A Revolutionary Approach to Mine Awareness: The Demining Support System

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A Revolutionary Approach to Mine Awareness: The Demining Support System

This versatile tool is designed to provide support to a mine action program on a range of topics. Its high-tech components are designed to provide on easily accessible, customizable, professional and portable element to any mine awareness campaign.

by Nicole Kreger, MAIC

Background on the System

The Demining Support System (DSS) is the wave of the future in humanitarian mine action, a wave that is quickly catching on. As 22 countries are already employing it in their mine action activities. It simultaneously serves as an aid in training staff, managing equipment, maintaining databases and developing instructional materials, among other things. Being customizable, mobile and ruggedized, the DSS is designed to cater to the needs of any mine action center (MAC) or other demining programs. Created by Star Mountain, Inc., at the request of and with assistance from the U.S. Department of Defense, Humanitarian Demining Program, Night Vision and Electronic Sensors Directorate, the DSS has been used by U.S. Army Special Operations Forces.

So what exactly is the DSS, and how can it be so flexible? The System is "suit of multi-media, audio-visual computer equipment." It makes use of modern technology with features like a touch-screen display, digital camera and portable color printer, and its versatility displays itself through the many ways in which it can be used. For example, the medical modules train users on everything from saturation to trauma medicine; while the manual module can produce manuals on operations and training. Additionally, the DSS Content Manager software can be translated into any of several languages, such as Vietnamese, English, French, Russian, Portuguese or Cambodian. Also, the System can integrate with existing applications such as the Information Management System for Mine Action (IMSSM).

In addition to all these features, probably the most important aspect of the DSS is its mobility. The System is designed to work out in the field, not just sit in a headquarters where few have access to it, as often happens with other equipment. It is designed specifically to travel, and is even capable of withstanding the harsh conditions of the locations where it will be deployed. Thus, no matter where the user is, the system can travel to him or her, as opposed to vice versa.

MAC in a Box

The DSS has more recently spawned a new design known as the "MAC in a Box." It was "designed to be an immediately deployable MAC technology base" that can support a MAC office with any or all of the following operational services: mine and UXO clearance database (IMSSM); mine awareness, administration and finance, operations, logistics, training, information management and other MAC functions. It uses commercial-off-the-shelf hardware and software and is designed to be lightweight and therefore easy to transport. It contains many of the same resources as the original DSS platform, but it is designed to be a ready-to-use wireless network that serves as the foundation of a mine action operation. The hardware is more compact, containing several laptop computers and network equipment, and peripherals such as a scanner and projector are available as well.

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Mozambique Workshops

During March, I visited PAD in Mozambique and MineTech in Zimbabwe to follow up on their usage and find out what they liked and disliked. I also visited MAC, Handicap International (HI), Instituto Nacional de Desminagem (IND- the Mozambiquan MAC) and NPA to hold workshops introducing the resource to their trainers.

These workshops were with surveyors and deminer trainers as well as those involved in mine risk education work with the general public. The resource was well received by all. The trainers suggested that almost all of the images could be used with any audience.

The large loose-leaf format was liked and there was enthusiasm for the use of photographs taken in situ. The inclusion of a generic mine action course and teaching notes on the reverse of each page was also appreciated. The trainers particularly liked the fact that the text was in Portuguese and English—so recognising their own language and incidentally helping them to learn an English demining vocabulary. Unpredictably, field surveyors and deminers use the resource for reference—and asked for some technical detail to be expanded.

Following the workshops, IND formally requested 640 resource packs to be donated for distribution to every district in Mozambique via the Ministry of Education. The GWHF is currently seeking funding to enable them to comply with this request.

The Angola training resource pack is scheduled for distribution during the summer of 2002, which may have happened by the time you read this.
method or message is universally effective. To overcome these issues, custom-made materials, such as small color printers, poster printers, color scanners and heat presses are available with the DSS. With these, users can create posters, handouts and stickers to give to local populations. However, since paper will not last long in many countries—especially since it is burned for fuel in some places—these items are often not appropriate. When more durable and long-lasting items are necessary, DSS users can create their own T-shirts with the heat press.

Newer versions also include a digital camera for taking still photographs and a camcorder for recording video footage, as well as video editing software. A microphone allows people to narrate such videos in the local country's native language. All of these items give users the opportunity to make professional quality materials without having to rely on mass-produced tools that may not suit the individual needs of the local population. Also, because the DSS is portable, mine action personnel can travel from village to village to make mine awareness videos and slides, in this way hopefully reaching more civilians.

