

## Armed Groups' Holdings of Guided Light Weapons

Non-state actors' growing arsenals of guided light weapons pose a significant international security threat. Small Arms Survey research indicates that since 1998 at least 59 armed groups from 37 countries possess—or possessed—such systems. These arsenals include man-portable air defence systems (MANPADS) and anti-tank guided weapons (ATGWs)—systems that can be operated by a single user or a small crew and the missiles of which can be steered towards the target after launch.<sup>1</sup> This *Research Note* complements other Survey publications focusing on these weapons' technical characteristics and effectiveness.<sup>2</sup> It explains the challenge facing the international community and provides an overview of the weapons possessed by non-state groups, paying special attention to their types of guidance and relative sophistication. It does not attempt to quantify specific weapons holdings.<sup>3</sup> Information on specific armed groups' holdings is available on the Survey's website.<sup>4</sup>

### The threat

The main concern related to the proliferation of portable guided missiles is their acquisition

and use by non-state actors. As of 2004 an estimated 500,000–750,000 MANPADS and even greater numbers of ATGWs were circulating worldwide.<sup>5</sup> At least 1 per cent of these MANPADS were believed to be outside of government control (Berman, Schroeder, and Leff, 2011, p. 3). While guided missiles are acquired more frequently than they are used, significant attacks nonetheless highlight the acute threat they pose to both government and civilian targets. Among the most devastating missile attacks was the downing of Rwandan president Juvénal Habyarimana's aircraft with two SA-16s<sup>6</sup> in 1994 (Berthemet, 2012), an event that catalyzed the Rwandan Genocide. Civilians are also at risk, as shown by al-Qaeda's attempted attack on an Israeli civilian aircraft in Kenya in 2002 (Schroeder, 2007a, p. 623) and Hamas's more recent successful attack on an Israeli school bus using a second-generation ATGW (CNN, 2011).

Armed groups acquire guided light weapons in many different ways, one of which is through transfers from government sponsors. The United States, for instance, reportedly distributed US-made FIM-92 Stinger MANPADS to anti-Soviet rebels in Afghanistan in the



A rebel opposing Libyan leader Muammar Qaddafi holds his SA-7b (9K32M Strela-2M) as he looks to the sky. Eastern Libya, March 2011. © Hussein Malla/AP

Table 1. **MANPADS and ATGWs reportedly held by armed groups (by type of guidance), 1998–2013**

<b>MANPADS</b>			
Type of guidance	Selected* models** (country of origin)***	Active groups reportedly possessing missile systems with this type of guidance	Number* of groups since 1998
Passive infrared seekers	SA-7 Grail (9K32 Strela-2 and 2M) (Russian Federation)	Abkhazian Congregation of the Caucasus Emirate; al-Qaeda cell (Kenya); al-Qaeda in the Arabian Peninsula; al-Qaeda in the Islamic Maghreb; al-Shabaab; Burundi insurgents; Chadian Union of Forces for Democracy and Development; Chechen rebels; Revolutionary Armed Forces of Colombia; Hezbollah; Hizbul Mujahideen (Kashmir); Iraqi insurgents; Islamic Resistance Movement (Hamas); Islamic State of Iraq; Libyan Revolutionary Brigades; Lord's Resistance Army (Uganda); Mouvement national de libération de l'Azawad (Mali); Palestinian Islamic Jihad; Kurdistan Workers' Party (PKK) (Turkey); Popular Front for the Liberation of Palestine; Rassemblement des forces pour le changement (Chad); Shan State Army (Myanmar); Somaliland (unilaterally declared government); Sudanese Revolutionary Front; Syrian anti-government armed groups; Taliban (Afghanistan); United Wa State Army (Myanmar)	48
	SA-14 Gremlin (9K34 Strela 3) (Russian Federation)	Iraqi insurgents; Hezbollah	6
	SA-16/18 (Igla series) (Russian Federation)	Abkhazian Congregation of the Caucasus Emirate; al-Shabaab; Chechen rebels; Democratic Republic of Congo insurgents; Hezbollah; Iraqi insurgents; Syrian anti-government armed groups	10
	FIM-92 Stinger (United States)	Chechen rebels; PKK (Turkey); Taliban (Afghanistan)	4
	HN-5 (China)	Taliban (Afghanistan); United Wa State Army (Myanmar)	4
Radio command line of sight (CLOS)	Blowpipe (United Kingdom)	Chechen rebels; Taliban (Afghanistan)	2
Laser-beam riding	RBS-70 (Sweden)	None	–
<b>Number* of groups having held MANPADS</b>		<b>Active groups: 35</b>	<b>All: 57</b>
<b>ATGWs</b>			
Manual command to line of sight (MCLOS); wire-guided	AT-3 Sagger (9K11 Malyutka) (Russian Federation)	Al-Shabaab; Hezbollah; Iraqi insurgents; Libyan Revolutionary Brigades; Syrian anti-government armed groups	8
Semi-automatic command to line of sight (SACLOS); wire-guided; radio- or laser-beam riding	AT-4 Spigot (9K11 Fagot) (Russian Federation)	Hamas; Hezbollah; Iraqi insurgents; Libyan Revolutionary Brigades	5
	AT-5 Spandrel (9K113 Konkurs) (Russian Federation)	Iraqi insurgents; Hezbollah; Libyan Revolutionary Brigades; Islamic Resistance Movement (Hamas)	4
	AT-7 and AT-13 Saxhorn (9K115 Metis and 9K115-2 Metis-M) (Russian Federation)	Hezbollah; Libyan Revolutionary Brigades; al-Shabaab; Syrian anti-government armed groups	5
	AT-14 Spriggan (9P133 Kornet E) (Russian Federation)	Hezbollah; Libyan Revolutionary Brigades; Islamic Resistance Movement (Hamas)	3
	Missile d'infanterie léger antichar (MILAN) (France)	Iraqi insurgents; Libyan Revolutionary Brigades; al-Shabaab	4
Passive infrared, radar, or laser guided; fire-and-forget guidance	Javelin (United States) Spike (Israel)	None	–
<b>Number* of groups having held ATGWs</b>		<b>Active groups: 10</b>	<b>All: 19</b>
<b>Number* of groups having held guided weapons since 1998</b>		<b>Active groups: 36</b>	<b>All: 59</b>

