A NEW VOICE FOR "PITC"— PITCAIRN ISLAND

By LEW BELLEM • W1BES
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PITCAIRN — that tiny island in the South Seas—is steeped in an atmosphere of romanticism and adventure. It was here, in 1790, that the small band of mutineers from His Majesty's Ship *Bounty* sought refuge from the ire of the British Crown. Edward Young, a midshipman on the *Bounty* was one of the nine Englishmen who sailed away from Tahiti in 1789 and eventually settled on Pitcairn Island.

Andrew Young . . .

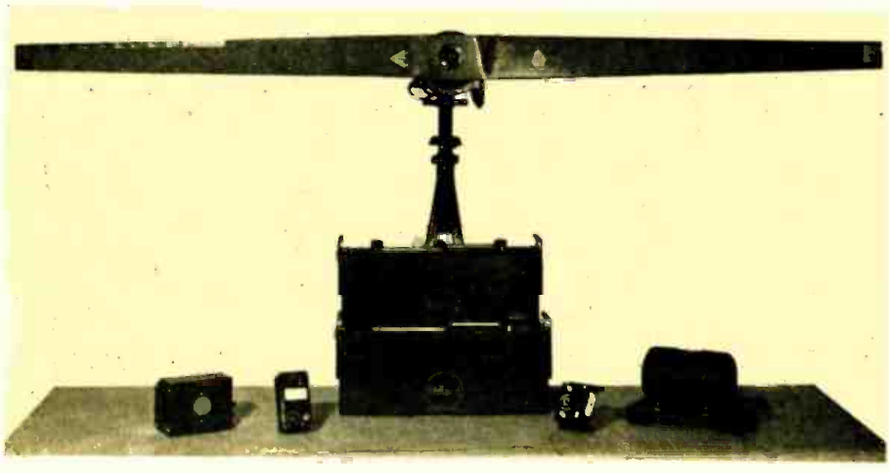
One hundred and twenty years later found one Andrew Young, a direct descendent of the colorful midshipman, living on the same island where most things remain much the same as they were when the men from the *Bounty* first set foot on the rockbound shores.

Last year Alan Eurich, W8IGQ, then radio operator aboard the Schooner *Yankee*, visited Pitcairn and met Andrew Young. He was shown what few people have seen—the island radio station, PITC.

Unversed in the mysteries of radio, and having only the crudest equipment on hand, Andrew Young had still managed to contrive a radio transmitter and receiver with which he was able to contact the few ships that occasionally passed his remote island community. In Andrew Young, Eurich recognized the true amateur spirit.

Eurich's story of Andrew Young and his pitiful "PITC" was responsible for the plan to assist the natives of Pitcairn that they might in the future have adequate and foolproof communication facilities at their disposal. The idea was enthusiastically received by all manufacturers who were contacted, and without exception they agreed to donate the equipment and components required for a complete installation.

Carl Madsen, W1ZB, who had maintained contact with Eurich aboard the *Yankee* throughout her world cruise, apprised him of the project under way. As a consequence W8IGQ was able to provide a complete report on conditions on the island and offer suggestions regarding the design and selection of satisfactory equipment. He stressed the importance, for instance, of high-grade insulation, since the salt air enveloping Pitcairn had demonstrated its bad effects on usual forms of insulation. He also reported that no source of primary power was available.



Source of primary power—the windcharger, the two 6-volt storage batteries and the dynamotors for providing the high voltages. Also shown is a small test set for trouble shooting.

The Plan Takes Shape

It was decided at the outset that storage batteries and a wind-driven generator for charging purposes would be the only practical source of power for the operation of the transmitter and receiver. Storage batteries of large capacity were selected to take care of heavy loads and at the same time provide suf-

ficient reserve during periods of low wind velocity. Since both transmitter and receiver would have to operate entirely from this power source, dynamotors were selected to provide plate power.

