

June 2004

## Where Technology and Field Information Meet: The Metal Detector Handbook

Dieter Guelle

Andy Smith  
*Humanitarian Mine Action Specialist*

A.M. Lewis  
*European Commission*

T.J. Bloodworth  
*JRC*

Follow this and additional works at: <https://commons.lib.jmu.edu/cisr-journal>



Part of the [Defense and Security Studies Commons](#), [Emergency and Disaster Management Commons](#), [Other Public Affairs, Public Policy and Public Administration Commons](#), and the [Peace and Conflict Studies Commons](#)

---

### Recommended Citation

Guelle, Dieter; Smith, Andy; Lewis, A.M.; and Bloodworth, T.J. (2004) "Where Technology and Field Information Meet: The Metal Detector Handbook," *Journal of Mine Action* : Vol. 8 : Iss. 1 , Article 23. Available at: <https://commons.lib.jmu.edu/cisr-journal/vol8/iss1/23>

This Article is brought to you for free and open access by the Center for International Stabilization and Recovery at JMU Scholarly Commons. It has been accepted for inclusion in Journal of Conventional Weapons Destruction by an authorized editor of JMU Scholarly Commons. For more information, please contact [dc\\_admin@jmu.edu](mailto:dc_admin@jmu.edu).



[Information within this issue may be outdated. Click here to link to the most recent issue](#)

## **Where Technology and Field Information Meet: The Metal Detector Handbook**

by Dieter Guelle, Andy Smith, Adam Lewis and Thomas Bloodworth

The Metal Detector Handbook for Humanitarian Demining explains what all operators need to know about modern metal detectors. If trying to test, select or simply use a detector to its optimal ability, this handbook will show the user exactly what is needed. The handbook is in pocket A5 format and is resistant to field use.

For those in the field, there is a short, separate index that points to those checks and adjustments that are critical for effective front-line work. Andy Smith claims to know that most demining groups do not use their detectors optimally, and there is a lot of evidence in the Geneva International Center for Humanitarian Demining/United Nations Mine Action Service (GIHCD/UNMAS) Database of Demining Accidents to support that view.

For those selecting which detector to buy, there are whole sections that help to pre-select suitable models and then carry out meaningful field trials. For those wanting to understand the basic principles behind the available models, there is a dedicated technical chapter including clear explanations of how the various metal detector technologies work. The advantages and disadvantages of different technologies and designs are discussed at length throughout the handbook.

This informational handbook was written because the authors believe that it is needed by field operators. The European Commission Joint Research Centre helped with the technical aspects and publication, but the main authors were unpaid. They feel that this knowledge needs to be shared with the demining community. Their approach is unique in humanitarian demining publications, merging technical information and end-user concerns into a book that is intended to be easy to read whatever your background.

Initial feedback of this project has been positive from the field users who know about the handbook and who were included in the first distribution list. There are requests for translation into four languages and the printing of 4000 more copies. For three of these languages (Russian, Azeri and a language commonly understandable in the area of South East Europe), an amount of \$20,000 (U.S.) will be needed. Portuguese is the other language requested, but a price quote has not been received. If a reader would like to help those national Mine Action Centers requesting the translation, and therefore contributing to greater safety in mine clearance, please contact us.

The PDF version of the handbook is for free downloading available on the James Madison University Mine Action Information Center website at

[http://maic.jmu.edu/whatsnew/metal\\_detector\\_handbook.pdf](http://maic.jmu.edu/whatsnew/metal_detector_handbook.pdf) or on the International Test and Evaluation Program for Humanitarian Demining (ITEP) website at [http://www.itep.ws/pdf/metal\\_detector\\_handbook.pdf](http://www.itep.ws/pdf/metal_detector_handbook.pdf). A limited number of copies were printed, and these are available on request. To get your free copy of the book, contact:

Marta Garotta  
Enrico Fermi 1  
JRC T.P. 723  
IT-21020 Ispra (VA)  
Tel.: +39 0332 785546  
Fax: +39 0332 785772  
E-mail: [Marta.Garotta@jrc.it](mailto:Marta.Garotta@jrc.it)

### Contact Information

Dieter Guelle  
Tel.: +39 0332 78557676  
Fax: +39 0332 785772  
E-mail: [dieter.guelle@jrc.it](mailto:dieter.guelle@jrc.it)

Andy Smith  
Tel: +44 1600 713727  
Fax: +44 1600 719993  
E-mail: [didactylos@landmines.demon.co.uk](mailto:didactylos@landmines.demon.co.uk)