DISPATCH FROM THE FIELD

ISLAMIC STATE WEAPONS IN KOBANE

Analysis of weapons and ammunition captured from Islamic State forces in Kobane

April 2015





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CONTENTS

INTRODUCTION	4
KEY FINDINGS	6
DOCUMENTED MATERIEL	7
CHINESE RIFLES AND AMMUNITION	7
BELGIAN RIFLES	10
IMPROVISED MUNITIONS	12
ADVANCED ANTI-TANK WEAPONS	14
SURFACE-TO-SURFACE ROCKETS WITH CARGO WARHEADS	16
WEAPONS FROM IRAQ	17
OBLITERATED MARKINGS AND SERIAL NUMBERS	20
RECENTLY MANUFACTURED AMMUNITION (2012–14)	22
WOLF-BRANDED AMMUNITION	25
MANPADS BCU	26
IRANIAN AMMUNITION	27
KALASHNIKOV-PATTERN ASSAULT RIFLES	28
ACKNOWLEDGEMENTS	32
ENDNOTES	33

INTRODUCTION

This *Dispatch from the Field* outlines preliminary findings from an examination of weapons and ammunition captured from Islamic State (IS) forces during the battle of Kobane, Syria between September 2014 and January 2015.

IS forces laid siege to the city of Kobane for more than four months, starting on 13 September 2014 and ending when IS forces retreated from the city on 26 January 2015. During the battle, Kurdish forces seized significant quantities of weapons and ammunition from IS forces. This materiel sheds new light on the types and potential origins of weapons in IS stockpiles.

This *Dispatch* is not intended to attribute responsibility for the supply of weapons to IS forces. Rather, it aims to review physical evidence of weapons captured from IS forces in order to improve our understanding of their types and countries of manufacture. In the absence of other forms of documentary evidence, it is not possible to identify the complete chain of custody of the weapons presented here. Conflict Armament Research (CAR) continues to investigate their provenance.

Between 20–27 February 2015, a CAR investigation team worked alongside Kurdish People's Protection Units (YPG) to document weapons they had captured from IS forces. The YPG typically quickly integrates captured IS weapons into its own stockpiles to supplement its firepower. By the time CAR reached Kobane, most of the captured weapons were unavailable for inspection because the YPG had deployed much of the seized materiel to its frontline operations.

THE YPG TYPICALLY QUICKLY INTEGRATES CAPTURED IS WEAPONS INTO ITS OWN STOCKPILES TO SUPPLEMENT ITS FIREPOWER.



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Locations where CAR documented materiel

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Additional locations outside Kobane where CAR documented materiel

KOBANE

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KEY FINDINGS

CHINESE RIFLES AND AMMUNITION

Chinese CQ 5.56 mm rifles with intentionally removed serial numbers, loaded with a specific Chinese cartridge, strongly resemble CQ rifles that Sudan supplied to South Sudanese rebel groups in 2013, which also had their marks removed.

BELGIAN RIFLES

CAR documented Belgian FN FAL rifles that have not been reported in inventories of the national armed forces of Syria or Iraq. This suggests that these weapons have been diverted to Syria from elsewhere. Ammunition found loaded in these weapons may suggest Libyan provenance.

IMPROVISED MUNITIONS

The large-scale production and use of improvised mortars, rockets, and associated launchers, as well as homemade explosives, suggests a shortage of military-grade explosive weapons in IS arsenals and its consequent reliance on improvised weapons.

ADVANCED ANTI-TANK AND ANTI-AIRCRAFT GUIDED WEAPONS

IS forces deployed European-made MILAN antitank guided weapons in Kobane, which are significantly more sophisticated than other weapons described in this *Dispatch*. The presence of a battery from a man-portable air defence system (MANPADS) also suggests that IS forces may have brought SA-16 or SA-18 MANPADS to Kobane.

