

# HANDBOOK

## **An Introductory Guide to the Identification of Small Arms, Light Weapons, and Associated Ammunition**

Edited by N.R. Jenzen-Jones and Matt Schroeder



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## About the Small Arms Survey

The Small Arms Survey is a global centre of excellence whose mandate is to generate impartial, evidence-based, and policy-relevant knowledge on all aspects of small arms and armed violence. It is the principal international source of expertise, information, and analysis on small arms and armed violence issues, and acts as a resource for governments, policymakers, researchers, and civil society. It is located in Geneva, Switzerland, and is a project of the Graduate Institute of International and Development Studies.

The Survey has an international staff with expertise in security studies, political science, law, economics, development studies, sociology, and criminology, and collaborates with a network of researchers, partner institutions, non-governmental organizations, and governments in more than 50 countries.

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## Using this Handbook

It is important to note that arms and ammunition identification is a very broad field, filled with many unknowns, errors, and disinformation. Arms and ammunition identification is also a very dynamic field, with new information frequently coming to light. This Handbook is intended only as an introduction to the practice and techniques of arms and ammunition identification. It is not a comprehensive list of identification techniques, or types or characteristics of specific arms and ammunition.

Most organisations and individuals do not need to identify weapons on sight; the real task of identification can often be undertaken by specialists later. What is important is to provide those specialists with relevant information, such as clear photographs and detailed records of the item's characteristics. To this end, this Handbook is intended to enable the reader to recognize important information and record it accurately, and also to classify and identify small arms, light weapons, and their ammunition according to their physical features and markings. The identification of a particular item using this guide should be considered tentative until a specialist has confirmed the identification.

## Disclaimer

The information in this Handbook is provided for informational purposes only. Arms or munitions of any variety should not be handled without the correct training, and then only in a manner consistent with such training. Subject matter experts, such as armourers, ammunition technical officers, and explosive ordnance disposal specialists should be consulted before interacting with arms or munitions. Individuals must also make a full and informed appraisal of the local security situation before conducting any research related to arms or munitions.

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## Abbreviations and acronyms

### *Arms-related abbreviations and acronyms*

<b>AGL</b>	Automatic grenade launcher
<b>AK</b>	Avtomat Kalashnikova ('Kalashnikov automatic rifle')
<b>AKM</b>	Avtomat Kalashnikova Modernizirovanny ('Kalashnikov automatic rifle, modernised')
<b>AK-74</b>	Avtomat Kalashnikova obraztsa 1974 ('Kalashnikov automatic rifle, model of 1974')
<b>AK-74M</b>	Avtomat Kalashnikova obraztsa 1974 Modernizirovanny ('Kalashnikov automatic rifle, model of 1974, modernised')
<b>AMR</b>	Anti-materiel rifle
<b>ATGM</b>	Anti-tank guided missile
<b>ATGW</b>	Anti-tank guided weapon
<b>ATR</b>	Anti-tank rifle
<b>CZ</b>	Česká Zbrojovka Uherský Brod ('Czech Arms Factory, Uherský Brod')
<b>DA</b>	Double-action*
<b>DA/SA</b>	Double-action / single-action*
<b>DGI</b>	Direct gas impingement*
<b>DShK</b>	Degtyareva-Shpagina Krupnokalibernyy ('Degtyareva-Shpagina large calibre')
<b>DShKM</b>	Degtyareva-Shpagina Krupnokalibernyy Modernizirovanny ('Degtyareva-Shpagina large calibre, modernised')
<b>FAL</b>	Fusil automatique léger ('light automatic rifle')
<b>FCS</b>	Fire control system
<b>FN Herstal</b>	Fabrique Nationale de Herstal ('National Factory, Herstal')
<b>GMG</b>	Grenade machine gun
<b>GPMG</b>	General-purpose machine gun (also 'MMG')
<b>HMG</b>	Heavy machine gun
<b>HK</b>	Heckler & Koch

