8	2,000,000		
	Air Force	127,200		2012	IISS (2012, p. 246)	0.3	32,000		
	Coast Guard	9,550		2012	IISS (2012, p. 247)	1.8	17,000		
	Navy	58,350		2012	IISS (2012, p. 244)	0.3	14,500		
	Reserves	1,155,000		2012	IISS (2012, p. 243)	0.4	504,500		
	Totals	2,480,000	2,480,000	2012		1.1	2,600,000	2,600,000	IAVA (forthcoming 2013)
Indonesia	Army	215,000		1989	IISS (1989, p. 161)	1.9	408,500		
	Air Force	24,000		1989	IISS (1989, p. 162)	0.9	21,600		
	Navy	43,000		1989	IISS (1989, p. 161)	1.3	55,900		
	Reserves	800,000		1989	IISS (1989, p. 161)	0.5	400,000		
	Total	1,082,000	1,082,000	1989		0.8	886,000	900,000	Aaron Karp, personal estimate
Iran	Army	305,000		1986	IISS (1986, pp. 96-97)	4.8	1,464,000		
	Air Force	35,000		1986	IISS (1986, pp. 96-97)	0.9	31,500		
	Navy	14,500		1986	IISS (1986, pp. 96-97)	1.3	18,850		
	Revolutionary Guard	350,000		1986	IISS (1986, pp. 96-97)	1.9	665,000		
	Reserves	350,000		1986	IISS (1986, pp. 96-97)	1.0	350,000		
	Total	1,054,500	1,054,500	1986		2.7	2,529,350	2,500,000	Aaron Karp, personal estimate
Italy	Army	270,000		1986	IISS (1986, p. 71)	2.6	702,000		
	Air Force	70,600		1986	IISS (1986, p. 71)	0.9	63,540		
	Navy	47,200		1986	IISS (1986, p. 71)	1.3	61,360		
	Reserves	799,000		1986	IISS (1986, p. 71)	1.0	799,000		
	Total	1,186,800	1,186,800	1986		1.4	1,625,900	1,600,000	Aaron Karp, personal estimate
Montenegro	Army	2,356		2011	IISS (2012, p. 138)	1.8	4,304		
	Air Force	226		2011	IISS (2012, p. 138)	1.4	327		
	Navy	402		2011	IISS (2012, p. 138)	1.9	765		
	Total	2,984	2,984	2011		1.8	5,396	5,000	Montenegro (2012, p. 4)
North Korea	Army	1,020,000		2012	IISS (2012, p. 257)	4.8	4,896,000		
	Air Force	110,000		2012	IISS (2012, p. 258)	0.9	99,000		
	Navy	60,000		2012	IISS (2012, p. 257)	1.3	78,000		
	Paramilitary	189,000		2012	IISS (2012, p. 258)	2.6	491,400		
	Reserves	600,000		2012	IISS (2012, p. 256)	1.0	600,000		
	Total	1,979,000	1,979,000	2012		3.1	6,164,400	6,200,000	Aaron Karp, personal estimate