The next point considered was the wavelengths on which the transmitter should operate. Since communication with passing ships was an essential, it was decided to include means for tuning to 600 meters. The 20- and 40-meter amateur bands were chosen for long-distance work, and provisions were made for phone work in these two bands. A receiver was selected that covered all three of these wavelengths and had sufficient sensitivity, selectivity and bandspread to meet all conditions that might be encountered.

In both the design and selection of the equipment it was necessary to keep in mind at all times that it be conservative of battery drain, as well as simple and foolproof as possible from the standpoint of connecting and operating, since Andrew Young has had no experience with tube transmitters.

Power Source

A 12-volt battery system was chosen to minimize IR drop in the feed lines. This consisted of two Willard 6-volt, 300-ampere-hour batteries connected in series. A Parris-Dunn 12-volt windcharger was obtainied to supply the battery charging current. This outfit provides an 8-ampere charging rate in a 20-mile wind. There is a cut-out which disconnects the batteries when the wind velocity falls below 6 miles per hour. This prevents the batteries from discharging through the line when the charging rate is too low. The windcharger is mounted on a 12-foot steel tower which will permit Young to get the 8-foot impeller well above ground and in favorable wind stream. Since the storage batteries will provide the desirable reserve power for 8 to 10 hours' operation in the event of lulls in wind velocity, it should be possible to operate both transmitter and receiver in excess of 10 hours a day without fear of power failure.

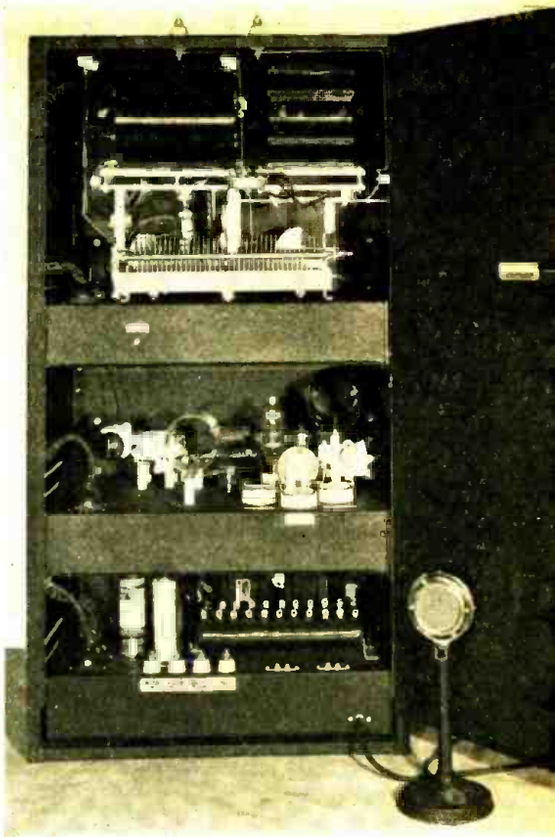
The Audio Channel

The transmitter consists of three separate chassis mounted in a Par-Metal 36-inch rack-and-panel cabinet, as shown in the accompanying front and rear views. The lower deck contains the speech amplifier and modulator, and a power distribution center for the 750-volt dynamotor and storage battery supply. The circuit of this unit is shown in Fig. 1. A Shure Model 70S crystal mike feeds a 6J7 tube resistance-coupled to a 6C5 which in turn is transformer-coupled to 6C5 push-pull drivers for the 6L6 modulator tubes.

Obtaining maximum performance from these tubes was quite a problem since they obtain their 450-volt plate supply from a bleeder network, and bias from the cathode resistor. It was learned that while poor voltage regulation was a stumbling block to the securing of a satisfactory level of a.f. output, the real hinderance was a variation in bias. This was minimized by returning the 6L6 grids to the negative battery lead and using a lower value of cathode bias resistor. This provided a fairly steady bias of 25 volts even when over-driving the amplifier.

