

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 an 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 program. 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 at Fort Belvoir, 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 "a suite of multi-media, audio-visual computer equipment."¹ 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 teams on everything from sanitation 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 one of several languages, such as Vietnamese, Arabic, Spanish, Serbo-Croatian,

Portuguese or Cambodian. Also, the System can integrate with existing applications such as the Information Management System for Mine Action (IMSMA).

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"² that can "support a MAC office with any or all of the following operational services: mine and UXO clearance database (IMSMA) mine awareness, administration and finance, operations, logistics, training, information management and other MAC functions."³ 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.

The Mine Awareness Module

DSS Mine Awareness Uses

While the DSS has many other functions that are more commonly used than the mine awareness module, many users see the DSS as a helpful means of spreading the word about the dangers of mines. There are some pre-made mine awareness materials provided with the DSS, demonstrating such mine-related messages as how to identify a mined area and what to do when encountering mines. However, according to an assessment study conducted after the DSS was deployed, in most cases, "the DSS helped with mine awareness through the hardware components, not through the images provided with the DSS."⁴

This fact further demonstrates the customizability of the System. Users are encouraged to actually create their own materials, so that they can use the most relevant information for their audience. This method is especially helpful for customizing the materials for the country in which they will be used, since no one

■ The DSS's hardware components include a scanner, digital camera, camcorder and printer, all of which can help mine action personnel create their own mine awareness materials. c/o Star Mountain, Inc.



method or message is universally effective.

In order to create such custom-made materials, a small color printer, poster printer, color scanner and heat press are available with the DSS. With these, users can make 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 photos and a camcorder for recording video footage, as well as video editing software. A microphone allows people to narrate such videos in the host 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 to villages to show 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 (MAIC), 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 informa-

tion 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.

Zambia 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 in 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-Herzegovina, 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-encompassing solution to the landmine problem, we should remember that they are a demining support system; thus, their role is to provide the assistance a 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 it otherwise could. And with the system's 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

1. "Demining Support System." Online Document. *Humanitarian Demining Equipment Catalog: Training and Mine Awareness Equipment*. Online Document: <http://www.humanitarianmining.org/archive/catalog97/cattrain1.htm>. September 13, 2002.
2. E-mail correspondence with Deborah Repass. October 28, 2002.
3. Repass, Deborah. *Immediately Deployable Computer Network for Mine Action Center Support*. Star Mountain Inc. Concept Paper. August 2, 2000.
4. The Demining Support System: Worldwide Analysis and Assessment 1999. Online .Pdf Document: <http://www.humanitarianmining.org/pubs/dssreport.pdf>. November 4, 2002.

Contact Information

Julie Clyman Lee
Project Manager
Humanitarian and Security Training Group
Star Mountain, Inc.
1101 King Street, Suite 500
Alexandria, VA 22314
Tel: (703) 960-7000
Fax: (703) 960-7009
E-mail: jlee@starmountain.com
Website: www.starmountain.com

Nicole Kreger
MAIC
Tel: 540-568-2810
Fax: 540-568-8176
E-mail: kregner@jmu.edu