Elliminate Canadian Tariffs Now!
To celebrate improved trade relations and the recently announced agreement to eliminate trade tariffs between the U.S. and Canada, ACC has a special offer for our Canadian customers. The elimination of the tariffs will not take effect for about a year, since Congress and Parliament need to approve the agreement. But you don't have to wait to benefit! For a limited time, you can purchase ACC equipment and we'll pay the tariff. Between now and March 31, 1988, we're offering a 10% tariff credit for equipment ordered from and shipped to Canada. Contact the factory for details.

No need to wait to benefit from improved trade relations with ACC!

220 Repeater
A new entry in 220 repeaters is from ICOM. Along the lines of their 440 and 1200 MHz repeaters, the IC-RP2210 is a 25 watt 216-236 MHz repeater. We haven't seen one yet, but based on the 440 repeaters we've seen and heard and the 1200 MHz repeater we own, it should be a nice piece of gear. Check with your dealer for availability. Price - $1500.

The ICOM entry brings a high quality, cost effective choice for a new 220 repeater. And best of all - we're happy to hook it up to your new RC-850 or RC-85 controller. At no charge! It's our way of helping to promote 220 activity.

After obtaining our written approval, send us your new IC-RP2210 repeater with your order for a new controller, and we'll return the package, all tied together. This is a limited time offer and applies to new controller orders only. We're also happy to hook up your new controller to other new repeaters as well for a small labor charge.

IDs of the Month
This is N4BZJ repeater, your taxi way to amateur radio.

Our repeater is your repeater, welcome to N4BZJ repeater.

You are (s-meter reading) on WB6KHP repeater. [RC-850 controller only, Initial ID]

Is it DVR or is it Memorex? This is KU6U, repeater.

Application Notes Available
The following new application notes are now available at no charge:

"Interfacing the RC-85 to the Motorola Micor"
"Interfacing the RC-85 to the GE Mastr II Repeater"
"Interfacing the RC-850 to the ICOM RP3010 Repeater"
"Interfacing the RC-850 to the ICOM RP1210 Repeater"
RC-850 controller manual supplement "Programming Summary"

Only registered owners of RC-850 controllers may request the "Programming Summary" as it contains the programming codes.

LRC is QYU
No sooner did Linda Rae Clark, our Administrative Assistant, get her Novice license (KB6UKY), then she passed her Technician exam and is now N6QYU. Linda Rae joins the ranks of Novice Enhancement hams who quickly upgraded past the entry level. Actually, she upgraded because she didn't like her lucky call. She's still looking forward to the possibility of personalized call signs. You'll find Linda Rae on local 220 repeaters.

Cognitive Dissonance
This theory predicts that when one has been through an unpleasant experience, which is voluntary, the very unpleasantness makes one more likely retrospectively to justify that experience, and advocate it for others, as if we're afraid to admit that we volunteered for such abuse. Dr. Edell, a media medical doctor, related the theory to the tortures of physician internship training. Sound like the reason some offer for keeping the Morse code requirement for amateur radio?

New Microphones
We have recently changed RC-850 controller and ShackMaster local microphone circuitry to support the Kenwood MC-48, MC-48B and MC-80 microphones. These 16 key Touch-Tone mites are part of a compatible line.

Contact us for instructions on how to adapt your RC-850 controller or ShackMaster to the Kenwood microphones.
There is a Pause...

In the synthesized speech of the RC-85 Version 3 vocabulary, we accidentally left it out of the listing in the manual on page 7-4. Vocabulary code "34" results in a brief pause for use between phrases.

220 PA

Jim Moorman, W9TK, an RC-850 controller owner writes:

"After searching the market for a commercial quality PA with a proven track record, it was obvious to me that Falcon Engineering was the only way to go. I am now waiting for the last piece to complete the 220 MHz system. Falcon is about to release a new driver stage which will provide the needed gain on the same heat sink to boost the MICOR exciter's 400 mW output and drive the PA (10 watt input) to full power out." The new driver stage that Jim mentions will be available in late February.

Jim has done the "220 Notes" MICOR conversion to an exciter and several receivers. He has not been able to get better than 3 uV sensitivity on the receivers (.5 uV with a preamp). If anyone has done better on a MICOR receiver conversion to 220, please let us or Jim know.

Falcon Engineering, P.O. Box 8979, Newport Beach, CA 92658 714-760-3622.

Keep Your Battery Charged

Charles Durst, WA4WTX provides us with his circuit for charging a backup gel cell battery to keep his 850 controller running during a primary power blackout. It's even complete with outputs for metering the ac line voltage and the battery DC voltage through the RC-850 controller's voice telemetry readback. The circuit provides a selectable charge current (110 mA for R2=5k), and limits the maximum voltage which can be applied across the battery (R1 pot). Thanks, Charles!

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British Digital Cordless Phone Service

In a twist on a portable telephone capability, the public Phonezone service allows calls to be made from handheld phones. Unlike cellular, however, this service is intended for stationary portable use. Operating at 900 MHz, these digital phones tie into public access terminals, or "teleports", at airports, railway stations, service stations, etc. Access is possible within 650 feet of the terminals. Forty channels are available for automatic selection, and voice is sent in packets of digitized speech using time-division duplex transmission. The digital transmission is said to provide high spectrum efficiency and privacy in communications.

Manufacturers involved in the special ICs for the zonephones include Plessey, Philips, Ferranti, and Texas Instruments. The handsets and base stations are each expected to cost $400-600.

