

AMMUNITION TRACING KIT

Protocols and procedures
for recording small-calibre
ammunition



COPYRIGHT

Published in Switzerland by the Small Arms Survey

© Small Arms Survey, Graduate Institute of International and Development Studies, Geneva 2008

First published in June 2008

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, without the prior permission in writing of the Small Arms Survey, or as expressly permitted by law, or under terms agreed with the appropriate reprographics rights organization. Enquiries concerning reproduction outside the scope of the above should be sent to the Publications Manager, Small Arms Survey, at the address below.

Small Arms Survey

Graduate Institute of International and Development Studies

47 Avenue Blanc, 1202 Geneva, Switzerland

sas@smallarmssurvey.org

Copy-edited by Alex Potter

Proofread by Donald Strachan

Typeset in Interstate and Palatino by Richard Jones, rick@studioexile.com

Printed by Paul Green Printing, London

ISBN 2-8288-0097-0

CONTENTS

About the Small Arms Survey	v
Acknowledgements	vi
Introduction	viii

AMMUNITION TRACING PROTOCOLS

1. About these protocols	1
2. The objectives of ammunition tracing	2
3. Elements of ammunition tracing	3
4. Recording ammunition in different circumstances	10
5. Safety, security, and protocol before sampling	15
6. Safety, security, and protocol when sampling	18
7. Data handling and review	23
8. The Small Arms Survey Ammunition Tracing Project	27
Annexe 1: Identification	29
Annexe 2: Mapping	30
Annexe 3: Verification	32
Endnotes	34
Bibliography	35

AMMUNITION TRACING MANUAL

A. Introduction to using the Ammunition Tracing Kit	1
B. Types of ammunition that may be recorded safely	2
C. The reporting forms	7
D. Sending your report to the Small Arms Survey	31
Annexe 1: Completed examples of two sections in the ARF(L)	33
Annexe 2: Completed examples of two sections in the ARF(S)	36

AMMUNITION REPORTING FORMS

Ammunition Reporting Cover Sheet

Ammunition Reporting Form (Long)

Ammunition Reporting Form (Short)

ABOUT THE SMALL ARMS SURVEY

The Small Arms Survey is an independent research project located at the Graduate Institute of International and Development Studies in Geneva, Switzerland. Established in 1999, the project is supported by the Swiss Federal Department of Foreign Affairs, and by sustained contributions from the Governments of Belgium, Canada, Finland, the Netherlands, Norway, Sweden, and the United Kingdom. The Survey is also grateful for past and current project support received from the Governments of Australia, Denmark, France, Germany, New Zealand, and the United States, as well as from different United Nations agencies, programmes, and institutes.

The objectives of the Small Arms Survey are: to be the principal source of public information on all aspects of small arms and armed violence; to serve as a resource centre for governments, policy-makers, researchers, and activists; to monitor national and international initiatives (governmental and non-governmental) on small arms; to support efforts to address the effects of small arms proliferation and misuse; and to act as a clearinghouse for the sharing of information and the dissemination of best practices. The Survey also sponsors field research and information-gathering efforts, especially in affected states and regions. The project has an international staff with expertise in security studies, political science, law, economics, development studies, and sociology, and collaborates with a network of researchers, partner institutions, non-governmental organizations, and governments in more than 50 countries.

Small Arms Survey

Graduate Institute of International and Development Studies

47 Avenue Blanc, 1202 Geneva, Switzerland

t +41 22 908 5777 f +41 22 732 2738

e sas@smallarmssurvey.org w www.smallarmssurvey.org

ACKNOWLEDGEMENTS

I would like to express my sincere thanks to a number of people who have helped to develop the Ammunition Tracing Kit. In particular, I am grateful to Alex Vines for sharing his experience and insight as a field researcher; Richard Jones and Adrian Wilkinson for their combined technical expertise in the fields of ammunition identification and safety (the Tracing Tool and Bullet Diameter Guide are their inspiration); Holger Anders for calling the project into being; David Huxford for having ‘done it before’ and explaining how; and Eric Berman for providing continuous support to all aspects of the Small Arms Survey’s ammunition tracing work from the outset.

The participants of the ammunition tracing workshop held at the Small Arms Survey in February 2007 provided encouragement and structure for this kit. They include Allard Blom, Ben Coetzee, Rob Deere, Pablo Dreyfus, Barbara Gimelli Sulashvili, Sahar Hasan, Jennifer Hazen, Merete Lundemo, Nicole Maric, Sarah Petrino, and Matthew Waechter.

Almost all of my Small Arms Survey colleagues have piloted parts of the Tracing Forms and deserve thanks for their efforts. Alex Losikiria and the APEDI team in northern Kenya and Rob Deere and his colleagues in Liberia also deserve particular mention for piloting parts of the form.

