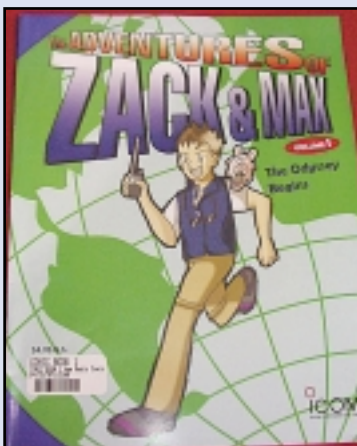




ICOM's ID-1 hooks up to a computer via a standard Ethernet connection and runs 128 kbps data as well as analog and digital voice.



The Adventures of Zack and Max is a 21st-century ham radio comic book featuring Japanese "anime" cartoon styles and aimed at young teens. It's produced by and available from ICOM America.



The IC-703 is ICOM's entry into the backpack radio market. The head is detachable and ICOM even offers a custom-designed backpack with special pouches, slots for cable pass-throughs, and even a rain covering.

## Dayton Sneak Preview

Once again this year, several manufacturers took advantage of mid-winter hamfests to preview new models before their "official" introduction at Dayton this month. Here's what we saw at Charlotte:

### ICOM

ICOM America previewed two new radios at the Charlotte Hamfest, the digital ID-1 and the backpack-ready IC-703. While a prototype of the ID-1 was on display last year at Dayton, the ICOM folks had two complete working stations set up in Charlotte.

The ID-1 is a 1270 MHz radio that does analog voice, digital voice, and data at 128 kb/sec via a standard Ethernet port on a computer. This is 10 times faster than 1200 baud packet and essentially lets you operate a 10 watt (1 watt low power) wireless network. Tied into a D-Star repeater, the ID-1 can be a port on a wide-area wireless network. The digital voice quality was excellent, and while the software on the demo rig had an 8 kHz bandwidth for digital voice, the production models planned to roll out at Dayton will feature a 4.8 kHz DV bandwidth with the potential for compression to 3 kHz in the future for HF use. When the radio is in digital voice mode, it also sends out a data packet with each transmission, including the sending station's callsign and other customizable information. This appears on the other radio's control panel. The radio is controllable via either a detachable front panel (separation cable is an option) or a virtual front panel on your computer (via a second, USB, connection). Possible uses suggested so far by testers have included multi-window ATV, streaming video, experiments with weather balloons, and live Doppler radar for SKYWARN activations. No price had been set as of Charlotte.

The IC-703 is ICOM's entry into the backpack HF market, and it even comes with an optional backpack that's custom-designed for carrying the radio and operating while on foot. There's a special pouch on the ICOM backpack for the removable front panel, so you can bring that around in front of you while wearing the radio on your back! The 703 will

operate at either 5 or 10 watts, depending on the supply voltage. The radio constantly monitors power supply voltage, and if it drops below 11 volts DC, automatically drops into low-power mode. There will be two models available; one covers HF only (160–10 meters) and the other includes HF plus 6 meters. Both include a built-in automatic antenna tuner, but at the expense of an internal battery pack. They'll sell you an external battery or you can supply your own. The receiver includes the same DSP (digital signal processing) circuitry found on the IC-706, and there is no drop in audio level when the radio shifts from high to low power. ICOM planned to have the IC-703 available by the end of March, but did not have a price set as of the Charlotte Hamfest.

ICOM also introduced a new ham radio comic book, *The Adventures of Zack and Max*, which it will make available to clubs, schools, and individuals for promoting amateur radio to young people. Using the popular Japanese "anime" style, the book brings ham radio comics into the 21st century.

### Yaesu

Yaesu's new FT-857 was actually introduced at Orlando, but it was generating a lot of interest at Charlotte as well. Most likely a successor to the FT-100D, Yaesu says the 857 is the world's smallest HF/VHF/UHF mobile transceiver, at just over 6" x 9" x 2". Despite the tiny size, it puts out 100 watts on HF and 6 meters, 50 watts on 2 meters, and 20 watts on 70 centimeters . . . sort of a cross between the larger FT-897 and the backpacking FT-817. The 857 also features a detachable front panel (separation cable is an add-on), plus DSP on both receive and transmit audio. It includes a built-in CW keyer and offers an external automatic antenna tuner as an option. The wide-coverage receiver tunes 100 kHz–56 MHz, 76–108 MHz, 118–164 MHz, and 420–470 MHz. You can even choose among 32 different background colors for the LCD screen!

