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*A training seminar for operators from northeastern Brazil. The seminar was held at the headquarters of INMET in Brasilia City.*

# INMET Network Upgraded in Brazil

With the installation of Vaisala's GPS-based sounding equipment at eleven separate sites, the INMET national weather service in Brazil has upgraded its network of meteorological stations. The INMET network covers the northeastern region of Brazil.

The installation of brand new DigiCORA II MW15G devices – complete with antennas, Windows 95 PCs, METGRAPH graphics interface programs, printers, and ground check sets – at Brazil's INMET station sites between April and June 1998 marked the inauguration of a new era for the entire weather observation network in the area. The modernization of INMET's network had been planned for several years; some of the stations had been using sounding equipment dating from the 1960s.

After budgeting and a tender competition, Vaisala's DigiCORA II equipment was chosen to replace the hybrid systems known as DACOS. In these systems, METOX wind-finding radiotheodolites had

been combined with PP11-based PTU equipment utilizing RS80 radiosondes.

## Crucial need for accurate weather data

The northeastern region of Brazil, where INMET's network is concentrated, is considered strategically important for aviation because most flights to and from Europe and the USA cross this region. This part of the country is also the most affected by El Niño, the position of the intertropical convergence zone, and the interaction of the Atlantic Sea Surface Temperature with the atmosphere.

Up-to-date weather information is also needed because the region is occasionally subjected to severe droughts, which can cause problems for some 10 million people, mostly small farmers. All the main industries in the region are related to agriculture and cattle raising. The modernized network will support local research and forecasting.

In addition, the INMET weather station network supplies data to WMO's World Weather Watch program via the international GTS network (Global Telecommunications

System), providing information to national meteorological institutes worldwide.

With the new equipment, data transfer from remote stations to INMET's central station in Brasil has also been modernized. Instead of using telex, DigiCORA II equipment can transmit weather data through satellite telecommunications. This makes data transmission faster, more efficient and more reliable.

## Support from local agent

Vaisala's local agent Hobeco Ltda. carried out the necessary training, commissioning and installation of the new sounding equipment at nine of INMET's station sites: Carolina, Palmas, Florianópolis, Fortaleza, Petrolina, Recife, Salvador, B. Jesus da Lapa, and Caravelas. Installation is in progress at two other sites.

Coinciding with this network upgrade, the Brazilian Air Force (DEPV) has also refurbished its own weather network with Vaisala's sounding systems. (See the separate article on the network upgrade in this issue page 9.) ■

*Mr. Augusto Cesar Vaz de Athayde from INMET.*