Individual bleeder networks are provided in this unit, one for the a.f. channel and the other for the r.f. oscillator. In this manner voltage variations appearing across the a.f. bleeder, R10-R12, on modulation peaks cannot influence the oscillator voltage.

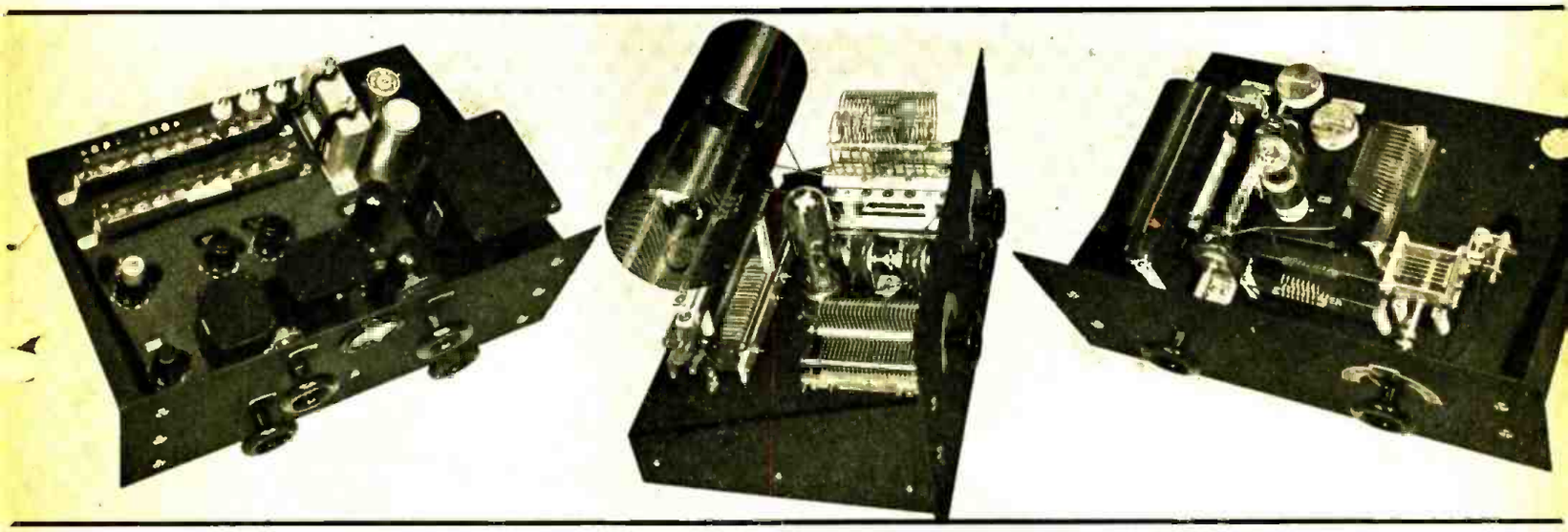
A three-position selector switch of the rotary type permits the choice of c.w. or phone operation. In the off positon all filaments in the transmitter are cold; in the c.w. position only the oscillator and final amplifier filaments are energized and the high-voltage supply to the a.f. bleeder is opened, thus reducing the load on the dynamotor. In the phone position the a.f. bleeder is connected to high voltage and the oscillator keying terminals are shorted, thus providing a continuous carrier.



Rear of transmitter cabinet, with door open, showing the three chassis shown separately below, and the microphone. The lower chassis is the power distribution and audio system.

The Crystal Oscillator

The central chassis carries the crystal-controlled oscillator. The circuit is shown



From left to right: power and audio chassis, the final amplifier chassis and the crystal-controlled oscillator chassis.

in Fig. 2. This employs an RCA-807 with cathode regeneration to provide adequate drive on all bands for high-level modulation. Three Bliley type VP4 crystals are employed, one each for the 20, 40 and 600-meter bands.