### Alinco

Alinco introduced its new DR-620 dual-band mobile radio at



Yaesu's FT-857 is small enough to fit into a backpack, but it's a full-featured 100 watt HF/VHF/UHF all-mode radio designed primarily for mobile and portable use.



The Alinco DJ-620 is a new dual-band FM mobile rig with options for digital voice and for 1200/9600 baud packet, and includes a direct input for a GPS receiver with the packet option.



The RIGblaster Pro from West Mountain Radio is an all-in-one audio box that includes traditional RIGblaster support for sound card digital modes, plus a built-in speech processor and much more.

Charlotte. With a maximum of 50 watts out on 2 meters and 35 watts on 70 centimeters (both bands offer 10 watt and 5 watt levels as well), the radio is a true dual-bander in that you can monitor both VFOs at the same time, configured as VHF/UHF, VHF/VHF, or UHF/UHF. The sub-band audio mutes on transmit, preventing the annoyance of a loud signal suddenly popping up on your second band while you're talking on the first. Like many of Alinco's recent radios, the DR-620 offers a digital voice option, although the 620's digital voice format is *not* compatible with that of previous Alinco models (the company says the audio quality is much better). The radio also offers narrow FM ( $\pm 2.5$  kHz deviation), which is coming into use on a growing number of repeaters in crowded areas. There's also an optional TNC unit which gives you 1200 and 9600 baud packet capability, along with a direct GPS receiver input for APRS (Automatic Position Reporting System) use. (*When is somebody just going to build the GPS receiver into the radio? My \$15 digital cell phone has one!*)

Frequency stability is helped by a temperature-compensated crystal oscillator (TCXO). The receiver has broad coverage, including the FM broadcast band, 108–174 MHz and 335–480 MHz. There's some interesting military and other federal communications you can monitor in the 300 MHz range, commonly found on scanners but a rarity in ham rigs.

### RIGblaster Pro

West Mountain Radio brought its new RIGblaster Pro to both Orlando and Charlotte. This "big brother" of the original and very popular RIGblaster digital-mode interface units includes built-in rig control (for computer-controllable radios), built-in speech processor, and digital voice recorder (using the computer's sound card), four different ways to configure receive audio, and of course, all the connections and switching that you need for using sound-card-generated digital modes with your HF or VHF radio. (Watch for a review in an upcoming issue of CQ.)

### Mini Motorized HF Mobile Antennas

Both Tarheel Antennas and Hi-Q have introduced small versions of their popular motorized HF mobile antennas, small

enough to sit securely on a trunk-lip mount or a heavy-duty magnet mount (the type with three big magnets). Tarheel had its "Little Tarheel" on display at Orlando and Charlotte and sold out at both shows. See WB6NOA's article elsewhere in this issue for more on this new generation of HF mobile antennas.

At the Orlando hamfest, High Sierra introduced its "Derringer" base antenna, a combination of two horizontally-mounted motorized antennas that gives you a very low-profile tunable dipole.

### MFJ

MFJ has rolled out several new items, mostly in the category of antennas and antenna accessories. There's a new disccone antenna (MFJ-1868), which transmits on 50, 144, 222, and 440 MHz, and receives anything from 25–1300 MHz; a quad-band fiberglass base antenna for 50, 144, 222, and 440 MHz; a tri-band FM mobile antenna for 2, 220, and 440 (MFJ-1434); the MFJ-1819 portable antenna stand; the MFJ-267 1500 watt dry dummy load and wattmeter; and the Ameritron RCS-10L, an 8-position remote coax switch with built-in lightning protection.

### And Finally...

While AOR wasn't at either Orlando or Charlotte, when I came back to the office, I found one of their new AR-8200 MkIIIB handhelds waiting on my desk to be reviewed. This is a receive-only radio, but it covers 530 kHz to 3 GHz (cellular blocked) with *all modes*, including SSB, CW, wide, narrow and super-narrow FM, and wide and narrow AM. According to AOR, it's the world's first all-mode handheld receiver with this breadth of frequency coverage. I'm looking forward to getting it home, charging it up, and using the optional PC interface to download computer-control software from the AOR website.

It's likely that other manufacturers will be introducing additional new models at Dayton, so keep your eyes open if you're there; and if you're not, keep watching the pages of CQ for announcements, ads, and reviews.

— W2VU