



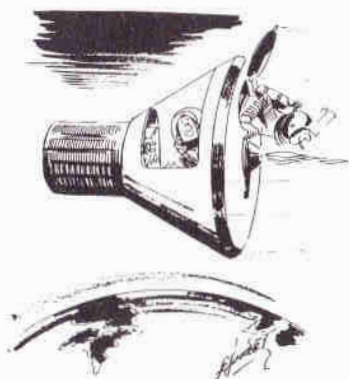
HAM HUM

Published by
AK-SAR-BEN RADIO CLUB, INC. - Omaha, Nebr. 68101
Post Office Box 291 - Downtown Station



Vol. XX
No. 5

May 1970



NEXT MEETING

WHEN: FRIDAY - MAY 8, 1970 - 8:00 P.M.

WHERE: RED CROSS CHAPTER HOUSE
432 South 39th Street, Omaha

PROGRAM: FILMS - APOLLO VIII and APOLLO XI

Refreshments - Eyeball QSOs

Guests welcome

HAM HUM is the official organ of the Ak-Sar-Ben Radio Club, Inc., of Omaha, Nebraska, mailed monthly to all members and to others upon request.



Next copy deadline: May 29th

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PRESIDENT'S CORNER

We had a great April auction and I want to thank those who were in charge: Erv Heinz and Cecil DeWitt as auctioneers; John Snyder, description manager; helpers Leonard Harkins, Buddy Johnson, Bill Snyder and Bob McClenahan. Our treasurer Hank Dworak did his job in rapid speed that made everything go smoothly, but not without his right-hand man Fred Fischer whose job wasn't an easy one.

Our thanks to General Motors Training Center for the use of their facilities and to Royal Enders, KØLYO, for making the arrangements.

If you want to enjoy yourself, don't miss the next meeting. If you have any suggestions for a meeting, don't be afraid to let a member of the Board know or better yet, fill out the card enclosed and mail it in. We're waiting to hear from you.

73,
Harold, WAØDGA

A miser may not be much fun to live with but he sure makes a wonderful ancestor.

4/10/70

Just received the April "Ham Hum." Can't tell you how much we enjoy reading them and hearing about all our old friends.

We are quite active on 28.6, 14.290, 21.39 and 3.983 Mcs. Hope to work some of you.

73s
Jim Noland, K6NT
Ex-WØAWX

Editor Ham Hum:

Noticed your mention of "X" calls in the April issue. Back in the 1930's these calls (such as W1XK) were issued to so-called "experimental" stations (commercial research firms, universities, etc.) and I assume they are still reserved for this purpose.

KØVVO
* * *

(article referred to above was taken from de Ham Monitor)

The Ham Monitor, Ks.



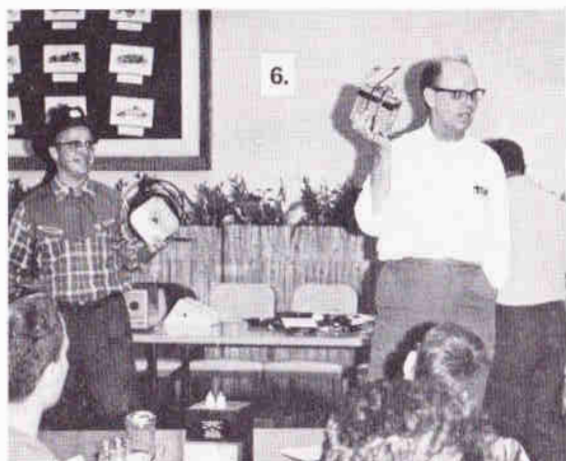
ANNUAL AUCTION

Erv Heinz, WAØEEM

Our annual auction was held April 10th at the General Motors Training Center. Our thanks to Royal Enders, KØLYO, for making the arrangements and GMTC for the fine hospitality and for the use of their facilities.

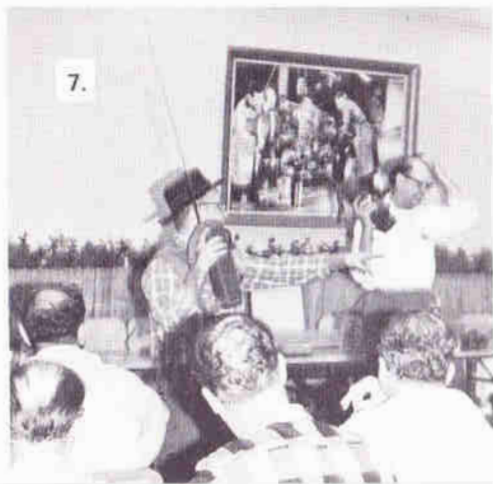
President McClenahan, WAØDGA, (picture 1) opened the session with a short business meeting and presented membership certificates to three members (pictures 2, 3 and 4).