**MAC in a Box:Mine Awareness Uses**

The MAC in a Box, like the DSS, contains several hardware items that can be used for mine awareness, such as a printer/scanner, camera/video camcorder and a projector. Two of the system's six or more laptops are designated the "mine awareness material workstations." Other mine awareness items that are included with the system include guides from the James Madison University (JMU) Mine Action Information Center (MAC), Flashcards, materials specifically designed for children and videos from the United Nations Children's Fund (UNICEF). Other items can be added to this list at the request of the MAC.

The mine awareness module of the MAC in a Box is very similar in concept to that of the DSS. It incorporates some ready-made materials that can be printed, distributed or viewed immediately, but it also allows users to customize their mine awareness lessons. With the inclusion of the laptops, the MAC in a Box is even easier to transport than the original DSS, thus facilitating quicker information dissemination.

**In-Country Mine Awareness Implementation**

Currently, of the two systems, only the DSS is being used for mine awareness. The first recipients of the MAC in a Box, the staff of the Armenian Humanitarian Demining Center, have received training on all aspects of the MAC in a Box, including the mine awareness features. However, they have not yet implemented or planned implementation of these tools. A number of DSS users, however, have employed the mine awareness module in their mine awareness activities.

Zarnab is the most recent recipient of the DSS. The in-country users there are the staff at the Zambia MAC (ZMAC), they received training on its use in September and are planning to implement it very soon. One of the ways in which they plan to use the System is to expand on their mine awareness campaign, which began last year. The ZMAC staff will be showing videos and making posters and t-shirts for three provinces in Zambia. They plan to go to villages, clinics and other community locations in order to reach their varied target audience, which covers about a third of the country.

Of the countries to which the DSS was deployed, Jordan used the mine awareness module the most. In fact, according to an assessment conducted by Star Mountain, Inc., Jordan uses the DSS for mine awareness more than any other function. Jordanian users make materials for use in their mine awareness program and also use it in preparatory training for mine awareness demonstrations. One example of the DSS in action is Jordan is the mine awareness brochures created in Jordan for general distribution.

Several other countries have made use of the DSS' mine awareness module as well. In Germany, one of the instructors using the DSS makes posters with it to use in mine awareness training for soldiers in Denmark. A New Zealand instructor has used the DSS to create T-shirts promoting mine awareness. In Bosnia-Hercegovina, the users have employed the mine awareness module to develop training materials and provide mine awareness training.

**Conclusion**

Overall, the DSS and the MAC in a Box are valuable tools in the world of mine action. While they are not meant to be an all-inclusive, pan-solution to the landmine problem, we should remember that they are a demining support system, thus, their role is to provide the assistance program needs to accomplish its objectives. Although the mine awareness module is just one small part of the overall system, it is an important one. It enables the mine action community to carry out its work more efficiently and hopefully reach more people than in other ways could. And with the systems' flexible and customizable nature, this can be done in a way that fits the users' needs and that engages the audience in a meaningful and relevant way.

**Endnotes**


2. E-mail correspondence with Deborah Stephenson, October 26, 2002.

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**MRE in Afghanistan**

**Mine Risk Education and Mine Awareness in Afghanistan**

Recently, UNICEF joined the UN Mine Action Center for Afghanistan (MACA) to coordinate mine awareness programs. Together, they support a number of Mine Risk Education (MRE) partner agencies and their activities.

**by Whitney Tulliver, MAIC**

**Introduction**

The International Campaign to Ban Landmines (ICBL), has estimated that there are nearly 724 million square meters of contaminated land in Afghanistan. Many areas are not accessible because of the high risk factor they present, while new minefields continue to be discovered at an alarming rate. Every month, landmines kill or injure 150 to 300 people in Afghanistan. The threat to the civilian and refugee populations is great. Mine risk education (MRE) and mine awareness programs are conducted throughout the country to warn and educate these communities of the dangers of mines and UXO present.

The Mine Action Program for Afghanistan (MAPA) and the UN Mine Action Center for Afghanistan (MACA) collect and evaluate civilian mine accident and UOX statistics from local hospitals and organizations to determine priority areas for MRE activities. International governmental organizations (IGOs) and non-governmental organizations (NGOs) communicate with MAPA to coordinate MRE programs in Afghanistan. Starting in 2002, the United Nations International Children's Emergency Fund (UNICEF) assumed partial responsibility for the MRE component of mine action with MAPA. Both UNICEF and MACA support a number of MRE partner agencies and their activities.

There are four main approaches to MRE activities. They include direct

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**An exited Afghan woman views an educational display of landmines at a UN refugee center, c/o AP**