<b>IZHMASH</b>	ИЖМАШ; Izhevskiy Mashinostroite Inyy Zavod ('Izhevsk Machine-Building Plant')
<b>KPV</b>	Krupnokalibernyy Pulemet Vladimirova ('Vladimirova large calibre machine gun')
<b>LMG</b>	Light machine gun
<b>LSW</b>	Light support weapon
<b>MAG</b>	Mitrailleuse d'appui général ('general-purpose machine gun')
<b>MANPADS</b>	Man-portable air defence systems
<b>MANPATS</b>	Man-portable anti-tank systems (also known as 'MPATS')
<b>MBRL</b>	Multiple-barrel rocket launcher
<b>MMG</b>	Medium machine gun
<b>NSV</b>	Nikitina-Sokolova-Volkova (these are the names of the weapon's primary designers)
<b>NSVT</b>	Nikitina-Sokolova-Volkova Tankovyy ('NSV tank machine gun')*
<b>PDW</b>	Personal defence weapon
<b>PK</b>	Pulemet Kalashnikova ('Kalashnikov machine gun')
<b>PKM</b>	Pulemet Kalashnikova Modernizirovanny ('Kalashnikov machine gun, modernised')
<b>PKT</b>	Pulemet Kalashnikova Tankovyy ('Kalashnikov tank machine gun')*
<b>PM</b>	Pistolet Makarova
<b>PSL</b>	Puşcă Semiautomată cu Lunetă ('semi-automatic sniper rifle')*
<b>RPD</b>	Ruchnoy Pulemyot Degtyaryova ('Degtyarev light machine gun')
<b>RPG</b>	Ruchnoy Protivotankovyy Granatomyot ('hand-held anti-tank grenade launcher') or Reaktivnaya Protivotankovaya Granata ('anti-tank rocket launcher')
<b>SA</b>	Single-action*
<b>SACLOS</b>	Semi-automatic command to line-of-sight
<b>SAM</b>	Surface-to-air missile (when man-portable, known as MANPADS)
<b>SAW</b>	Squad automatic weapon
<b>SKS</b>	Samozaryadnyy Karabinsistemy Simonova ('Simonov self-loading carbine')
<b>SMAW</b>	Shoulder-Launched Multipurpose Assault Weapon

<b>SMG</b>	Sub-machine gun
<b>SPG</b>	Stankovyy Protivotankovyy Granatomyot ('heavy anti-tank grenade launcher')
<b>SVD</b>	Snayperskaya Vintovka Dragunova ('Dragunov sniper rifle')
<b>TT</b>	Tokarev-Tula
<b>ZPU</b>	Zenitnaya Pulemetnaya Ustanovka ('anti-aircraft machine gun system')*

### *Munitions-related abbreviations and acronyms*

<b>ABM</b>	Airburst munitions
<b>ACP</b>	Automatic Colt Pistol
<b>AP</b>	Armour-piercing
<b>APCR</b>	Armour-piercing composite, rigid
<b>APDS</b>	Armour-piercing discarding sabot
<b>APHC</b>	Armour-piercing hard core
<b>APT</b>	Armour-piercing tracer*
<b>API</b>	Armour-piercing incendiary
<b>API-T</b>	Armour-piercing incendiary tracer
<b>API-DT</b>	Armour-piercing incendiary dim tracer
<b>ASM</b>	Anti-structure munitions
<b>ATGM</b>	Anti-tank guided missile
<b>AXO</b>	Abandoned explosive ordnance
<b>B</b>	Belted (when used as suffix in cartridge calibre designation)
<b>B-32</b>	Broneboynozazhigatelnyy ('armour-piercing incendiary')
<b>BMG</b>	Browning machine gun
<b>BZT</b>	Broneboyno Zazhigatelno Trassiruyushchiy ('armour-piercing incendiary tracer')*
<b>CCS</b>	Copper-clad steel
<b>CHS</b>	Cartridge headspace
<b>EOD</b>	Explosive ordnance disposal
<b>ERW</b>	Explosive remnants of war
<b>FMJ</b>	Full metal jacket
<b>FN Herstal</b>	Fabrique Nationale de Herstal ('National Factory, Herstal')
<b>GMCS</b>	Gilding metal-clad steel