SURFACE-TO-SURFACE ROCKETS WITH CARGO WARHEADS

IS forces fired Egyptian SAKR rockets at Kurdish positions close to the Turkish border. The presence of a time fuse suggests the rockets had cargo warheads and contained sub-munitions (cluster munitions), though CAR did not document any.

WEAPONS FROM IRAQ

A number of weapons that IS forces used in Kobane originate in Iraqi military stockpiles. The procurement and/or capture by IS forces of this materiel helped fuel its siege of Kobane.

OBLITERATED SERIAL NUMBERS

Unidentified parties removed markings and serial numbers from several Kalashnikov-pattern assault rifles, most likely to obstruct efforts to trace their provenance.

RECENTLY PRODUCED AMMUNITION

CAR documented Chinese, Iranian, Russian, and Sudanese ammunition manufactured in 2012–14, which implies a very short chain of custody between production and IS acquisition. Production dates indicate that the ammunition entered Syria after the conflict began in 2011.

WOLF-BRANDED AMMUNITION

Sporting Supplies International, Inc. (a US company) markets Russian-manufactured 7.62 x 39 mm ammunition under the brand name 'WOLF.' IS forces used significant quantities of this ammunition in Kobane, including cartridges packed in civilian market boxes.

IRANIAN AMMUNITION

IS forces deployed Iranian-manufactured small calibre ammunition in Kobane, most of which was produced after 2006 and, consequently, unless they were lost or stolen, must have been exported in breach of the UN arms embargo on Iranian arms exports.

DOCUMENTED MATERIEL

CHINESE RIFLES AND AMMUNITION

YPG units captured Chinese CQ 5.56 mm rifles from IS forces in Kobane. This is the first evidence of this type of rifle in IS stockpiles. CAR documented two CQ rifles, each of which featured markings and serial numbers that had been deliberately removed by milling. The milled area had subsequently been painted black. CAR and the Small Arms Survey (SAS) documented hundreds of CQ rifles held by rebels in South Sudan in 2013 with serial numbers deliberately removed in an identical fashion (including the application of black paint). CAR and SAS confirmed that the Sudanese National Intelligence and Security Service supplied the rifles to various South Sudanese rebel groups. Rebels in South Sudan reported that they had received the weapons with

the markings removed, but it is not clear whether China, Sudan, or an intermediary was responsible for supplying the weapons to parties to the Syria conflict.¹

The CQ rifles in Kobane were loaded with Chinese Factory 71 5.56 x 45 mm ammunition, manufactured in 2008. The CQs previously observed in South Sudan were likewise loaded with Factory 71 ammunition dated 2008. The same types of rifle, loaded with identical ammunition, and subjected to the same method of milling and painting, strongly suggests that the CQ rifles observed in Syria and South Sudan derive from the same source.





CQ rifle with obliterated markings captured from IS forces





CQ rifle with obliterated markings captured from IS forces

Kobane, Syria, February 2015



FOR COMPARISON

CQ rifle with obliterated markings with the South Sudan Democratic Movement/ Army (SSDM/A) under the leadership of James Kubrin

Jonglei, South Sudan, February 2013



Chinese factory 71 5.56 x 45 mm ammunition produced in 2008 that was loaded in CQ rifles

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Kobane, Syria, February 2015



FOR COMPARISON

Chinese factory 71 5.56 x 45 mm ammunition produced in 2008, recovered from David Yau Yau's militia, Jonglei State, South Sudan, July 2013

Physical sample held by CAR





BELGIAN RIFLES

CAR documented two Belgian FN FAL rifles, which the YPG had captured from IS forces. Marks on the weapons indicate manufacture by FN Herstal in 1979 and 1980, respectively. FN FAL rifles produced in these years have never been reported in Syrian state stockpiles, and there is no record of them in Iraqi national inventories.



