

Black Market Prices for Man-portable Air Defense Systems

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Prices of Black Market MANPADS 1990-2010					
Time Frame	Missile	Price	Location	Source	Notes
2008-2009	Strelas and Iglas	\$45,000/unit	Peru/Colombia	Miami Herald, 2/16/2010. ¹	Missiles were reportedly stolen from Peruvian military arsenals from May 2008 through an unspecified date in 2009 and sold to an Ecuadorean accused of buying weapons for Colombian rebels. Media summaries of court documents do not identify the specific models of the diverted missiles or indicate whether the traffickers paid more for Iglas than Strelas.
Unspecified	Unspecified MANPADS	\$15,000-\$20,000/unit	Unspecified	Small Wars Journal, 7/19/ 2007 ²	Source of price data not identified.
Unspecified	Russian MANPADS	\$2,000-\$3,000 to \$25,000/unit	Unspecified	Russian Government, 3/8/2007 ³	Price range for SA series missiles provided by Peyotr Litavrin, Department for Security Affairs and Disarmament, Ministry of Foreign Affairs of Russia, at an OAS conference in Washington, DC. The \$25,000 estimate was for "the most sophisticated, modern type of Iglas."
Unspecified	SA-7	\$5,000/unit	Unspecified	Australian Government, 1/18/2007 ⁴	Estimate for "...a first generation Russian-made SA-7 on the black market" provided in a speech by Alexander Downer, Australia's Minister for Foreign Affairs.
Unspecified	Igla	\$5,000/unit	Unspecified	National Post, 11/2/2006 ⁵	Alleged Toronto arms trafficker reportedly told Canadian interrogators that someone offered to sell him "Russian-made Igla anti-aircraft missiles" for \$1,000 apiece. According to a media summary of the interrogation transcript, the alleged trafficker replied "...If you bring them for a thousand dollars, I will sell them for five and give you two and a half thousand." He reportedly said that he would sell them to al Qaeda.
2006	SA-7	\$10,000/unit ⁶	Sri Lanka	US Court document, 8/19/2006 ⁷	During a recorded conversation between undercover US agents and three LTTE sympathizers, one of the sympathizers claimed that the LTTE pays "...ten grand or something" for its SA-7 missiles.