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Norway	Army	8,900		2011	IISS (2012, pp. 141-42)	2.5	22,235		
	Air Force	3,650		2011	IISS (2012, pp. 141-42)	1.0	3,831		
	Navy	3,900		2011	IISS (2012, pp. 141-42)	1.8	7,165		
	Reserves & Home Guard	45,250			IISS (2012, pp. 141-42)	3.1	139,456		
	Total	61,700	61,700	2011		3.1	188,646	189,000	Norway (2012, p. 3)
Pakistan	Army	550,000		2000	IISS (2000, p. 173)	2.6	1,430,000		
	Air Force	40,000		2000	IISS (2000, p. 173)	0.9	36,000		
	Navy	22,000		2000	IISS (2000, p. 174)	1.3	28,600		
	Reserves	513,000		2000	IISS (2000, p. 173)	1.0	513,000		
	Total	1,125,000	1,125,000	2000		1.8	2,007,600	2,000,000	Aaron Karp, personal estimate
Poland	Army	295,000		1986	IISS (1986, p. 53)	4.8	1,416,000		
	Air Force	88,000		1986	IISS (1986, p. 53)	0.9	79,200		
	Navy	19,000		1986	IISS (1986, p. 53)	1.3	24,700		
	Reserves	501,000		1986	IISS (1986, p. 53)	1.0	501,000		
	Total	903,000	903,000	1986		2.2	2,020,900	2,000,000	Aaron Karp, personal estimate
Russian Federation	Army	1,000,000		1993	IISS (1993, p. 99)	4.8	4,800,000		
	Air Force	170,000		1993	IISS (1993, p. 100)	0.9	153,000		
	Air Defence	230,000		1993	IISS (1993, p. 100)	0.9	207,000		
	Navy	300,000		1993	IISS (1993, p. 100)	1.3	390,000		
	Strategic Nuclear Forces	194,000		1993	IISS (1993, p. 99)	0.9	174,600		
	Reserves	20,000,000		1993	IISS (1993, p. 99)	1.0	20,000,000		
	Total	21,894,000	21,894,000	1993		1.2	25,724,600	26,000,000	Aaron Karp, personal estimate
South Korea	Army	560,000		2005	IISS (2005, p. 284)	2.6	1,456,000		
	Air Force	64,000		2005	IISS (2005, p. 286)	0.9	57,600		
	Navy	63,000		2005	IISS (2005, p. 285)	1.3	81,900		
	Reserves	4,500,000		2005	IISS (2005, p. 284)	0.7	3,150,000		
	Total	5,187,000	5,187,000	2005		0.9	4,745,500	4,700,000	Aaron Karp, personal estimate
Spain	Army	230,000		1986	IISS (1986, pp. 76-77)	2.6	598,000		
	Air Force	33,000		1986	IISS (1986, pp. 76-77)	0.9	29,700		
	Navy	62,500		1986	IISS (1986, pp. 76-77)	1.3	81,250		
	Reserves	1,085,000		1986	IISS (1986, pp. 76-77)	1.0	1,085,000		
	Total	1,410,500	1,410,500	1986		1.3	1,793,950	1,800,000	Aaron Karp, personal estimate
Taiwan	Army	312,000		1993	IISS (1993, p. 168)	2.6	811,200		
	Air Force	70,000		1993	IISS (1993, p. 168)	0.9	63,000		
	Navy	60,000		1993	IISS (1993, p. 168)	1.3	78,000		
	Reserves	1,657,500		1993	IISS (1993, p. 168)	1.0	1,657,500		
	Total	2,099,500	2,099,500	1993		1.2	2,609,700	2,600,000	Aaron Karp, personal estimate
Turkey	Army	542,000		1986	IISS (1986, pp. 78-79)	2.6	1,409,200		
	Air Force	57,375		1986	IISS (1986, pp. 78-79)	1.3	74,588		
	Navy	55,000		1986	IISS (1986, pp. 78-79)	0.9	49,500		
	Reserves	951,000		1986	IISS (1986, pp. 78-79)	1.0	951,000		
	Total	1,605,375	1,605,375	1986		1.5	2,484,288	2,500,000	Aaron Karp, personal estimate

Country	Service	Highest personnel	Total highest personnel	Year	Source	Ratio firearms / person	Estimated small arms	Estimated total military small arms	Alternate estimate source
United Kingdom	Army	162,100		1986	IISS (1986, pp. 57-59)	2.6	421,460		
	Air Force	93,400		1986	IISS (1986, pp. 57-59)	0.9	84,060		
	Navy	68,300		1986	IISS (1986, pp. 57-59)	1.3	88,790		
	Reserves	305,030		1986	IISS (1986, pp. 57-59)	1.0	305,030		
	Total	628,830	628,830	1986		1.5	899,340	900,000	Aaron Karp, personal estimate
United States	Army	1,178,700		2001	IISS (2001, pp. 19-24)	1.4	1,608,000		
	Air Force	426,900		2001	IISS (2001, pp. 19-24)	0.6	260,000		
	Coast Guard	36,260		2001	IISS (2001, pp. 19-24)	0.6	20,268		
	Navy (inc. Marines)	810,200		2001	IISS (2001, pp. 19-24)	1.0	800,000		
	Reserves	Included above		2001	Note: 2001 US small arms and light weapons data does not disaggregate reserves, so comparison to other examples here is difficult.		Included above		
	Total	2,442,660	2,442,660	2001		1.1	2,688,000	2,700,000	Small Arms Survey (2002, p. 85)
Ukraine	Total	1,187,600	1,187,600	2005	Small Arms Survey (2006, p. 44)	5.9	7,006,840	7,000,000	Small Arms Survey (2006, p. 44)
Vietnam	Army	1,000,000		1986	IISS (1986, p. 172)	4.8	4,800,000		
	Air Force	15,000		1986	IISS (1986, p. 172)	0.9	13,500		
	Air Defence	100,000		1986	IISS (1986, p. 172)	0.9	90,000		
	Navy	40,000		1986	IISS (1986, p. 172)	1.3	52,000		
	Reserves	3,000,000		1986	IISS (1986, p. 172)	1.0	3,000,000		
	Total	4,155,000	4,155,000	1986		1.9	7,955,500	8,000,000	Aaron Karp, personal estimate

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