\* This table is the product of desk research conducted by the Small Arms Survey and based on a wide range of reports, press statements, and author correspondence with acknowledged experts in the field of proliferation, light weapons, and/or non-state armed groups. The full list of models and groups reported to have held guided light weapons since 1998 is available on the Small Arms Survey website and will be updated regularly; see Small Arms Survey (2013). Numbers of groups presented here reflect final findings from the database and not totals from Table 1.

\*\* The weapon names used here follow NATO designations, with the respective Russian Federation (and former Soviet Union) designation in parenthesis when applicable. Each category reflects the types of systems rather than the country of production, thus it may include foreign variants when not specified otherwise.

\*\*\* Countries of origin are mentioned for background purposes only. They refer to the countries where the weapons were originally designed and are not necessarily the countries of production of the actual weapons possessed by the groups.

Source: Lazarevic (2008); Rigual (2013); Small Arms Survey (2008; 2013)

1980s (Schroeder, 2007a, p. 625).<sup>7</sup> Several other governments have been suspected of supplying guided weapons to armed groups, including the Gaddafi regime in Libya prior to its collapse (Schroeder, Smith, and Stohl, 2007, pp. 63–64) and the government of Eritrea (UNSC, 2007, p. 15).

Other sources of diversion include rogue arms brokers, poor stockpile security, battlefield losses, and the sudden collapse of well-armed regimes (Schroeder, 2007a, pp. 625–26). The uprisings in North Africa and the Middle East since 2011 have resulted in the depletion of several governments' arsenals in the region. The 2011 collapse of the Libyan government, which was estimated to have acquired as many as 20,000 MANPADS in the previous four decades (UNSC, 2012, p. 6),<sup>8</sup> is of particular concern in terms of guided systems proliferation. It has been confirmed that Libyan Revolutionary Brigades possess these weapons.<sup>9</sup> In addition, the UN Panel of Experts identified SA-7 MANPADS and AT-13 and MILAN ATGWs among weapons shipped from Libya that were seized by Lebanese authorities in April 2012 (UNSC, 2013, pp. 35–38).

## Armed groups' reported holdings

At least 59 non-state armed groups have been reported to possess guided light weapons worldwide since 1998 (see Table 1). These armed groups are—or have been—located in 37 different countries across the globe. Twenty-nine of these countries have been reported to be actively involved in an armed conflict since 1998:<sup>10</sup> these types of weapons tend to circulate throughout major conflict areas. Strikingly, the estimated number of active groups holding or having held guided light weapons is at least 36, and may be as high as 57.<sup>11</sup>

MANPADS are believed to be or have been held by at least 57 armed groups since 1998 (Table 1). The comparatively lower number of groups reported to possess ATGWs (19; see Table 1) must be interpreted with caution. Indeed, ATGWs are widely used by armed groups to attack military

targets in conflict zones, but documentation of most of these incidents is classified.<sup>12</sup> In contrast to MANPADS attacks, which are often highly publicized, events involving ATGWs receive less consideration from the press, and governmental and non-governmental agencies alike.