He then turned the meeting over to auctioneers Erv Heinz, WAØEEM, and Cecil DeWitt, WØRMB, (picture 5). Leonard Harkins, auction expert, is seen helping pick up the bids. Leonard also helped in getting the sold "goodies" to the highest bidder. Thanks again, Leonard!

John Snyder, WØWRT, (right in picture 6) was our technical expert and gave the rundown on all the more technical equipment. Here Cecil, with only one hand, demonstrates how to get a good buy!



Picture 7 shows a "pair to draw to." This was real communication "DX style" and a real buy for one of



our young members. And the night went on until all the "goodies" were gone (picture 8).

Back of the scene were two hard-working hams who did a tremendous job coordinating the recording of sales, accounting and treasury work. Smiling Fred Fischer,

WØEGP, and happy Hank Dworak, WAØQLE, took in the money, deducted the Club's 10%, and paid off the sellers.

The merchandise had to get up and go, and got up and went. Big "thank you's" to all who helped or participated in any way.

**OFFICIAL BULLETIN NR 268
FROM ARRL HEADQUARTERS
NEWINGTON CONN
APRIL 9 1970 TO ALL RADIO
AMATEURS BT**

Upon recommendation of the ARRL Contest Advisory Committee, the 1970 Field Day rules will include several new features. The field day period will be advanced one hour to start at 1800 GMT June 27 and end at 2100 GMT June 28. Time sharing devices will be expressly prohibited. Any Class A group manning four or

more transmitters simultaneously will be permitted to set up a Novice only station without changing the basic entry classification. FD rules are now available upon receipt of an addressed stamped envelope. Clubs are requested to ask for rules at once since no automatic mailing will take place this year. When ordering log sheets, indicate the number of transmitters planned to be operated simultaneously and the approximate number of contacts anticipated. Allow four weeks for regular mail delivery of Field Day logs AR

OFFICIAL BULLETIN NR 267
FROM ARRL HEADQUAR-
TERS NEWINGTON CONN
APRIL 2 1970 TO ALL RADIO
AMATEURS BT

Dayton L. Phifer, WØVEA
East Tryon Route
North Platte, Neb. 69101

March 18, 1970

Attention DXers. A reply has now been received from the Radio Sports Federation of the USSR furnishing a breakdown of the new UK series of call signs in use by Soviet club stations. A UK1, 3, 4, 9, Ø followed by any letter, a UK2F, a UK6A, E, H, I, J, L, P, U, W, X, Y; indicates Russian SFSR. A UK2A, C, I, L, O, S, W; White Russia. A UK2B or UK2P; Lithuania. UK2Q, UK2G; Latvia. UK2R, UK2T Estonia. UK5O, Moldavia. UK5 followed by any letter except O; Ukraine. UK6F, O, V; Georgia; UK6G, Armenia. UK6D, C, K; Azerbaijan. UK7, followed by any letter, Kazakh. UK8H, Turkoman. UK8J or UK8R; Tadzshik. UK8M or UK8N; Kirghiz. UK8A, C, D, F, G, I, L, O, T, U, Z; Uzbek. All vhf stations in the USSR have the new prefix UR AR

An old-timer is one who remembers when the Federal government was criticized for giving away free garden seed.

* * *

In an argument, the best weapon to hold is your tongue.

Service

FOR SALE

14 AVS vertical antenna - \$5.00
Jim Knowlton, WAØPVN
Phone: 553-5983, Omaha

Ham Hum
Ak-Sar-Ben Radio Club
Omaha, Nebr.

Hi:

To build or not to build, that is the question.

Why do you want to build? To save money? To have a better rig than you can buy? Because others are said to be doing it, or have done it? Then skip it; learn to be a good operator, work nets.

Have you studied theory and want to see for yourself that you can make something work? Are you interested in starting with very simple circuits and perfecting, improving your technique, before trying something more complicated? Do you just love to tinker, fix, try something different? Do you want to understand why when something does not work? Try building, you may really enjoy it.

