

Polish Ministry of Health selects Magellan MobileMapper CE for nationwide upgrade of potable water database



MobileMapper CE training session organized by INS for the Polish Ministry of Health

The Polish Ministry of Health, Main Sanitary Inspectorate, has purchased 120 Magellan MobileMapper CE handheld GIS GPS receivers to more efficiently develop and maintain the nation's database of potable water resources. The Ministry selected the MobileMapper CE after evaluating proposals submitted by three leading brands of GPS receivers. The MobileMapper CE coupled with DigiTerra Explorer GIS application software and Magellan's post-processing option met or exceeded all the required technical specifications and did so at a cost significantly lower than the competition. **INS**, in Krakow, is the **Magellan** dealer responsible for the sale.

The task of collecting points and information for the database, including wells, rivers, reservoirs, pump stations and descriptive data, had previously been accomplished using recreational-grade GPS receivers. In many of the nation's 16 districts, there are more than 10,000 points to record. The recreational-grade receivers were inefficient, requiring data collection personnel to read the coordinates for each point, write them on a piece of paper along with descriptive notes, such as the address, administrative unit and water quality information. Upon returning to the office, all the hand-written data had to be manually typed into an Excel spread sheet. Now with the MobileMapper CE, data is captured directly to the receiver, digitally stored as SHP files and directly exported to a new ESRI GIS database, which replaced the Excel database.

The Magellan MobileMapper CE is the standard for performance and affordability in handheld GPS/GIS receivers. It is the most cost-effective solution on the market, offering an impressive array of high-performance features, including real-time, sub-meter GPS positioning, removable SD memory card with capacity up to 2 GB for the storage large files, such as complex maps and GIS data bases, and an all-day removable battery. It's designed to operate in harsh environments where standard consumer-grade, less rugged GPS receivers, are easily damaged. ■

قامت وزارة الصحة البولندية بشراء ١٢٠ جهاز Magellan MobileMapper CE المحمول والذي يعمل على شبكة GPS بنظام المعلوماتية الجغرافية، وذلك بهدف تطوير قاعدة بيانات البلاد الخاصة بموارد مياه الشرب والمحافظة عليها. تقوم شركة INS البولندية بتسويق ومبيع منتجات Magellan في بولندا.

REFER TO RIN 56 ON PAGE 90

Environmental water lifting and transferring

The main line of activity of the engineering firm **LEK** in Kaliningrad, Russia (since 2000) is to produce environmentally friendly devices with relatively small capacity for lifting and transferring water. The pump units operated by sailing windmills WmS-200 with output 0.2 t/h can be applied for personal water supply. Lately their windmill pump for individual water supply was getting the balance to reduce the starting speed of wind up to 1.7 m/s at a water pressure of 0.7 bar.



For cased deep wells a simple additional submersible membrane pump was created, which can lift water from a depth of 30 meters and more. It is put in action from the windmill pump, the hand pump, or the rotary pump. As placed in a well the deep inertial pump together with bringing and departing hose pipes represents the counterbalanced U-shaped tube, the theoretical height of the rising of water (or the depth of the well) has no restrictions. Restrictions are imposed only through the hydraulic resistance of fittings and hoses, and also the durability of the materials of the pump (it is necessary not to forget, that every 10 m of a water column add 1 bar of pressure approximately).

The company is conducting operations aiming for the reduction of the cross-section sizes of submersible pumps for use in chinks with an inner diameter of up to 100 mm. Other interesting direction for LEK's activities is the development and construction of mini-installations (CPPOR) for the distillation of oil and the reception of fuel from any oil-containing raw material, including fulfilled oils. ■

تقوم شركة LEK الروسية بإنتاج أجهزة تراعي البيئة ذات قدرة محدودة في مجال رفع ونقل المياه، منها وحدات ضخ تعمل على طاقة الرياح وهي تستخدم لتموينات المياه الفردية وبإمكانها ضخ ٠.٢ طن بالساعة. تُعنى LEK أيضاً بمجال تطوير وتصنيع منشآت صغيرة لتقطير النفط واستقبال الوقود من أي مادة خام تحتوي على النفط.

REFER TO RIN 57 ON PAGE 90