The selection of any one crystal and its associated tank inductor is taken care of by means of the ganged Ohmite band switches, SW1-SW2. The 50-mmfd. tank condenser, C5, is connected from the plate of the 807 to ground so that it is in circuit on all three bands irrespective of the band-switch setting. On 600 meters, however, a 150-mmfd. condenser, C6, equipped with a locking device, is shunted across the tank coil, being automatically picked up by the band switch. The 50-mmfd. condenser is brought out to a front-of-panel control for tuning on 20 and 40 meters, and provides sufficient capacity to induce resonance on 600 meters at which wavelength it parallels the 150-mmfd. condenser.

The Final Stage

The uppermost chassis in the transmitter cabinet accommodates the final amplifier stage. The circuit is shown in Fig. 3. An Amperex ZB-120 was chosen because of its very high mu and consequent low bias and driving requirements. It will be noted from this diagram that the 600-meter circuit is capacity loaded in the same manner as the identical circuit in the crystal oscillator.

Provision was made in the 20- and 40-meter bands for individual doublet antennas. Both tanks have internal variable link coils terminating in Alsimag 196 bushings arranged along the top of the transmitter cabinet. Two half-wave doublets cut to proper length for each band, with 75-foot lengths of Bassett concentric cable permanently attached, are included ready for connection to their respective terminals. The 600-meter output is designed to feed a Marconi antenna by means of a shunt-tuned antenna pick-up coil, L4, coupling between this coil and L3 being varied by loosening two wing nuts and sliding the antenna coil mounting. A Triplett Model 341 r.f. meter on the upper panel indicates antenna resonance, the external thermocouple being located in the antenna lead at the rear of the chassis.

All essential circuits are wired to the upper panel which carries the five Triplett meters. They indicate the 807 plate current, filament voltage, antenna current on the 600-meter band, the ZB-120 filament voltage and plate current. The filament voltage for the 807 and ZB-120 is controlled by the rheostats, R15-R16, located on the power chassis, a red line on each voltmeter scale indicating the proper operating voltage. No series resistance was required in conjunction with the 6.3-volt a.f. tubes since they are paired up and wired in series-parallel across the 12-volt battery supply. This reduces battery drain. The 2-inch meter on the bottom panel indicates the total current con-

AEROVOX
C1—0.1 mfd. paper
C2—10 mfd., 50 v. electrolytic
C3—4 mfd., 450 v. electrolytic
C4—4 mfd., 450 v. electrolytic
C5—10 mfd., 50 v. electrolytic
C6—10 mfd., 50 v. electrolytic
C7—25 mfd., 250 v. electrolytic
C8—8-8 mfd., 450 v. electrolytic
C9—4 mfd., 600 v. oil filled
C10—2 mfd., 2000 v. oil filled
C11—25 mfd., 250 v. electrolytic

IRC
R1—2 megs, 1 watt
R2—3,000 ohms, 1 watt
R3—100,000 ohms, 1 watt
R4—300,000 ohms, 1 watt
R5—20,000 ohms, 1 watt
R6—500,000-ohm gain control
R7—2000 ohms, 1 watt
R8—1000 ohms, 1 watt

KENYON
T1—Type T58 transformer
T2—Type T255 transformer
T3—Type T459 transformer

OHMITE
R9—200 ohms, 20 watts
R10—30,000 ohms, 200 watts
R11—30,000 ohms, 200 watts
R12—2500 ohms, 200 watts
R13—10,000 ohms, 200 watts
R14—25 ohms, 10 watts
R15—Model H rheostat, 2 ohms, 25 watts
R16—Model J rheostat, 2 ohms, 50 watts

