

W8AXV, Joseph H. Pitzer, Cleveland, Ohio (9th Naval District)
W4RO, R. F. King, Morristown, Tennessee (8th Naval District)
W5BMI, E. F. Henning, Little Rock, Arkansas (8th Naval District)
W9EOP, Paul E. Smay, Merrill, Iowa (9th Naval District)
W2JE, A. J. Gironda, on board S. S. *Panaman* (Att. to 11th Naval District)
W6CLY, P. Bertelli, San Pedro, California (11th Naval District)
W9ERU, Eugene A. Hubbell, Rockford, Illinois (9th Naval District)
W9DXY, Porter H. Quinby, Omaha, Nebraska (9th Naval District)
W9EYH, Walter W. Wallace, Milwaukee, Wisconsin (9th Naval District)
W8PKY, E. O. Seiler, East Bloomfield, New York (3rd Naval District)
W9GBN, Alfred Monkkonen, Crosby, Minnesota (9th Naval District)
W8EGX, Clayton F. Howe, Alamo, Michigan (9th Naval District)
W9CFL, A. W. Hodge, Kansas City, Missouri (9th Naval District)
W9GAD, R. C. Hunt, Kansas City, Missouri (9th Naval District)
W1CU, Ralph J. Renton, Quincy, Massachusetts (1st Naval District)
W4BG/EZ, C. F. Clark, Jacksonville, Florida (7th Naval District)
W7ANU, Boyd Wolf, Oakridge, Oregon (13th Naval District)
W3ZD, Roy C. Corderman, Chevy Chase, Maryland (5th Naval District)
W3ADE, Lewis E. Elicker, Jr., Penbrook, Pennsylvania (4th Naval District)
W7JY, Warren L. Green, Grangeville, Idaho (13th Naval District)
W4BRG, Robert C. Cheek, Savannah, Georgia (6th Naval District)
W2EWG, Frederick Best, Dunellen, New Jersey (3rd Naval District)
—, Frank J. Czenkus, Inverness, California (12th Naval District)
W3QP, Jack Morgan, Philadelphia, Pennsylvania (4th Naval District)

The remaining 371 participants on the Honor Roll follow. They are classified by Naval Districts and are listed under their respective districts in the order of rating. Where calls are connected by dashes, it indicates that those participants have equal ratings and are listed in a group, alphabetically:

First Naval District: W1QX W1DVJ W1APK W3CBF/W1OR W1DFQ W1AXS-W1ZI W1ATF W1BVR W1BOF W1BEU-W1EWP W1DGH W1FDS W1WV W1GHB W1EMR-W1HHR. *Third Naval District:* W8ABX W1AVS W8DMJ W2FNG W2AUP W2BJX W8AOZ W8BGN W1DOV-W2DFU W2GAK W2BYO W2APO-W2DIJ W2FDS W2CBN W8WB W2EJK W2DBQ W8BAL-W8PU W2AIQ Harry E. Seales W2CUH W2AA W2EQL W3KA W2BII. *Fourth Naval District:* W3UT W8ETQ W3AR

W8KPG W8FKU W8EJG W3DRO W3ANZ W3DIA W3AKB W3QL W3BOP W3BPN W3CL W3CAP W3AKC W3AAV W3BGD W3C1M. *Fifth Naval District:* W3CTD W1ART/W3AR W4GW W3BTJ-W3CYV W4BLT W3CDG W3AWS W8JM W3CJT Donald McClenon W4DW W4CGH W4AMK W4BRT. *Sixth Naval District:* W4DL-W4W W4AAR W4CFD W4AAY W4BBR W4CMA. *Seventh Naval District:* Joseph B. Kuehl W4HC Julian T. Webber W4APY W4AEM W4AKV W4HZ W4BSJ W4DZ W4CCC W4AGR Donald H. Reed W4OY W4BUR W4AZV. *Eighth Naval District:* W5TR W5RF W5IQ W5PF W5JA W5CT W5NO/W4UW W4AIL W4AUA W4CV W5ADH W4AIH-W4ASV-James M. McCoy-W5AAD-W5ARZ W5DAL W5CY W2FRX/WYB W5BOE W5CYO. *Ninth Naval District:* W9BLG W9BIS-W9GHI-W9GSF-Clifford I. Melloh W9DXV-W9GGB-W9IPF E. J. Jacobson W9AHH-W9DGS-W9FNQ W9KJE W9BCA-W9CER-W9CGP-W9GMQ-W9KX W9SO W9JDN-W9JSG-C. M. Howard-John V. Nyderer W9DFA-W9DUO-W9KC-W9PB W9DOE-W9FFD-Delmar Sage W8EBY W8DED W9FYX-W9JAF-W9LZ-R. J. McMahan/W9YB W9DI W8BDH W9EQV W9BFD-W9HKL W8AND-W8CMY-W9BNL-W9BXT-W9DAI-W9DEA-W9FBX-W9GFS-W9LNI-W9UZ W9HUX W9FCO W9AQL-J. R. Cadge W9IQZ W9OMW G. Lloyd Tucker W9FOQ W9DTK-Ray L. Martin W9EVQ W8HGF-W8SS-W9CCQ-W9IWI W9FYB-W9FYC W9PCC W9LEO W9DRM W9LGA W9EFH-W9EMN W9CZC W9LLD W9LGR W9HBK Marion R. Longworth W8DYR W8BAH-W9KFQ W9FZX W9DGR W9AUH W8HS W9GEN W9IKE W9GJH W9NSX/W9HEZ W9DEB W9CWG W9COA W8CJZ W9AIR W9KDO W9ANB W9JZJ W8KHY W9GPL Frank Guednick W8BKM Anton J. Repesh W8DTF-W8KMT W9ENQ-W9JAR W8JUQ W9ANV-W9CWM-W9IEP-W9ANT W9ECE-W9GNU W8BGY/Babcock W9ETM-W9KJY W9IHO W8BT-W9ACU-W9AON-W9LIV W9AET-W9FWW W9DAE-W9LHV-L. J. Larkin-John C. Mead W9DKL-W9HPP-W9HUV W9CTZ W9DJA W8UW-W9DNY W8AYO-W8DNN-W8EJ-Roy S. Skaggs-W9BHH W9EIV W9AFZ-W9IMI-H. A. Penhollow W8GTN-W9BCP W9AM-W9ILH-W9MXN-H. E. Wilcox W8CGP-W9LHQ-W9UW W9EDK-W9ESE-W9CJH W9IQW W8FVP-W9AND-W9LLV-Roy S. Herald W9MTO W8KC W8ASL Wilbur J. Tabor W9OSZ W9EWO W9DBO-W9FKI Bernard T. Wilkens W9AYO W9HNV W9JSO-W9KUT W8EDY W9FCF W9FKH W9LQW W9KMU W8GSP W9AIJ W9KJC Joe Selk W8IFQ W8BON. *Eleventh Naval District:* W6BP W6ERC W6EZZ W6CBK W6FGT W6CBY W6FXL W8AAX-W6WQ-W6WV W6FJK W6BXV W6AHP-W6FTV-R. M. Hansen aboard S. S. *Nebraska* W6GZU W6DBF