<b>HE</b>	High-explosive
<b>HE-FRAG</b>	High-explosive fragmentation
<b>HEAB</b>	High-explosive airburst
<b>HEAT</b>	High-explosive anti-tank
<b>HEAT-T</b>	High-explosive anti-tank tracer*
<b>HEDP</b>	High-explosive dual-purpose
<b>HEI</b>	High-explosive incendiary
<b>HP</b>	Hollow-point
<b>IED</b>	Improvised explosive device
<b>JHP</b>	Jacketed hollow-point
<b>JSP</b>	Jacketed soft-point
<b>MDZ</b>	Mnogovenного Deystviya Zazhigatelnyy ('instantaneous incendiary'; HEI)
<b>MP</b>	Multipurpose (ammunition)
<b>OTM</b>	Open-tipped match
<b>PPHE</b>	Programmable pre-fragmented high-explosive
<b>R</b>	Rimmed (when used as suffix in cartridge calibre designation)
<b>RAP</b>	Rocket-assisted projectile
<b>RCA</b>	Riot control agent
<b>SAA</b>	Small arms ammunition
<b>SAPHE</b>	Semi-armour-piercing high-explosive
<b>SAPHEI</b>	Semi-armour-piercing high-explosive incendiary
<b>SAPHEI-T</b>	Semi-armour-piercing incendiary tracer*
<b>SCHV</b>	Small-calibre, high-velocity
<b>SR</b>	Semi-rimmed (when used as suffix in cartridge calibre designation)
<b>TOW</b>	Tube-launched, optically-tracked, wire-guided
<b>TP</b>	Training/practice (ammunition)
<b>TPT</b>	Training/practice-tracer
<b>UXO</b>	Unexploded ordnance

*Other abbreviations and acronyms*

<b>ARES</b>	Armament Research Services
<b>ATO</b>	Ammunition technical officer
<b>ATT</b>	Arms Trade Treaty
<b>CBP</b>	Customs and Border Protection
<b>dB</b>	Decibel
<b>DRC</b>	Democratic Republic of the Congo
<b>GPS</b>	Global Positioning System
<b>HS</b>	Harmonized system
<b>HTS</b>	Harmonized Tariff Schedule
<b>IMP</b>	Information, materiel, and persons
<b>ITI</b>	International Instrument to Enable States to Identify and Trace, in a Timely and Reliable Manner, Illicit Small Arms and Light Weapons ('International Tracing Instrument')
<b>IR</b>	Infrared
<b>KNP</b>	Kruger National Park
<b>IATG</b>	International Ammunition Technical Guidelines*
<b>ISACS</b>	International Small Arms Control Standards*
<b>LAPD</b>	Los Angeles Police Department
<b>NATO</b>	North Atlantic Treaty Organization
<b>NGO</b>	Non-governmental organization
<b>PID</b>	Positive identification
<b>PoA</b>	Programme of Action to Prevent, Combat and Eradicate the Illicit Trade in Small Arms and Light Weapons in All Its Aspects ('Programme of Action')
<b>PSSM</b>	Physical security and stockpile management*
<b>RF</b>	Radio frequency
<b>SDG</b>	Sustainable Development Goal
<b>SE</b>	Site exploitation
<b>SIPRI</b>	Stockholm International Peace Research Institute
<b>SSE</b>	Sensitive site exploitation
<b>TSE</b>	Tactical site exploitation
<b>UID</b>	Unique identification (or unique identifier)
<b>UN</b>	United Nations

<b>UN Comtrade</b>	United Nations Commodity Trade Statistics Database
<b>UNGA</b>	United Nations General Assembly
<b>UNROCA</b>	United Nations Register of Conventional Arms
<b>UNSD</b>	United Nations Statistics Division
<b>USD</b>	United States dollar

\* These abbreviations and acronyms are not used in this Handbook. They have been included here for informative and educational purposes.