Most rewarding activities in amateur radio are having interests in operating a net or two, building or tinkering, especially some particular specialty of radio, club work, defense, or emergency communications, a particular band to meet old friends on. Keep your interest diversified to some extent beyond immersing yourself in just one activity and going stale.

Dayton

If you burn the candle at both ends you may not be as bright as you think!

- Ham Monitor

REPORT ON CODE AND THEORY CLASSES

By Ray Kydney, WAØWOT

The 1970 code and theory classes can be termed a success with at least six licenses upgraded. Those known to have passed are: Charles Kelly, WNØUZX; Jim Worth, WN2LYT/Ø; Pete Adwers, WNØYCV, passed general; Robert Serlet, WNØZPW, and Joe Braun, WNØBAA, passed general and advanced; and Ray Kydney, WAØWOT, passed advanced.

Don Trapp, WNØAOI, passed his first phone. Don must have been tired after that as he didn't attempt his general.

Six more from the class passed their general code test but stumbled on the theory. These were: Mike Wilczynski, KNØZKC; Don Henderson, WNØZKW; Jack Frans, Sr., WNØZJH; Gerry Frans, WNØZJG; Jack Frans, Jr., WNØZJI; and Dick VanWinkle, WAØSOW. Let's all hope they found their weak points and pass in July.

Two members of the class are on their way to the novice license, having passed their code portion so far. These are Dan C. Pettengill and Milo Nechvatal.

All members of the class extend their gratitude to the teachers who donated their time. Thanks to Bob Lockwood, WAØDHU, Bob Andrus, KØLUG, John Snyder, WØWRT, and Bryce Nelson, WAØTSO.

If anyone was left out here please let us know.

(Ed. Note: This is one of the few times when Ham Hum and the Ak-Sar-Ben Radio Club can congratulate

our members and friends for upgrading their license. We would like to congratulate all of you who upgrade or obtain a license but cannot do it unless you send in the information. For this type information or any other news, please use the card enclosed.)

NEWS NOTE

Hy-Gain Electronics Corporation has changed its mailing address to Rural Route 3, Lincoln, Nebraska 68505. The location will remain the same: 1135 North 22nd Street.

OFFICIAL BULLETIN NR 269 FROM ARRL HEADQUARTERS NEWINGTON CONN APRIL 16 1970 TO ALL RADIO AMATEURS BT

Once each year the League produces a comprehensive directory of all nets whose primary function is public service. Early this summer, work will begin on the Fall 1970 Net Directory. If your public service net has not been reregistered since July of 1969, it will be necessary to do so before July 1, 1970 to ensure listing in the coming edition. Remember that all public service nets are eligible for listing in this free directory and that the deadline for registration is July 1. Details for net registration are identical with those appearing on page 65 of May 1969 QST AR

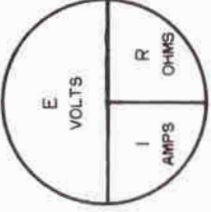
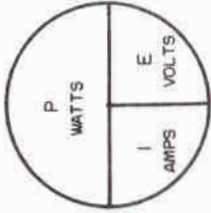
SERIES RESISTORS

$$R_T = R_1 + R_2 + R_3$$

PARALLEL RESISTORS

$$\frac{1}{R_T} = \frac{1}{R_1} + \frac{1}{R_2} + \frac{1}{R_3}$$

$$R_T = \frac{1}{\frac{1}{R_1} + \frac{1}{R_2} + \frac{1}{R_3}}$$



$$E = RI = E$$

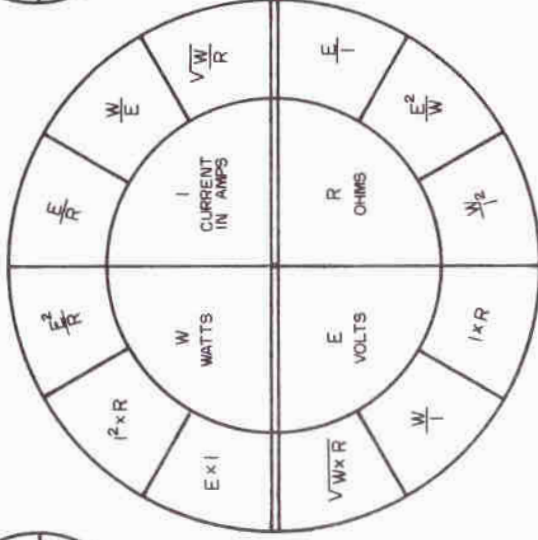
SERIES CONDENSERS

$$C_T = \frac{1}{\frac{1}{C_1} + \frac{1}{C_2} + \frac{1}{C_3}}$$

PARALLEL CONDENSERS

$$C_T = C_1 + C_2 + C_3$$

$$E = RI = E$$



This is a formula clock. To use it cover the unknown quantity in the inner circle with your thumb and use the known quantities to solve your problem. The formula for most of the problems that arise in the ham shack are shown on the formula wheel. Most problems involve only power (watts), resistance (ohms), electrical potential (volts) and current (amperes), or a combination of all of these.