2006	SA-18	\$60,000/unit ⁸	Unspecified	US Court document, 8/19/2006 ⁹	During a recorded conversation between undercover US agents and three LTTE sympathizers, one of the sympathizers identifies \$60,000 as the "market price" for SA-18 MANPADS. While it is unclear whether the reference was to legal or black market sales, the context suggests he was referring to black market sales.
2006	SA-18	\$80,000 (launcher and 2 missiles)	US/Sri Lanka	US Court document, 8/19/2006 ¹⁰	During an undercover operation in 2006, three LTTE sympathizers and undercover agents eventually settled on a price of \$800,000 for 10 SA-18 launchers and 20 missiles, and \$25,000 for two weeks of training in Sri Lanka. According to US court documents, the sympathizers were working directly with high-level LTTE officials and had been authorized to make the deal.
2005	QW-2	\$91,500/unit ¹¹	China/United States	San Gabriel Valley Tribune, 4/20/2006 ¹²	According to media reports, Chao Tung Wu offered to sell 200 QW-2 missiles with "ground energy unit, firing unit\optical aiming devices" to undercover agents for \$18.3 million.
Unspecified	Unspecified MANPADS	"as little as \$5,000"/unit	Unspecified	Cato Institute, 4/19/2005 ¹³	Appears to be taken from a 2004 Report by the RAND Corporation
Unspecified	"First generation" SA-7/ "advanced" SA-18	"as little as \$500...and as much as \$125,000"/unit	Unspecified	CREATE, 4/14/2005 ¹⁴	General reference. Source of price data not identified.
2005	SA-7	\$45,000/unit	Nicaragua	Associated Press, 2/25/2005 ¹⁵	Price reportedly paid for an SA-7 by "air-conditioner repairman," who was later arrested and convicted. The seller of the missile reportedly made \$38,000 on the deal, which, if accurate, would mean that the seller paid \$7,000 for the missile. ¹⁶
Unspecified	Unspecified MANPADS	Less than \$1000 to \$100,000/unit	Unspecified	Government Accountability Office, 5/2004 ¹⁷	General reference. Source of price data not identified.
Unspecified	Unspecified MANPADS	\$5000 to \$30,000/unit	Unspecified	US Government, 2/16/2005 ¹⁸	"[T]ypical black market cost of MANPADS", according to a US delegate to the Fifth Regular Session of the Inter-American Committee Against Terrorism.
2003	Strela-2	~\$12,000/unit ¹⁹	Somalia	The Economist, 4/3/2004 ²⁰	US government agents reportedly paid former Somali official Hussein Aideed \$500,000 for 41 "Strela-2" missiles ²¹ provided to him by Eritrea in 1998.
Unspecified	SA-7	"as much as \$5,000"	Yemen, Syria, Northern Pakistan	Washington Times, 10/13/2003 ²²	Source of price data not identified.
Unspecified	Unspecified MANPADS	As little as \$2000/unit	Unspecified	Jane's Missiles & Rockets, 9/1/2003 ²³	General reference. Source of price data not identified.
2003	Igla	\$62,000/unit	US/Eastern Europe	Los Angeles Times, 3/6/2003 ²⁴	Price for an Igla, "current production or a few years old," provided by an unidentified "Eastern European arms broker" to a "retired American intelligence officer" during a media interview. The broker knew that the intelligence officer was not a terrorist but, according to the officer, "this guy would sell his mother," suggesting that he would sell the same missile on the black market.

2003 (1996)	"older" Strela	\$10,800/unit	Bulgaria	Los Angeles Times, 3/6/2003 ²⁵	Price is based on a 1996 quote from Elmet Engineering in Bulgaria reportedly obtained by the Los Angeles Times. The price for the "older Russian-made Strela" missile was \$7,400 and the price for the launcher was \$3,400. The broker who provided the quote claimed that the estimate is "still roughly accurate for covert deals" in 2003.
2003 (1996)	"newer-model" Strela	\$31,850/unit	Bulgaria	Los Angeles Times, 3/6/2003 ²⁶	Price is based on a 1996 quote from Elmet Engineering in Bulgaria reportedly obtained by the Los Angeles Times. The price for the "newer-model Strela" missile was \$22,700 and the price for the launcher was \$9,150. The broker who provided the quote claimed that the estimate is "still roughly accurate for covert deals" in 2003.
2002-2003	Igla-S	\$86,500/unit ²⁷	Russia/US	US Court documents, 8/11/2003 ²⁸	Money transferred to Hemant Lakhani by government agents as part of an undercover operation in 2002-2003. Given Lakhani's apparent lack of experience in arms trafficking and that nearly the entire operation was orchestrated by the US and Russian governments, it is unclear if the offer reflected actual black market prices at the time of the operation.
2002-2003	Igla ²⁹	\$87,000/unit	US/Cyprus	US Court Document, 11/28/2006 ³⁰	Price for Igla missile system allegedly provided to Hemant Lakhani by a Cyprus-based company. According to US court documents, the company had offices in Kiev and Moscow. While it is not clear if the company knew that the missile was part of an illicit deal, Lakhani claims that the company "...is involved in the darker side of international arms trading." ³¹
Unspecified	Stinger	Up to \$150,000/unit	Afghanistan	Jane's Missiles & Rockets, 3/1/2002 ³²	The US government reportedly paid up to \$150,000 for five Stinger missiles from Afghan commanders in or near Kandahar.
1999-2001	Stinger	\$50,000	Pakistan	Los Angeles Times, 3/6/2003 ³³	Per unit price of "hundreds" of Stingers ordered by a middleman for Pakistani intelligence agents during an undercover operation conducted by BATF.
Unspecified	Unspecified MANPADS	"under \$100,000"	Unspecified	Salon ³⁴ , 11/5/2001	Source of the price data not identified.
Unspecified	Stinger	\$80,000 - \$250,000	Unspecified	Jane's Intelligence Review, 9/2001 ³⁵	Source not of price data not identified.
1995-1997	Strela 2M, Strela 3M and Igla-1E	\$32,500/unit	Bulgaria/US	US Court Document, New York Times ³⁶ , 7/1/1997	Undercover operation involving two Lithuanian nationals who offered to sell undercover agents 40 Stelas and Iglas for \$1.3 million. Public accounts do not provide individual prices for the specific types of missiles. Defendants appeared to have the contacts and know-how to complete the transaction.
Unspecified	Mistral	\$60,000-\$100,000	Unspecified	Aviation Week & Space Technology ³⁷ , 7/29/1996	Author told the Federation of American Scientists that the price data came from interviews with military intelligence officers.
Unspecified	Stinger	\$50,000-\$80,000/unit	Unspecified	Aviation Week & Space Technology ³⁸ , 7/29/1996	Author told the Federation of American Scientists that the price data came from interviews with military intelligence officers.
Unspecified	SA-7 and SA-14	\$35,000/unit	Unspecified	Aviation Week & Space Technology ³⁹ , 7/29/1996	Author told the Federation of American Scientists that the price data came from interviews with military intelligence officers.

