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# ADRC Highlights Vol.55

*Asian Disaster Reduction Center Biweekly News*

September 17, 2002

## ➢ Test of Satellite Communications System for Disaster Damage Assessment

On Disaster Prevention Day, September 1, 2002, ADRC demonstrated its Real Time Damage Assessment System at a comprehensive disaster prevention drill held in Omaezaki-town, Shizuoka Prefecture. The system connects a disaster struck area with disaster relief headquarters via a portable satellite-imaging terminal. ADRC also tested the Detailed Damage Information Transmission System, which provides disaster related information to disaster management experts throughout Japan.

These systems represent the next generation of satellite communications systems used in disaster management. They have been developed in collaboration with NASDA (National Space Development Agency), CRL (Communication Research Laboratory), DAS (Diamond Air Service), and other organizations.

(1) Real Time Damage Assessment System (Ground)

This is a system that makes us of GIS to transmit real time information from a disaster struck area, such as images and sound, to disaster relief headquarters. This is accomplished by placing IP-VSAT in a vehicle in the affected area and establishing a broadband, wireless connection with a camera operator. Furthermore, with this system it is possible to gather information about a target area from a remote location by following instructions given by the disaster relief headquarters.

In this experiment, we positioned VSAT in Omaezaki town, ADRC, CRL, Shizuoka Prefecture Office, and another central administrative government office in order to experiment with real time transmissions and interactive communications. Clear pictures and geographical information about the site appeared on the PC screen and voice exchanges with the cameraman were clear, demonstrating that it is possible to assess the situation of a disaster struck area using this system. In January of next year we are planning to further test the early damage assessment system by loading cameras onto airplanes.

(2) Detailed Damage Information Transmission System

Dynamic and static images filmed by the real time damage assessment system are posted on the Internet via the ADRC server. Using these images, experts in various fields of study at disaster related organizations can easily access information and analyze disaster related situations. Determining road cable condition or assessing the situation of disaster struck areas are a few examples of the types of analysis that experts can perform using the tool. In relation to the most recent test, we released information and pictures of Shizuoka Prefecture shot from an airplane at the comprehensive disaster prevention drill on July 5. Please access our website and set the Range of Date. You will then find static and dynamic images for the corresponding dates. We are planning to modify the picture quality and operation menu in order to make professional analysis using this tool possible.

We are working on reducing the size of our machines and systems, and on combining digital maps and images from earth observatory satellites, in order to create an effective system for use at disaster sites in Asia.

(Mr. Masaru Arakida, Senior Researcher)

## ➢ Disaster Prevention Fair 2002, Fukuoka, Kyushu

A representative of ADRC participated in the Disaster Prevention Fair 2002, which was held August 29 – September 2 in Fukuoka, Kyushu. ADRC not only disseminated information on the activities of the Center but also promoted its International Strategy for Disaster Reduction, focusing upon the publication, "Living with Risk – a global review of disaster reduction initiatives," which was launched in Tokyo in August.

The Disaster Prevention Fair is an annual event held in a different city each year. The fair was co-organized by the Government of Japan, Fukuoka City, and the Disaster Management Promotion Committee. Fukuoka City offered to host the event this year in order to introduce the city's disaster reduction measures and to promote further awareness and preparedness among the population of the city and the region. Fukuoka City suffered a raging flood in June 1999 that killed one person and inundated underground city centers with water, bringing the basic functions of the city to a complete stop. Following this disaster in 1999, the city developed measures to deal with new types of urban flooding.

## ➢ ADRC Human Resource Development Program

### □ Singapore: Int'l Urban Search and Rescue Training

Following last year's program, ADRC is dispatching 3 experts from member countries to the Singapore International Urban Search and Rescue Training (November 11 – 22) program in collaboration with Singapore's Civil Defense Force. We are accepting applications through ADRC counterparts in each country. Please note that this program is for governmental officials. We hope to contribute to the development of disaster management capability in each member country.

(Mr. Fumiaki Yoshimura, Senior Researcher)

## ➢ New Publication: 20th Century Asian Natural Disasters Data Book

ADRC complied disaster data on the Asian region from the past 100 years (from 1901 to 2000) utilizing a disaster database (EM-DAT) owned by CRED (The Centre for Research on the Epidemiology of Disasters, Louvain Catholic Univ.) in order to publish the 20th Century Data Book on Asian Natural Disasters. This book has been assigned a GLIDE number, which ADRC proposed and has been promoting in cooperation with CRED, and ReliefWeb/UN-OCHA. Upon request, the book can be sent postage paid on delivery. It is also available on our website. We hope that this data book will stimulate a process of learning from the past and will be applied to future disaster management efforts.

## ➢ Recent Natural Disasters in Asia

### □ A strong Earthquake Rocked Papua New Guinea

A strong earthquake with a magnitude of 7.5 on the Richter scale and a depth of 30km struck near the coastal town of Wewak, 850 kilometers (530 miles) northwest of the capital city of Port Moresby, at 18:44 UTC time on Sunday, September 8, 2002.

### □ Typhoon Rusa caused serious damage in South Korea

On Friday, September 6, disaster relief authorities reported that typhoon Rusa has left 120 people confirmed dead and 64 missing in South Korea.

If you have comments or needs for this Newsletter, please write to ADRC in the right box.

Published by : Asian Disaster Reduction Center (ADRC)
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