FN FAL rifle captured from IS forces

Kobane, Syria, February 2015



FN FAL rifle captured from IS forces

One of the FN FAL rifles was loaded with a combination of Belgian 7.62 x 51 mm ammunition from 1980 and Pakistani 7.62 x 51 mm ammunition from 1981. In 2012, the UN Panel of Experts on Libya observed identical Pakistani 7.62 x 51 mm ammunition in northern Libya. According to the

Belgian FN Herstal 7.62 x 51 mm ammunition produced in 1980 that was loaded in the FN FAL rifles

Kobane, Syria, February 2015

Panel of Experts, Qatar supplied the ammunition to Libyan rebels in contravention of the arms embargo. The Panel later discovered the same type of ammunition in a shipment from Libya destined to the Syrian opposition.²





Pakistan Ordnance Factories 7.62 x 51 mm ammunition produced in 1981 that was loaded in the FN FAL rifles

FOR COMPARISON

Pakistan Ordnance Factories 7.62 x 51 mm ammunition exported to Qatar in the 1980s and documented by the UN Panel of Experts

Libya, 2012

© UN Panel of Experts on Libya



IMPROVISED MUNITIONS

IS forces used improvised munitions of different types in significant quantities in Kobane, suggesting a lack of factory produced, military grade weapons in its arsenal. Most of the improvised munitions were based on mortar rounds of various calibres and 105 mm rockets containing aluminium-based homemade explosives. IS forces also employed a type of improvised rocket assisted munition (IRAM) in Kobane, constructed from a gas canister filled with aluminium-based homemade explosives and welded to a homemade rocket motor. Opposition groups fighting Syrian armed forces have reportedly been manufacturing and using similar types of device across northern Syria since at least 2013.³



100 mm and 120 mm improvised mortars with launchers, filled with homemade explosives Kobane, Syria, February 2015



105 mm improvised rockets and launchers Kobane, Syria, February 2015

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Unexploded IRAM Kobane, Syria, February 2015

ADVANCED ANTI-TANK WEAPONS

IS forces used MILAN anti-tank guided weapon (ATGW) systems in Kobane, which both Syrian and Iraqi armed forces reportedly have in their inventories.⁴ IS forces also deployed Bulgarian and Russian RPG-22 rocket launchers in Kobane. Previously, CAR observed another Russian RPG-22, which YPG units captured from IS forces in September 2014 near Qamishli, in northeastern Syria. The two Russian manufactured RPG-22 launchers were both produced in 1985, and featured closely related lot and serial numbers, which may imply that they were once part of the same consignment. The Bulgarian launcher was manufactured in 1992.





Russian RPG-22 launcher manufactured in 1985

Kobane, Syria, February 2015





Bulgarian RPG-22 launcher manufactured in 1992





European MILAN ATGW

Kobane, Syria, February 2015

CAR documented two gas cylinders, which can be used with Russian 9K135 'Kornet' ATGWs. This suggests IS forces may have been equipped

Gas cylinder for Russian 9K135 'Kornet' ATGW

Kobane, Syria, February 2015

with such systems in Kobane. Both Syrian and Iraqi armed forces have 9K135 systems in their inventories.⁵



SURFACE-TO-SURFACE ROCKETS WITH CARGO WARHEADS

CAR documented two mechanical time fuses (MTF) and rocket nose cones from SAKR 122 mm surface-to-surface rockets a few meters from the Turkish border in Kobane. The Arab Organization for Industrialization (AOI), Egypt, produced the rockets. Although SAKR rockets are also produced with high explosive payloads, the presence of a time fuse suggests the rockets were carrying dualpurpose improved conventional munition (DPICM) sub-munitions. The presence of SAKR rockets in Syria has been established in recent years,⁶ and IS forces reportedly launched cluster munitions on Kurdish positions near Kobane in July and August 2014.⁷ According to an official in Kobane, IS launched the two SAKR rockets on 26 January 2015.⁸



Cones with fuses for SAKR surface-to-surface cargo rockets Kobane, Syria, February 2015

CAR HAS DOCUMENTED RELATIVELY FEW NATO-CALIBRE WEAPONS CAPTURED FROM IS FORCES IN SYRIA AND IRAQ, EVEN THOUGH IS FORCES HAVE REPORTEDLY CAPTURED MANY US M16 RIFLES FROM IRAQI MILITARY UNITS.