Unspecified	SA-16 and SA-18	\$60,000- \$100,000/unit	Unspecified	Aviation Week & Space Technology ⁴⁰ , 7/29/1996	Author told the Federation of American Scientists that the price data came from interviews with military intelligence officers.
1992-1996	Stinger	\$50,000/unit	Afghanistan /Iran	Jane's Missiles & Rockets ⁴¹ , 3/1/2002	Iranian diplomats in Kabul reportedly paid \$50,000 "...cash-in-hand for a Stinger placed in a diplomatic vehicle."
1993-1995	Stinger	\$80,000/unit	Afghanistan /Pakistan	<i>Ghost Wars</i> ⁴² , 2004	Pakistan's ISI reportedly bought loose Stinger missiles from Afghans for \$80,000 apiece as part of the US buyback program. The ISI then reportedly sold the missiles to US government for the same price.
1990	Stinger	\$50,000/unit	United States/Ireland	Miami Herald ⁴³ , 11/27/1990	Alleged PIRA members agreed to pay \$50,000 to undercover agents during undercover operation in early 1990. The \$50,000 price was reportedly approved by the traffickers' superiors. ⁴⁴
Unspecified	Stinger	Up to \$160,000/unit	United States	Miami Herald ⁴⁵ , 5/9/1990	Buyers, presumably for narco-terrorists, "...have offered up to \$160,000 for the shoulder-fired, heat-seeking Stinger missiles." No additional details provided. Source not identified.
Compiled by Matt Schroeder, Federation of American Scientists, and Matt Buongiorno, Scoville Fellow March 2010					

NOTES

¹ Juan Tamayo, "FARC rebels' missile purchase raises concerns," *The Miami Herald*, 16 February 2010, <http://www.miamiherald.com/2010/02/15/1481993/farc-rebels-missile-purchase-raises.html>.

² Malcolm Nance, "Buying Out the Insurgency-Re-evaluating the Community De-Weaponization Initiative in Iraq," *Small Wars Journal*, 17 July 2007, available at <http://smallwarsjournal.com/blog/2007/07/buying-out-the-insurgency-reev/>.

³ Presentation by Peyotr Litavrin, Department for Security Affairs and Disarmament, Ministry of Foreign Affairs of Russia," Organization of American States, 8 March 2007, available at http://www.oas.org/OASpage/videosaf/2007/03/SH_12.wmv.

⁴ Hon. Alexander Downer, "Australia's International MANPADS Initiative," Speech to Seminar at the Millenium Hotel, New York City, 18 January 2007, <http://www.fas.org/asmp/campaigns/MANPADS/2007/AustraliaMFA18jan07.htm>.

