

## Weapons and ammunition of returning SSLA forces, Mayom, Unity state, May 2013

On 24 April 2013, Government of South Sudan President Salva Kiir issued a presidential amnesty for six of the main rebel commanders fighting in opposition to the South Sudan government. On the same day, members of the South Sudan Liberation Army (SSLA), under the leadership of Gen. Bapiny Monyтуil—who had been in Khartoum for several years—crossed the border with their families from a rear base in Kharasana, South Kordofan to Mayom, Unity.

The Small Arms Survey met with the SSLA forces and its field commander Matthew Puljang on the outskirts of Mayom town on 9 May 2013, while its two other leaders, Generals Bapiny Monyтуil and Karlo Kual, were arriving in Juba to begin negotiations with the Sudan People's Liberation Movement/Army (SPLM/A). Local authorities said the SSLA arrived in Mayom with some 1,200 fighters and more than 100 vehicles, but the Survey could verify only about half that number during its visit. It is conceivable that some of the forces were in nearby villages with their families.

During its visit to Mayom, the Small Arms Survey made detailed assessments of the arms and ammunition stocks of the SSLA, including small arms, light weapons, and larger conventional weapons. The fighters were extremely well armed with assault rifles, rocket propelled grenades (RPGs), light and heavy machine guns, mortars, anti-aircraft guns, and recoilless guns. But the fighters had very little small arms ammunition—only what was loaded in their magazines and belt feeds—which may indicate that their supply chain had been severed.

### SSLA generals in Mayom



Gen. Matthew Puljang (standing, fifth from right, with brimmed hat and sunglasses) and his generals, Mayom town, 9 May 2013.

## Chinese-manufactured 5.56 x 45 mm CQ assault rifles



SSLA forces deployed more than 100 Chinese-manufactured 5.56 x 45 mm CQ assault rifles. In all cases, factory marks (on the left-hand side of the magazine housing) had been removed by grinding or milling. This practise has become increasingly common among Khartoum-supported rebels in South Sudan. The Small Arms Survey documented weapons with markings removed with Athor and Yau Yau's forces in late 2012 and early 2013. In some cases, the weapons displayed traces of an eight-digit serial number at the base of the magazine housing. Interestingly, videos from 2011 and 2012 show SSLA fighters carrying hundreds of brand new Type 56-1 assault rifles, and the Small Arms Survey documented more than 100 that the SPLA had seized from the SSLA in 2011. In Mayom, the SSLA fighters did not possess a single rifle of this variety. The Small Arms Survey also documented CQ assault rifles (with markings removed in an identical fashion) among David Yau Yau's forces in Jonglei in February 2013, and they have been observed with tribal militias in various inter-communal clashes. This year marks the first time this rifle has been observed in South Sudan.

## RPG-7-pattern rocket launchers



The Small Arms Survey documented two primary types of RPG-7-pattern rocket launchers in the hands of SSLA forces. The first (top) appears to be of a type manufactured by the Military Industry Corporation (MIC), based in Khartoum. The design characteristics of this model are consistent with 'A30' type rocket launchers documented in service with the Sudan Armed Forces (SAF) and various rebel groups in Sudan and South Sudan. The second type of rocket launcher (center) is identical to known examples of Iranian manufacture, yet the absence of any markings makes its provenance difficult to identify. The Small Arms Survey has documented the same type of launcher in service with the both the SSLA and George Athor's forces in 2011. The bottom image shows a weapon that appears to have been modified. The body is the same as the Iranian-pattern rocket launcher (center), but the trigger assembly/pistol grip appears to have been replaced with that of another weapon.

## RPG-7-pattern rocket launchers: markings



The above image (left) is of the Iranian-pattern rocket launcher, featured in the bottom photo on the previous page. It clearly indicates that the factory identifying marks have been removed by grinding. The use of yellow paint-filled factory marks and serial numbers is consistent with Iranian production. The image to the right illustrates the trigger assembly of an 'A30' rocket launcher of Sudanese manufacture. The serial number has been removed by grinding.

## Various conventional weapons and ammunition



Clockwise from top left: Iranian-pattern BM-12 type 107 mm rocket launcher; Chinese-manufactured Type 65 (B-10) recoilless rifle (marks removed by grinding); ZU-23-2 23 x 152B mm twin-barrel cannon; ZU-23-2 twin-barrel cannon mounted on a six-wheel truck; unidentified SPG-9-pattern recoilless gun (marks removed by grinding); ZU-23-2 twin-barrel cannon mounted on a six-wheel truck; boxed 9M22M 122 mm rockets for use in BM-21 truck-mounted multiple rocket launcher (BM-21 launcher not present); and an Iranian-pattern BM-12 type 107 mm rocket launcher. Sudan's MIC claims to produce identical BM-12 type rocket launchers.