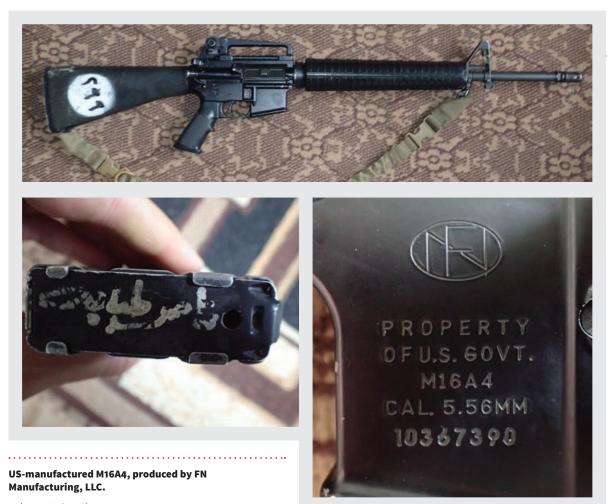
WEAPONS FROM IRAQ

ARMS

Out of the 280 Kalashnikov-pattern assault rifles that CAR documented in Kobane, Iraqi import stamps indicate that 29 of the rifles were at one time in Iraqi stockpiles, suggesting that the fall of Iraqi military bases helped fuel the siege of Kobane.

In contrast to abundant former Soviet-calibre weaponry, CAR has documented relatively few

NATO-calibre weapons captured from IS forces in Syria and Iraq, even though IS forces have reportedly captured many US M16 rifles from Iraqi military units. The relative scarcity can be explained, in part, by the shortage of NATO 5.56 x 45 mm ammunition in the region. Perhaps because of this, YPG forces note that they usually capture these 'prestige' weapons from IS commanders, rather than IS rank and file.⁹



AMMUNITION

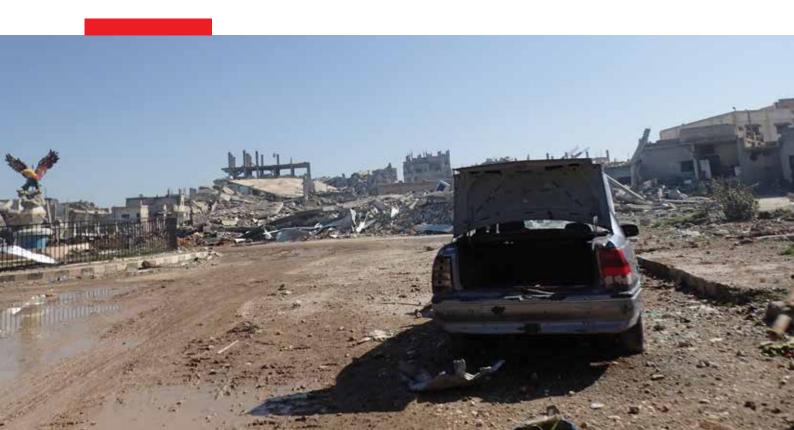
Although the majority of small arms ammunition in Kobane consists of former Soviet calibres, CAR documented 177 rounds of 5.56 x 45 mm NATOcalibre ammunition. Of these, the Lake City Army

Ammunition Plant in the United States produced 72 rounds between 1986 and 2010. The remaining 5.56 x 45 mm ammunition mostly comprised Chinese Factory 71 cartridges produced in 2008.

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US manufactured 5.56 x 45 mm ammunition produced at the Lake City Army Ammunition plant, USA, in 1986, 1991, 1993, 1996, 1997, 1998, 2000, 2001, 2002, 2003, 2004, 2006, 2007, 2008, and 2010



VEHICLES

IS forces in Kobane used US manufactured M1114 high mobility multi-purpose wheeled vehicles (HMMWVs), which they had previously captured from Iraqi armed forces. CAR documented three

such vehicles, which YPG units had destroyed during battle. The vehicle identification number (VIN) plates bear 2004 dates of delivery.



