NEW PRODUCTS

GINPOLE

The IIX GP-81 ginpole features all welded construction, full zinc plating, and is designed to fit all popular tower sizes. A kit version (buyer purchases a pipe locally) costs \$129.50, while the complete assembly sells for \$159.50. These antenna accessories and further information are available from IIX Equipment, PO Box 9, Oak Lawn IL 60456; (312)-423-0605. Reader Service number 480.

MICRO-CONTROLLED TRANSCEIVER

The Santec ST series of radios (both the 2-meter and the 440-MHz versions) are the first units to incorporate digital clocks within the radio's control program. The ST offers 10 memories to store both frequency information and the transmitter offset for repeater operation. Bandscan is handled by a manuat mode for single stepping, a search mode which automatically finds the first busy frequency, and a scan mode which steps through the band, pausing at each busy channel to monitor the conversation.

The ST-144/uP provides MARS/CAP frequency coverage down to 142,000 MHz and up to 149,995 MHz. There are three selectable power levels: 100 mW, 1 W, and a full-rated 3.5 W. A large liquid-crystal display and a 16-key control pad are among some of the other ST-144 features. The two-meter version lists for \$359. For more details, contact Encomm, Inc., 2000 Avenue G, Suite 800, Plano TX 75074. Reader Service number

24-HOUR WALL CLOCK

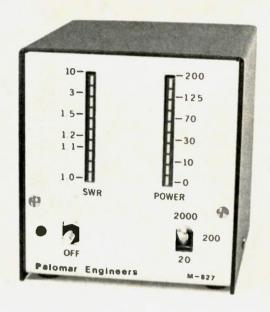
The Benjamin Michael Industries Model 973A clock features quartz accuracy and a 12" dial for excellent visibility. A unique dial face helps to eliminate interpretation errors often associated with 24-hour clocks, and battery operation eliminates the need for a power cord. The Mod-



The Benjamin Michael 24-hour



The Lance Johnson Engineering GP-1.



The M-827 swr meter from Palomar Engineers.

el 973A clock lists for \$59.95. For more information, contact Benjamin Michael Industries, 65 E. Palatine Rd., Suite 105, Prospect Heights IL 60070; (312)-459-5760. Reader Service number 479.

AUTOMATIC SWR METER

Palomar Engineers introduces the new M-827 swr meter. This new meter computes swr automatically and displays it on a light bar. A second light bar displays power.

The frequency range of the M-827 swr meter is 1-30 MHz. Power ranges are 20, 200, and 2000 Watts. The swr scale is 10:1 with a logarithmic response. The M-827 swr meter sells for \$97.50. For further information, write to Palomar Engineers, 1924-F W. Mission Rd., Escondido CA 92025.

GROUND PLANE BUSS

Lance Johnson Engineering has developed the GP-1, a 24-point buss that allows you to connect a large number of radials to the base of your antenna in a neat and efficient manner. The cast "alumaloy" disk attaches to masts up to 2 inches in diameter and has a convenient opening for feedline routing. The GP-1 is priced at \$24.95 and is sold by Lance Johnson Engineering. For more information, contact Lance Johnson Engineering, PO Box 7363, Kansas City MO 64116. Reader Service number 481.

COMPACT ANTENNA

Bilal Company now offers the Isotron 15. It will cover the complete 15-meter band and maintain a 2:1 or less swr. The Isotron 15, which handles the legal power limit, is supported on a single length of tubing, giving the antenna a total length of 21 inches. The principle of operation is similar to that of the 80-, 40-, and 20-meter models. The Isotron 15 sells for \$32.95. For more infor-