To use this way of finding the formula: place your thumb over the unknown quantity and solve for the known quantities. Remembering the spellings, ERIE, will automatically give you a method of finding Ohm's law for simple mathematical equations. ($E = RI = E$)

A simple relationship known as Ohm's law exists between the voltage, current and resistance in electrical circuits. The student should become thoroughly familiar with all three forms of Ohm's law, since it is very useful in determining the voltage, current, or resistance in an electrical circuit. When any two of these values are known, the third can easily be found.

Ohm's law simply states that the current flowing in a circuit is equal to the voltage applied to the circuit divided by the resistance.

$$I \text{ (amperes)} = \frac{E \text{ (volts)}}{R \text{ (ohms)}}$$

This is the form that is used when the applied voltage in the circuit and the resistance of the circuit are both known, and the value of the current flowing in the circuit is wanted.

Example: What is the current flowing in a circuit if 500 volts are applied to a circuit which has a resistance of 5,000 ohms? Using our formula wheel, place your thumb over the I and solve the two known quantities.

$$I = \frac{E}{R} = \frac{500}{5,000} = .1 \text{ ampere or } 100 \text{ ma.}$$

If the current and the resistance of a circuit are known, the voltage applied to the circuit can be found by placing the thumb on the E on the formula wheel, then: voltage E equals the current I times the resistance R. $E = I \times R$ or simply: $E = IR$.

If the values of the current and the voltage are known, the resistance of the circuit can be found by placing the thumb on the R on the formula wheel, then: resistance R equals the voltage E divided by the current I. $R = \frac{E \text{ volts}}{I \text{ amps}}$

The power dissipated in a circuit can be found by placing the thumb over the W on the formula wheel and solving with the equation of the two known quantities. The amount of power dissipated by a resistor can be calculated by using any of two known quantities, such as resistance, current or voltage drop. A factor of at least two (twice the power dissipation) should be used as a safety measure.

The total resistance of several resistors connected in series is equal to the sum of the resistances of the individual resistors.

$$R_T \text{ (total)} = R_1 + R_2 + R_3$$

The total resistance of several resistors in parallel will be equal to the sum of the reciprocals of the individual resistors.

$$\frac{1}{R_T} = \frac{1}{R_1} + \frac{1}{R_2} + \frac{1}{R_3}$$

If the several resistors are of equal resistance then the formula is much simpler. The total resistance of several resistors of equal value will equal the value of one resistor divided by the number of resistors.

The total resistor value of a parallel connected branch is always smaller than the smallest resistor value in the branch.

(Ed Note: I have had this in my file for so many years that the copy is yellow with age, so do not know to whom credit should be given.)

FOR SALE

1 - Galaxy GT 550 with AC Power Supply	\$450.00
(Used 3½ months)	
1 - Turner Dynamic Mike (Model SR90R-5)	15.00
1 - Astatic Mike with Stand (Model 10-D)	20.00
1 - Jackson Tube Tester (Model 648-1)	120.00
(Used 2½ years)	
Hustler Mobile Antennas	
1 - New RM-20-S 20 Meter Resonator	11.00
1 - New RM-40-S 40 Meter Resonator	14.00
1 - Used RM-75-S 75 Meter Resonator	15.00
1 - MO-1 Fold-over Mast	5.50
(All in their shipping tubes)	
Bound QST 1960 through 1966	
Unbound QST 1967 through current issue	
Unbound CQ 1962 through current issue with Jan.	
& Sept. 1962 and March 1965 missing.	
Ham Radio June 1968 through current issue.	

Best offer accepted on the above magazines. Shipping charges extra on all items.