US M1114 vehicles manufactured by O'Gara Hess & Eisenhard

OBLITERATED MARKINGS AND SERIAL NUMBERS

In addition to the CQ rifles described above, CAR documented 12 Kalashnikov-pattern assault rifles and one RPG launcher, from which markings had been deliberately removed using various methods. Some had removed serial numbers, while others had both their factory markings and serial numbers removed. Most of the rifles with obliterated serial numbers were Russian manufactured. Grinding was the most common method of obliteration.

Oxy-acetylene torch or arc weld method



Chiselling method



Grinding method



RECENTLY MANUFACTURED AMMUNITION (2012-14)

IS forces attacking Kobane used Chinese, Iranian, and Russian 7.62 x 39 mm and 7.62 x 54R mm ammunition produced in 2012–14 as well as Chinese Type 69 40 mm high-explosive (HE) rockets produced in 2013. Russian 7.62 x 39 mm ammunition dated 2014 and 7.62 x 54R mm ammunition produced in 2013 were the most prevalent types in this subset of the sample.



Russian (Ulyanovsk Ammunition Plant) 7.62 x 39 mm ammunition manufactured in 2013 and 2014 Kobane, Syria, February 2015



Chinese Type 69 40 mm HE rocket produced in 2013



Iranian 7.62 x 39 mm and 7.62 x 54R mm ammunition manufactured in 2012 and 2013 by the Defense Industries Organization (DIO) Ammunition and Metallurgy Group (AMIG)

Kobane, Syria, February 2015

Russian 7.62 x 54R mm ammunition manufactured in 2013 at LVE Novosibirsk Cartridge Plant JSC

Kobane, Syria, February 2015



IS FORCES USED IMPROVISED MUNITIONS OF DIFFERENT TYPES IN SIGNIFICANT QUANTITIES IN KOBANE, SUGGESTING A LACK OF FACTORY PRODUCED, MILITARY GRADE WEAPONS IN ITS ARSENAL.

CAR documented several rounds of Sudanese Military Industry Corporation 7.62 x 39 mm ammunition produced in 2012–13. This is not the first documentation of this type of ammunition, and in addition to IS forces, it is present in Syria with other rebel forces. In May 2013, a New York Times journalist found Sudanese 7.62 x 39 mm ammunition produced in 2012.¹⁰ Further, in July 2014, YPG units captured Sudanese 7.62 x 39 mm ammunition from IS with a 2012 production date.¹¹ During the siege of Kobane, IS forces used Sudanese 7.62 x 39 mm ammunition produced in 2012 and 2013.



Sudanese 7.62 x 39 mm ammunition produced in 2012 and 2013 Kobane, Syria, February 2015

Sudanese 7.62 x 39 mm ammunition produced in 2012 and captured from IS forces by the YPG

Kobane, Syria, July 2014



WOLF-BRANDED AMMUNITION

The Russian Federation manufactures 7.62 x 39 mm ammunition, marketed by Sporting Supplies International, Inc. (a US company) under the brand name WOLF. CAR has documented WOLF ammunition used by or captured from IS forces throughout Iraq and Syria.¹² This ammunition is packed in relatively plain, white cardboard boxes (image below). However, in Kobane, CAR also documented WOLF ammunition in colourful cardboard boxes, which are destined for civilian market sales (notably in the US), and have not been previously observed elsewhere in Iraq and Syria.