Nicolas Florquin, Alex Vines, and Holger Anders reviewed large parts of the Tracing Kit, notably the Protocols and Manual. The development of the kit has, however, been a rolling review process, involving many peers, including Eric Berman, Ben King, Richard Jones, Jonah Leff, and Adrian Wilkinson.

I thank Alex Potter for his copy-editing (and critical insight regarding the logic of the kit), Rick Jones for the layout, Daly Design for the illustrations, Donald Strachan for proofreading, and, in particular, Tania Inowlocki for her tireless efforts in planning and directing the publication process.

The German Federal Foreign office funded the Tracing Kit and has provided continuous support to all of the Small Arms Survey's ammunition tracing projects. In particular, I would like to thank Michael Hasenau most sincerely for his support throughout.

—James Bevan

INTRODUCTION

Ammunition is a rapidly consumable good. During periods of intense armed conflict or high rates of crime, it is used up quickly and needs to be replenished often. In this context, controlling the supply of ammunition can have a more immediate impact on armed violence than can the control over weapons.

Nevertheless, studies of ammunition have remained largely on the sidelines of policy-relevant research on armed violence. Growing international interest in ammunition, however, suggests that things are changing. Activists, journalists, and researchers increasingly view ammunition as a way to identify human rights abusers; parties to armed conflict; and, by extension, their supporters. Yet since publicly available or verifiable information on tracing illicit ammunition remains limited, these efforts can be problematic.

It is rarely true, for example, that the factory or manufacturing state of an illicitly appropriated cartridge is directly complicit in the illicit trade. Information gleaned from ammunition itself is rarely misleading, but its interpretation can be incorrect and even harmful.

When engaged in properly, ammunition tracing goes beyond explaining the origin of every cartridge discovered on the illicit market. Its aim is to develop data on the types of ammunition circulating in particular regions and in the hands of particular groups—whether state or non-state. This ‘baseline’ information can then be used to direct, support, or (where necessary) discredit observations made about the sources of illicitly proliferating ammunition.

Development of the Ammunition Tracing Kit

The Ammunition Tracing Kit was developed during a 14-month process of extensive field testing, revision, and consultation. The project germinated during a workshop, held in Geneva in February 2007, which aimed to clarify the Small Arms Survey’s rapidly developing ammunition tracing agenda.

Workshop participants were selected for their expertise in the field of armed violence or in ammunition more specifically. Whether researchers, technical specialists, or practitioners of various field-based activities, they often find themselves in conflict zones or high-crime areas.

The workshop explored core issues related to ammunition tracing methods and data analysis. It focused particular attention on the great potential for misinterpreting tracing data and, consequently, on the need to develop systems to ensure comprehensive review and evaluation of all findings. All of these requirements are reflected in the Ammunition Tracing Kit.

Using the Kit

The Ammunition Tracing Kit is designed to enable rapid, reliable, and responsible reporting of small-calibre ammunition in a variety of circumstances. It provides instructions for reporting on ammunition recovered at crime scenes and on cartridges collected during disarmament or weapons collection programmes; it also supplies guidelines for investigating parties to armed conflict or crime.

In addition, the Kit includes the information needed to judge the validity and reliability of the data collected, understand the limitations of tracing data, and generate comparable information.

While offering guidance on issues such as safety considerations, the Tracing Kit also outlines the Small Arms Survey's comprehensive, evidence-based approach to ammunition tracing and its commitment to providing secure, impartial, and timely analysis of ammunition data.

Using the components of the Ammunition Tracing Kit:

- Use the **magnetic Ammunition Tracing Tool** to measure cartridges, identify case composition, and photograph the ammunition.
- Use the **Bullet Diameter Guide** to establish the calibre of small-calibre cartridge-based ammunition and to photograph it against a clean background.
- Before conducting any investigations or recording ammunition, read the **Ammunition Tracing Protocols** carefully to find out about important safety issues and guidelines for data handling and analysis.

The Protocols provide a first step in clarifying the requirements and limitations of ammunition tracing. They underscore that ammunition tracing can be a powerful tool for understanding the illicit trade in ammunition and for reducing its effects. But tracing is a complex process and one that needs to be controlled by a strict set of rules for interpreting, verifying, and publishing findings.

The Protocols provide clear guidance on the risks inherent in ammunition tracing—both in terms of accurate and responsible reporting and on issues related to the physical security of ammunition tracing practitioners and their informants. While the Protocols draw on many years of collective experience in the field of armed conflict, it should be noted that they cannot predict all eventualities.

- Read the **Ammunition Tracing Manual** to learn how to complete the Ammunition Reporting Forms and how to submit them to the Small Arms Survey for analysis. The Manual provides the step-by-step instructions for recording small-calibre ammunition quickly and reliably in field conditions.
- Complete the **Ammunition Reporting Forms** to record specific types of ammunition and their identifying features. These Forms have been field-tested in a number of countries and in different contexts, ranging from cartridges found on the ground after a violent incident to ammunition recorded directly from non-state armed groups.