Phonezone service is expected to begin shortly in Britain.


Manuals Available

We've "laser written" all our product manuals so that they're as easy as possible to read. If you have a tattered old manual, need spares, or you're interested in reading about our products before buying, you may order them separately.

RC-850 Controller - $35
RC-85 Repeater Controller - $15
ITC-32 Touch-Tone Control Board - $10
Digital Voice Recorder - $10
ShackMaster 100 - $15

All prices are prepaid or credit card, with no charge for shipping. Command codes are censored in controller manuals to protect owners, but registered owners can order uncensored manuals.

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![Battery Charge Circuit](image)

R1 sets maximum voltage across battery
R2 sets maximum charge current
Sa gives approximately 110 mA
**Bridgeway to Radio**

Jack Romano of AAT Communications recently sent us some pictures of the view from his repeater site at the Brooklyn tower top of the Verrazano Narrows Bridge in New York.

Jack writes ... "We presently have an RC-85 in service on the Brooklyn tower top and it is working great just as the literature states. When equipment needs to be serviced on the bridge, the lower level roadway must be closed for service personnel to gain access to tower elevators. So the need for reliable equipment is a must! We have chosen the RC-85 on the reputation of several ShackMaster 100s and ITC-32s. Hats off to the engineers at ACC." Thanks, Jack.

**Programmable-Programmable Encoder**

The new Communications Specialists SS-32P subaudible tone encoder allows use of standard or any non-standard tones in communications systems. The SS-32PA generates the standard 32 tones between 67 Hz and 250 Hz, but you may order the unit with any desired tone frequencies at any switch setting. A small E2PROM is used to allow configuring the exact frequencies to be generated. No more need to change crystals to get an oddball tone frequency for extra security in a tone guarded system. When you order the unit, just tell them what special frequencies you want, at no extra charge. $28.95 (1-9)

Communications Specialists, 426 West Taft Ave., Orange, CA 92665-4296 (800) 854-0547

**City Counting on Radio Hams**

(The following article appeared in the October 7, 1987 issue of the San Jose Mercury News.)

If an earthquake or other major disaster were to hit Cupertino, city officials plan to rely on a low-profile group of ham operators to help coordinate rescue and clean-up operations.

The amateur radio enthusiasts could enable city officials, huddled in a city emergency center, to communicate with rescue workers throughout the city if regular city telephone and radio systems become overloaded, said Bert Viskovich, the city director of public works.

The 29-member Cupertino Amateur Radio Emergency Service "will allow us to reach different frequencies. They are a support service and a very important one in an emergency," he said.

The ham operators could be scattered throughout the city and be in places that city workers are too busy to be, Viskovich said.

As soon as a quake hits, the ham operators will get in touch with one another and be available to help city officials in any way, said Skip Stevens, a research and development engineer, who formed the group two years ago.

"As soon as we are available -- perhaps in two minutes -- we will turn on our amateur radios to well-established disaster coordination channels," he said. "The first man who gets on acts as a manpower supervisor and takes a roll-call of who is available to respond to an emergency and identify their locations."

"Then, we go to government officials and say we're available, and how can we serve?" he said.

Stevens, who will go immediately to the Emergency Operations Center on Mary Avenue, will sit with city officials and dispatch his all-volunteer group throughout the city.

"Our group will shadow key agency personnel such as the city manager, building inspectors, the community relations officer and those moving heavy construction equipment, setting up shelter areas and coordinating material and food," he said.

Viskovitch said the city is "fine tuning" its overall emergency preparedness plan and will move into the basement of the City Hall building when remodeling is finished late this year.

He said the city has invested at least $3,000 in ham radio equipment and plans to buy more.

"We have invested in them, included them in exercises, and they have become a member of our emergency operating plans," he said.

"They have become the most important link we have because the other communications links may be overloaded," he said. "They are the ones that provide the communications link between different agencies and radio frequencies."

He said that before the ham radio group organized, city officials said that a communications breakdown during an emergency was one of their chief worries.

"Now, we may have solved that problem that has been hovering over us."

**And Introducing ...**

our new sales engineer, Richard Golino.

Richard joined ACC in October to help us serve our business radio-related customers and other commercial accounts. When he's not out on the rugby field, he's working on getting his Novice ham license. With a mechanical engineering background and nine years of sales experience with EG&G Rotron, Richard is a welcome addition to our staff.
Repeater Phone Line Cost Reduction

From the W5YI Report, January 1, 1988, we have learned that Southwestern Bell has recently downgraded their telephone service classification for ham radio repeater lines from commercial to residential rates. This means a substantial telephone rate reduction for repeater sites served by Southwestern Bell. One club will be receiving a $2000 refund representing 17 years of back overcharges!

You may want to find out from your phone company if your repeater phone line has been improperly classified as a commercial line. For more information, contact Paul Gilbert, KESZW, telephone number (915) 573-2163.

All we ask is that when you get your refund, use it to upgrade your repeater with a new ACC controller!

Wanted – Engineer to Help Invent the Future

We're looking for an additional design engineer to join our engineering team. Help us to invent the future of amateur radio and other markets. He/she should be an electrical engineer with a computer science background, at least 4 years experience in microcomputer, logic, and analog design. Assembly and high level language programming skills required. Salary is competitive and commensurate with experience. For confidential consideration, please send resume to: Engineering Manager, Advanced Computer Controls, Inc., 2356 Walsh Ave., Santa Clara, CA 95051.