From the Ham Shack of Silent Key KØWFG (Scottie)

Direct inquiries to: Mrs. G. E. Scott
2015 Beverly Blvd.
North Platte, Nebr. 69101

**OFFICIAL BULLETIN NR 270
FROM ARRL HEADQUAR-
TERS NEWINGTON CONN
APRIL 23 1970 TO ALL
RADIO AMATEURS BT**

Effective April 26 W1AW will change to Eastern Daylight Saving Time. The full operating schedule for the summer months appears in May QST. Newly revised copies of the printed information will shortly be available without charge from ARRL, 225 Main Street, Newington, Connecticut 06111. Please enclose an 10

addressed stamped envelope to expedite your request. The ARRL National Traffic System will, as usual, operate one hour earlier by GMT effective 2300 GMT April 26 AR

FOR SALE

Galaxy V Transceiver)
AC-35 Power Supply) \$200.00
VOX and Calibrator)
Call Chuck, WØNGG, at
291-0237 after 5:00 P.M.

Reflected and Directed

George H. Goldstone, W8AP
1010 Burnham Road
Bloomfield Hills, MI 48013

AFTER THE BALL WAS OVER... MOANS AND GROANS

If there was ever a proceeding before the FCC when everybody — and we mean EVERYBODY was given a chance to speak up, to file a comment, and generally to get his two cents worth in, it was Docket Proceeding 15928. The Commission had started out years before with a Notice of Inquiry, seeking means of enhancing the Extra Class License. Everyone had a chance to make suggestions — and a great many did. The majority of hams filing comment in that proceeding stated to the Commission that the proper incentive to push amateurs up to the Extra Class was exclusive frequency privileges, such as had existed before Docket 10173's effective date of February 18, 1953.

When a series of "incentive petitioners" was filed, including not just one from ARRL in October 1963, but petitions from many other amateurs, the Commission took not only Months, but YEARS to come up with a proposal, as set forth in Docket 15928. Comments on Docket 15928 were solicited, and MORE AMATEURS FILED COMMENT than had ever been received by the Commission on any proposal; a response from over 4,000 licensees!

The FCC could not please everybody. No right-minded person

expects them to. What the Commission did was not entirely pleasing to this writer, who has never felt that radio-telegraph excellence should be demonstrated to obtain radio-telephone privileges, and vice versa. But NO ONE was put off the air; NO ONE was evicted from any band (except Novice Phone Operators); and the door to every last kilohertz (ugh!) remains open to anyone who demonstrates his ability.

Now that Phase II of the Incentive Plan has gone into effect, we hear moans and groans from an expected quarter. A Conditional Class operator in West Point, Mississippi (only 140 miles from Memphis — an FCC examining point) is urging everyone who "doesn't believe in segregation of the amateur bands" to send a stock post card to an address in Oklahoma, where they will apparently be bundled up to deliver to some Congressman. Two Conditional Class licensees in Michigan were heard leading the pack on one Michigan net on 3935 KHz. While a General Class Licensee need not take the 13 WPM code test over again in order to take the Advanced Class exam, the Conditional Class Licensee MUST DO SO! All of which explains why Conditional Class licensees, who have never been eye to eye with a live FCC examiner, are against the form of incentive licensing which would make them prove they have the qualification of their license. It looks as though that cheap shoe — the Conditional Class license — is beginning to pinch some of the feet that wear it.

W8AP
de Ham Monitor

STATION	MILITARY FREQUENCY KHZ unless other- wise noted	EMISSION	APPROPRIATE AMATEUR BAND (MHZ)
WAR (Army Radio sh., D.C.)	4001.5	CW	3.5 - 3.65
	4020	CW	3.65 - 3.8
	6992.5	CW	7.0 - 7.1
	7325	CW	7.1 - 7.2
	14405	CW	14.0 - 14.2
NSS (Naval Communication Station Wash., D.C.)	*3385	CW	3.5 - 3.65
	4012.5	RATT	3.65 - 3.8
	*4040	LSB	3.8 - 4.0
	6970	LSB	7.2 - 7.25
	**7301	CW	7.1 - 7.2
	**7336	LSB	7.25 - 7.3
	7380	RATT	7.0 - 7.2
	7385	CW	7.0 - 7.1
	13940	RATT	14.0 - 14.1
	14385	USB	14.2 - 14.35
	14400	CW	14.0 - 14.2
	21500	CW	21.0 - 21.25
	***49.692 MHZ	AM	50.1 - 54.0
***143.820 MHZ	AM	144.0 - 145.5	
***150.090 MHZ	FM	144.0 - 147.9	

*To be operated from 16/2200 GMT to 17/0245 GMT.