Most models of guided light weapons acquired by the 59 armed groups studied were first fielded several decades ago. Many are Soviet-designed systems dating back to the 1960s and 1970s, such as the SA-7 MANPADS and AT-3 ATGW.<sup>13</sup> While many of these weapons may be old and unserviceable, at least some are still operational, with the 2002 MANPADS attack in Kenya being a prime example. Open-source accounts of the attack suggest that user error rather than missile degradation explains the failure to hit the targeted aircraft (Schroeder, 2007b, p. 3). More advanced systems, including the QW-1 Vanguard, SA-18 Igla, and AT-14 Kornet, have reportedly been acquired by active groups, including Hezbollah, insurgents in Iraq, and al-Shabaab (see Table 1 and Small Arms Survey, 2013). Recently fielded Chinese MANPADS are also reported to be in the hands of anti-government groups in Syria (Reed, 2013). While aircraft-mounted anti-missile systems deployed by some militaries are reportedly effective against many of the MANPADS available on the black market, civilian aircraft often are not equipped with such countermeasures, which makes them vulnerable to most MANPADS models (Schroeder, 2007a, pp. 637–39).

## Conclusion

Recognizing the threat of guided missiles, governments have undertaken numerous initiatives to recover and destroy thousands of these weapons. The US Department of State's Office of Weapons Removal and Abatement, for instance, helped destroy more than 33,000 MANPADS in more than 38 countries<sup>14</sup> between 2003 and 2013 (US Department of State, 2013). Considerable progress has been made to reduce surplus or obsolete stockpiles of guided missiles, but global efforts to this end are still insufficient.

Cases where armed groups possess guided weapons,<sup>15</sup> as illustrated in this *Research Note*, underscore the threat that the proliferation of such weapons represents to militaries, civilians, and peace operations worldwide, pointing to the need for stronger controls on the transfer, production, transportation, and storage of guided light weapons. ■

## Sourcing

This *Research Note* is based on a background paper by Jasna Lazarevic that formed the basis for an annex that appeared in: Eric G. Berman and Jonah Leff, 'Light Weapons: Products, Producers, and Proliferation', in Small Arms Survey, *Small Arms Survey 2008: Risk and Resilience*, Cambridge: Cambridge University Press, 2008, pp. 7–41). It has been updated and developed by Christelle Rigual with support from Matt Schroeder.

## Notes

- 1 Infrared passive systems, however, steer themselves to their targets.
- 2 See, for example, Berman, Schroeder, and Leff (2011) on MANPADS, and Berman and Leff (2012) on ATGWs.
- 3 Information on the number of (working) systems in armed groups' possession is very difficult to obtain and even more difficult to verify. Similarly, publicly available information may not help in specifying whether the weapons systems are complete. Indeed, a guided light weapon is composed of several elements, all essential to the weapon's functioning: a launcher, a grip stock, a battery, and a missile.
- 4 See Small Arms Survey (2013) for a complete database of armed groups and the specific weapons systems they reportedly possess.
- 5 According to Herron et al. (2011, p. 31), at least 650,000 missiles have been produced of the ATGW 'US TOW' type *only*, and thus 'far fewer MANPADS have been produced than ATGWs, but they have proliferated as widely'.
- 6 In the text of the present *Research Note* the weapons are presented using their NATO designations for the sake of clarity. The full NATO and Russian designations are presented in Table 1 and the online database.
- 7 The United States did not confirm this information.
- 8 According to the UN Security Council report the number of MANPADS held in the Libyan government's arsenal at the time of the collapse of the Gaddafi regime is unknown. The UN Support Mission to Libya and the United States have, however, recovered 5,000 weapons, whose most frequent type was the SA-7 (UNSC, 2012, p. 6).

- 9 See the Small Arms Survey (2013) database for a more detailed compilation of the type of weapons possessed.
- 10 The list of conflict zones has been delimited based on two main sources: the *Global Burden of Armed Violence* (Gilgen, 2011) and the Uppsala Conflict Data Programme's dataset (UCDP/PRIO, 2012).
- 11 The online database from which these figures are taken is constructed in terms of a two-level scale of likelihood based on the quality and number of the sources. Totals can thus include high levels of likelihood only (low estimates) or combine high and low levels of likelihood (higher estimates). All the findings presented in this *Research Note* have high levels of likelihood. See Small Arms Survey (2013).
- 12 Author interviews with confidential sources.
- 13 Interestingly, this finding is consistent with one of the main conclusions of Schroeder and King (2012, p. 314) regarding illicit arms found in high-intensity conflict zones.
- 14 Not all of these MANPADS have been held by non-state actors, however. Many destruction efforts deal with government stockpiles in conflict and post-conflict settings.
- 15 For instance, it has been estimated that in 2004 armed groups illicitly held 6,000 MANPADS (Schroeder, 2007a, p. 633), and this may be a significant underestimate as of 2013, especially considering the situation in Libya. There are no estimates yet regarding ATGWs.

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**For additional information on armed groups' holding of guided light weapons, please visit: <[www.smallarmssurvey.org/?groups-guided-weapons](http://www.smallarmssurvey.org/?groups-guided-weapons)>**

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