⁵ Adrian Humphreys, "Khadr helped al-Qaeda with GPS," *National Post*, 2 November 2006, available at <http://www.canada.com/nationalpost/news/story.html?id=4a83cb67-444f-4348-811f-cd3303b56ded&k=1213>.

⁶ Note: court records suggest that the three LTTE sympathizers' knowledge of MANPADS was minimal. It is not clear if their knowledge of black market prices for MANPADS was any better.

⁷ Transcript of meeting between Thiruthanikan Thanigasalam, Sahil Sabaratnam, Sathajhan Sarachandran, a cooperating witness, and three undercover US agents, 19 August 2006, Document 257-5.

⁸ Note: court records suggest that the three LTTE sympathizers' knowledge of MANPADS was minimal. It is not clear if their knowledge of black market prices for MANPADS was any better.

⁹ Transcript of meeting between Thiruthanikan Thanigasalam, Sahil Sabaratnam, Sathajhan Sarachandran, a cooperating witness, and three undercover US agents, 19 August 2006, Document 257-5.

¹⁰ Transcript of meeting between Thiruthanikan Thanigasalam, Sahil Sabaratnam, Sathajhan Sarachandran, a cooperating witness, and three undercover US agents, 19 August 2006, Document 257-5 and "Letter to supplement and correct facts and calculations contained within the Presentence Investigation Report," United

States v. Sathajahn Sarachandran, Criminal Docket No. 06-615, 22 July 2009, available at http://www.nationalpost.com/documents/090818-needle_12.pdf.

¹¹ Assuming that the offer did not include other weapons, i.e. was solely for the 200 QW-2s, parts and accessories, the average cost per system would have been \$91,500.

¹² Jennifer English, "Local man admits missile plot," *San Gabriel Valley Tribune*, 20 April 2006.

¹³ Charles Peña, "Flying the Unfriendly Skies: Defending against the Threat of Shoulder-Fired Missiles," Policy Analysis, CATO Institute, 19 April 2005, available at http://www.cato.org/pub_display.php?pub_id=3734.

¹⁴ T. O'Sullivan, *External Terrorist Threats to Civilian Airliners: A Summary Risk Analysis of MANPADS, other Ballistic Weapons Risks, Future Threats, and Possible Countermeasures Policies*, Center for Risk and Economic analysis of Terrorism Events, 14 April 2005, p. 7, available at <http://create.usc.edu/research/50768.pdf>.

¹⁵ Traci Carl, "Shoulder-fired missiles U.S. left behind in Central America raise terror fears," *Associated Press*, 25 February 2005. See also Lizabeth Garcia, "Nicaragua: SAM-7 seller, buyer given 18-month, one year jail terms respectively," *El Nuevo Diario* (Managua), 22 February 2005.

¹⁶ Lizabeth Garcia, "Incommutable prison sentences and destruction of SAM-7", *El Nuevo Diario*, 22 February 2005, translated and republished by *BBC Monitoring Latin America*, 25 February 2005.

¹⁷ *Further Improvements Needed in U.S. Efforts to Counter Threat from Man-Portable Air Defense Systems*, Government Accountability Office, May 2004, p. 2, available at <http://www.gao.gov/cgi-bin/getrpt?GAO-04-519>.

¹⁸ "MANPADS: A Threat to Civil Aviation," Presentation by the Delegation of the United States to the Third Meeting of National Points of Contact of Inter-American Committee Against Terrorism (CICTE), 16-18 February 2005, available at http://scm.oas.org/doc_public/ENGLISH/HIST_07/CP17706E04.doc.

¹⁹ The per-unit estimate is rounded down from \$12,195/unit and assumes that the same amount was paid for each missile.

²⁰ "Coke and al-Qaeda; Somalia," *The Economist*, 3 April 2004 and *Report of the Panel of Experts on Somalia*, S/2003/1035, 27 October 2003, p. 29, available at <http://daccess-ods.un.org/TMP/5392627.71606445.html>.