## 60 mm and 82 mm Sudanese-manufactured mortar bombs



The above images document boxed 82 mm (top and bottom, left) and 60 mm (top and bottom, right) mortar bombs. The box marks, and the marks applied to the mortar bombs, are consistent with suspected Sudanese-manufactured bombs. The Small Arms Survey has documented the same types in service with SAF and various rebel groups throughout Sudan and South Sudan. These 60 and 82 mm mortar bombs were produced in 2011 and 2012, respectively, which suggests very recent supply to the SSLA. The fill codes (TD-42 and TD-30, respectively) are of a type employed for mortar bombs manufactured by the former Soviet Union and aligned states.

## Chinese-manufactured 12.7 x 108 mm ammunition



This Chinese-manufactured (Factory 41) 12.7 x 108 mm ammunition for heavy machine guns is date-marked 2009 and 2010. The Small Arms Survey has documented identically marked ammunition that the SPLM-North had seized from SAF forces in South Kordofan and Blue Nile.

## Sudanese-manufactured 7.62 x 39 mm ammunition



The ammunition is marked, clockwise, with: '011' (most probably a 2011 date mark); '2' (which denotes the production line within the factory) and '39,' which denotes the second part of the calibre designation (7.63 x 39 mm). The Small Arms Survey has documented similar varieties of ammunition with Sudanese forces and rebel groups throughout Sudan and South Sudan.



## Suspected Chinese-manufactured 5.56 x 45 mm ammunition



This 5.56 x 45 mm ammunition is marked '71,' a factory code used by the Chinese Factory 71 (the Chongqing Changjiang Electrical Group). The date mark ('08') indicates manufacture in 2008. The Small Arms Survey has documented identically marked 5.56 x 45 mm ammunition in service with David Yau Yau's forces in Jonglei in February 2013.

## Chinese- and Bulgarian-manufactured 7.62 x 54R mm ammunition



Chinese-manufactured (top casings) 7.62 x 54R mm ammunition, displaying factory codes '945' and date marks '10' for 2010 production. The lower row consists of Bulgarian-manufactured ammunition of the same calibre, which features date marks '75' that indicate manufacture in 1975. The Small Arms Survey has documented identically marked ammunition in service with Sudanese and rebel forces throughout Sudan and South Sudan.

## Bulgarian- and suspected Sudanese-manufactured PG-7 rockets



The upper and lower images to the left depict a Bulgarian PG-7 rocket, manufactured in 1975, in service with SSLA forces. The upper and lower images in the centre are of a suspected Sudanese-manufactured PG-7 rocket, which was also documented in service with the SSLA. This rocket bears the same fill code (A-IX-1) as the Bulgarian example and the same lot number sequence ('101-3-09'), indicating factory-lot-year). The year of manufacture is 2009.

The upper and lower images on the right are of a Sudanese manufactured PG-7 rocket, displayed by the Sudanese MIC at the 2013 IDEX arms fair in the United Arab Emirates.<sup>1</sup> This rocket features the same factory codes ('1' and '101', respectively) as the rocket pictured in the centre. The Small Arms Survey documented PG-7 rockets bearing similar codes in Darfur in 2010.

<sup>1</sup> IDEX photos courtesy of Robin Ballentyne, Omega Research Foundation.

## 106 mm HEAT ammunition



The above images depict two types of 106 mm high-explosive anti-tank (HEAT) cartridge for use in a 106 mm recoilless gun deployed by the SSLA. Clockwise from top left: Unidentified 106 mm cartridge (base), with no observable year of manufacture; A second unidentified type of 106 mm cartridge (base), with marks ('98') indicating manufacture in 1998; marks on the box containing the second type (1998) of cartridge; and marks on the packing tubes containing the second type (1998) of cartridge. This type of ammunition has never been observed with rebels in Sudan or South Sudan, nor has the weapon that is ordinarily used to fire it.

## DShKM-pattern heavy machine guns



The SSLA deployed in excess of 30 DShKM-pattern heavy machine guns. In all cases, the weapons' identifying marks (see image above, right) had been removed by grinding.

### **Sudan Human Security Baseline Assessment (HSBA) for Sudan and South Sudan**

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