(Continued on page 45)

The 830-B—A New Tube for Class-B Service

DIFFERING from other triode tubes of the "50-watt" class in that it has been developed specifically for Class-B audio, the Sylvania 830-B particularly recognizes the special conditions met with in this work: the need of ample emission, adequate insulation, an approximately straight-line relation of plate current to grid voltage, and the somewhat contradictory requirements of moderate plate impedance and high voltage amplification constant. Like all other air-cooled Sylvania transmitting tubes it has a graphite anode.

Except for the plate connection on top, the tube is identical with the 830 in appearance. The base is of the usual medium 4-pin type, made of Isolantite. The plate lead is brought out at the

(Continued on page 79)

The 830-B—A New Tube for Class-B Service

(Continued from page 59)

top, the grid and filament through the base. The simple internal structure is based on substantial lavite insulators. A clear bulb is used because of the choice of materials and their treatment during manufacture. This facilitates inspection, also observation during operation.

Preliminary ratings for Class-B amplifier or modulator operation are as follows:

Filament: 2.15 amperes at 10 volts.

Plate: 1000 volts normal. Average plate current per pair at max. (190 watts) output, 280-ma. Maximum efficiency under proper conditions, 68%. Max. plate dissipation, approximately 60 watts per tube.

Grid: Bias voltage, —33. Rectified grid current per pair at full load, 36 ma. 8 driver watts required per pair (225 volts r.m.s. a.c. between grids).

Optimum load resistance: 10,000 ohms, plate to plate, for two tubes.

Plate resistance, 8000 ohms. Amplification factor (μ), 30.

The following driver and input transformer combination are suggested:

Class-A Push-Pull Tubes (2)

2A3 (recommended)

45

10

59 (recommended)

Class-B Input Trans.

Turns Ratio

1/1.4

1/1.4

1/1

2/1 or 3/1

The outstanding operating feature of the 830-B is ability to furnish 190 watts of audio output per pair, with modest requirements as to tube cost, bias voltage and driving power. While 1000-volt operation has been stressed, the tube may be operated to advantage at lower voltages, the 600-volt performance being proportionate. At the lower voltage it may be compared with the Type 10 and will be found to have advantages over it, from every viewpoint.

Since the use of a graphite plate removes plate-color as a criterion of overloading, an amplifier or modulator using 830-B tubes must be operated with proper conditions as shown by the associated d.c. meters indicating plate and grid current, and preferably also by a high-resistance a.c. grid-to-grid voltmeter (0–300 rectifier type), all of which should be left permanently in circuit.

—J. J. L.

Strays

Bakelite caps from toothpaste and similar tubes make good insulating bushings for metal panels. Just bore a hole in the center large enough to pass the wire.

—W3AAJ

Alden Products Company has a new catalog which gives a very complete socket layout chart and contains useful information on modernizing obsolete tube checkers and set analyzers. Copies will be sent on request if addressed to the firm at 715 Center St., Brockton, Mass.

W1AMG focuses a 50-watt desk lamp on his right hand to keep it warmed up for DX these cold mornings!

THE FLORIST SAYS "SAY IT WITH
FLOWERS"—AND IF QST HAD A
SWEETIE IT WOULD YELL

"SAY IT
WITH BINDERS!"



QST BINDERS

Priced at

\$1.50 postpaid

AMERICAN RADIO RELAY LEAGUE
WEST HARTFORD, CONN.