²¹ A 2003 UN report indicates that some sources claimed that the US had purchased 43 missiles, not 41 missiles, See S/2003/1035, p. 29.

²² James Zirin, "Surface-to-air missile retrieval," *Washington Times*, 13 October 2003, available at <http://www.washingtontimes.com/news/2003/oct/13/20031013-121425-7388r/>.

²³ Ed Blanche, "US reacts to growing MANPADS threat to airliners," *Jane's Missiles & Rockets*, 1 September 2003.

²⁴ Ken Silverstein and Judy Pasternak, "A Market in Missiles for Terror," *Los Angeles Times*, 6 March 2003, available at <http://articles.latimes.com/2003/mar/06/world/fg-sams6>

²⁵ Ibid.

²⁶ Ibid.

²⁷ According to US Court documents, the "supplier's" i.e. undercover Russian FSB officers' asking price for the missile was \$70,000, which Lakhani reportedly agreed to pay. See United States v. Hemant Lakhani, Criminal Complaint, 11 August 2003.

²⁸ United States of America v. Hemant Lakhani, Criminal Complaint, 11 August 2003, available at <http://news.findlaw.com/hdocs/docs/terrorism/uslakhani81103cmp.pdf>.

²⁹ It is not clear from the court document whether the quote was for an Iglá (SA-18) or Iglá-S (SA-24).

³⁰ United States of America v. Hemant Lakhani, Appellant, No. 05-4276, 28 November 2006, p. 8, available at <http://bulk.resource.org/courts.gov/c/F3/480/480.F3d.171.05-4276.html>.

³¹ Ibid.

³² David Isby, "Stinger buy-back in Afghanistan," *Jane's Missiles & Rockets*, 1 March 2002.

³³ Ken Silverstein and Judy Pasternak, "A Market in Missiles for Terror," *Los Angeles Times*, 6 March 2003, available at <http://articles.latimes.com/2003/mar/06/world/fg-sams6>.

³⁴ Paul Caffera, "Hand-held terror," *Salon.com*, 5 November 2001, <http://www.salon.com/news/feature/2001/11/08/manpads/>.

³⁵ Thomas Hunter, "The Proliferation of MANPADS," *Jane's Intelligence Review*, September 2001.

³⁶ UNITED STATES OF AMERICA v. ALEXANDER DARICHEV, United States District Court, Southern District of Florida, 10 July 1997, available at <http://www.pbs.org/wgbh/pages/frontline/shows/russia/scenario/indictment.html> and "2 Lithuanians, Arrested in Miami, Are Accused of Bid to Sell Soviet Nuclear Weapons," *New York Times*, 1 July 1997, available at <http://www.nytimes.com/1997/07/01/us/2-lithuanians-arrested-miami-are-accused-bid-sell-soviet-nuclear-weapons.html?pagewanted=1>.

³⁷ David Fulghum, "Mixed Threat from Small SAMs," *Aviation Week & Space Technology*, 29 July 1996.

³⁸ Ibid.

³⁹ Ibid.

⁴⁰ Ibid.

⁴¹ David Isby, "Stinger buy-back in Afghanistan," *Jane's Missiles & Rockets*, 1 March 2002.

⁴² Steve Coll, *Ghost Wars* (New York: Penguin Group, 2004), p. 590.

⁴³ David Zelman, "IRA buyers almost got real missile; agent says switch with fake misfired," *The Miami Herald*, 27 November 1990.

⁴⁴ During the trial, the traffickers' defense attorneys called the \$50,000 price the "deal of the century," claiming that the going black market price was \$150,000. See David Zelman, "A stiff upper lip meets fresh mouth in weapons trial," *The Miami Herald*, 30 November 1990.

⁴⁵ Carlos Harrison, "Armaments R US: Shoppers Stop Here," *The Miami Herald*, 9 May 1990.