7.62 x 39 mm WOLF ammunition (military packaging)

Kobane, Syria, February 2015



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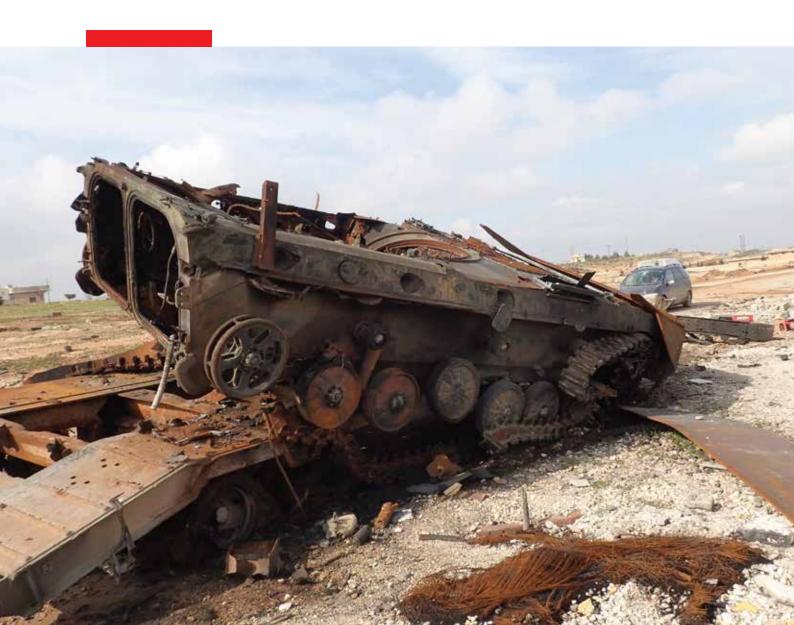
7.62 x 39 mm WOLF ammunition (civilian market packaging)

MANPADS BATTERY

A man-portable air defence system (MANPADS) battery, compatible with SA-16s and SA-18s, suggests IS forces may have been equipped with MANPADS in Kobane.



Russian battery produced in 1987, compatible with SA-16 and SA-18 MANPADS



IRANIAN AMMUNITION

CAR documented numerous Iranian 7.62 x 39 mm and 7.62 x 54R mm cartridges, which the YPG had captured from IS forces in Kobane. Most of these cartridges have been manufactured after 2006, with some as recently as 2013. Their presence outside Iran may indicate a violation of UN Security Council Resolution 1737 (2006), which prohibits Iranian arms exports.¹³



Iranian 7.62 x 39 mm and 7.62 x 54R mm ammunition manufactured by DIO, AMIG, in 2001, 2006, 2007, 2009, 2012 and 2013

KALASHNIKOV-PATTERN ASSAULT RIFLES

CAR documented 280 Kalashnikov-pattern assault rifles that YPG units had captured from IS forces. China and Russia together manufactured 140 of them, while the remaining rifles derive mostly from Eastern European countries. The majority are old (some dating from the 1950s), which will make it difficult to trace their precise chain of custody. CAR has already initiated trace requests with manufacturers.

Table Kalashnikov-pattern assault rifles, which YPG forces captured from IS, Kobane, September 2014-January 2015	Country of manufacture	Number of Kalashnikov- pattern assault rifles documented	Percentage of total sample
	Russia	76	27%
	China	64	23%
	Romania	40	14%
	Hungary	27	10%
	East-Germany	22	8%
	Bulgaria	22	8%
	Poland	17	6%
	Iraq	8	3%
	Yugoslavia	4	1%
	TOTAL	280	100%



Russian AKM assault rifle manufactured at the Tula plant in 1977 Kobane, Syria, February 2015



Chinese Type 56-1 assault rifle manufactured at Factory 66, manufacture date unknown

Kobane, Syria, February 2015

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Romanian PM md. 65 assault rifle manufactured in 1988 Kobane, Syria, February 2015



Hungarian AK-55 assault rifle, manufacture date unknown



East German MPi-K assault rifle, manufacture date unknown

Kobane, Syria, February 2015



Bulgarian AKKS assault rifle, manufacture date unknown Kobane, Syria, February 2015



Polish kbk AKMS manufactured in 1982

Kobane, Syria, February 2015

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Iraqi Tabuk assault rifle manufactured by the Al-Qadissiya Establishments in 1994

Kobane, Syria, February 2015



Yugoslavian Zastava M-70B1 assault rifle manufactured in 1982

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