**To be operated from 16/1400 GMT to 16/2200 GMT.

***Provided it is consistent with operational and training commitments, this frequency will be keyed from a U.S. Navy aircraft flying between Washington, D.C., and Brunswick, Maine, between 16/1200 GMT and 16/1430 GMT. The aircraft will depart Brunswick, Maine at 16/1730 GMT and fly westerly to Akron, Ohio, southerly to Morgantown, West Virginia, and return to Washington, D.C. at approximately 16/2100 GMT. The call sign NSSAM will be utilized from the aircraft.

NPG (Naval Communication Station, San Francisco, Calif.)	4001.5	LSB	3.8 - 4.0
	4005	CW	3.5 - 3.65
	4016.5	RATT	3.65 - 3.8
	7301.5	LSB	7.2 - 7.3
	7347.5	RATT	7.0 - 7.2
	7365	CW	7.0 - 7.1
	7495	CW	7.1 - 7.2
13922.5	RATT	14.0 - 14.1	

STATION	MILITARY FREQUENCY KHZ unless other- wise noted	EMISSION	APPROPRIATE AMATEUR BAND (MHZ)
NPG (Naval Communication Station, San Francisco, Calif.) continued	13975.5 14356 14375 20954.5 21600 # 143.700 ## 148.410	CW USB CW CW USB AM FM	14.0 - 14.1 14.2 - 14.35 14.1 - 14.2 21.0 - 21.25 21.25 - 21.45 144 - 148 144 - 148

Provided it is consistent with operational and training commitments, this frequency will be keyed from a U.S. Navy aircraft flying between San Diego, California, and Seattle, Washington during the major portion of the time allotted for military to amateur crossband contacts. The call sign NPGAM will be utilized on the aircraft.

To be operated from Mt. Diablo

AIR (Air Force Radio Wash., D.C.)	3347 4025 6997.5 7305 7315 13995 14397 20994	CW LSB CW LSB RATT CW USB CW	3.5 - 3.8 3.8 - 4.0 7.0 - 7.2 7.2 - 7.3 7.0 - 7.2 14.0 - 14.2 14.2 - 14.35 21.0 - 21.1
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(Ed Note: With reference to the CW Receiving Contest and the RTTY Receiving Contest, information regarding times and frequencies will be sent by Ham Hum to those requesting it.)

GOOD OLD DAYS BEST?

How many times do you hear a Ham identify by saying "W4XXX, W4ZZZ?" Now, when the boys at Powder Springs hear this, they undoubtedly cringe. The regulations say that there are only two ways to I.D. One is to say "W4XXX this is W4ZZZ"; the other is to say "W4XXX from W4ZZZ." No other form is legal. Considering how prevalent this habit

is, one can only assume that this is one more bit of evidence that the fellows at Powder Springs are superhuman, for they must be extremely forgiving, and "To Err is human, but to forgive is Divine."

The new Regulations have some good features (bet that surprises opponents of incentive licensing). For one thing, it's legal now that if you're

Great NEW Values from World Radio!

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THE BEAUTIFUL NEW Duo Bander "II" TRANSCEIVER

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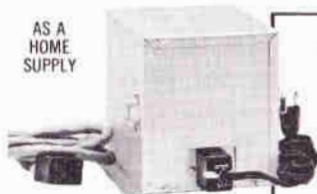
\$169⁹⁵

Use your BankAmericard
or Master Charge

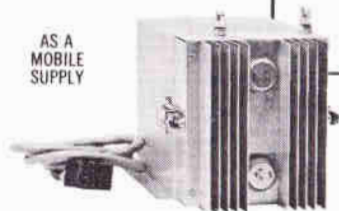
LOOK AT THESE FEATURES: Up to 400 watts • PEP/SSB • 2 Kc Calibration • Solid State VFO • Covers LSB on 3.8-4 and 7.1-7.3 MHz • Sharp 2.7 kHz Crystal Filter • New, husky 6LB6 tubes in the final to a Pi-network • "S" and RFO Metering • E-Z one knob tuning.

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SUPPLY



AS A
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The all-new "Duo-Power 300" Supply is ideal for the man using the rig as Fixed-Mobile-Portable at the least cost. Use as a complete 12VDC mobile supply or unsnap the transistor module end and use it for a 115VAC home supply. Approx. 5½" x 6¾" x 9½" (HWD). Weight 18.5 lbs.

Buy 'em together—SAVE \$20! (Order Package ZZM189)

You get the DUO-BANDER II and DUO-POWER 300 Both for \$299.90!

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