PAR-METAL
1—15213 chassis
1—3604 panel

RCA
1—type 617 tube
3—type 6C5 tubes
2—type 6L6 tubes

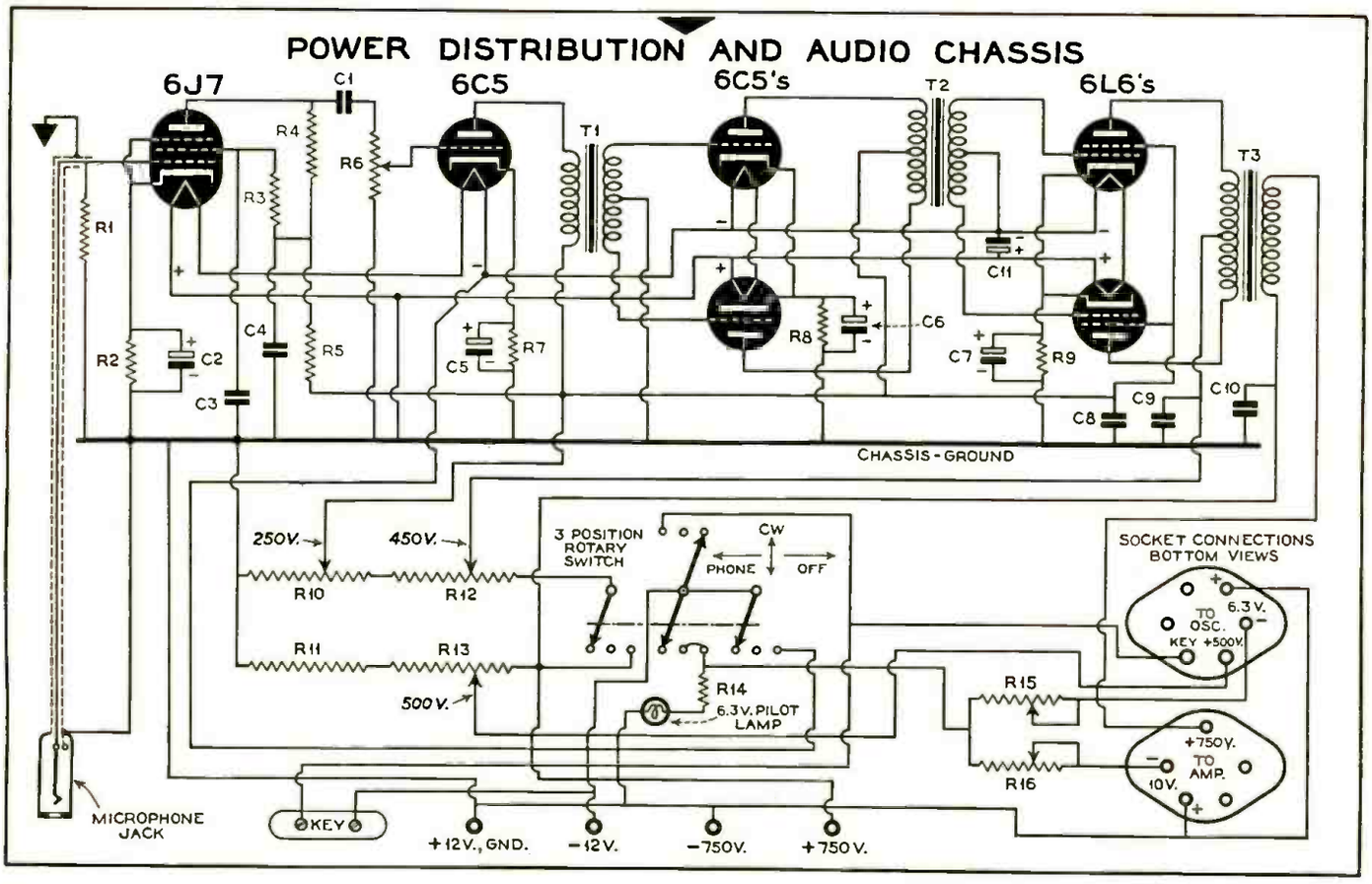


Fig. 1. Schematic diagram of the power distribution and audio chassis. Note manner in which bias is obtained for the 6L6 modulators.

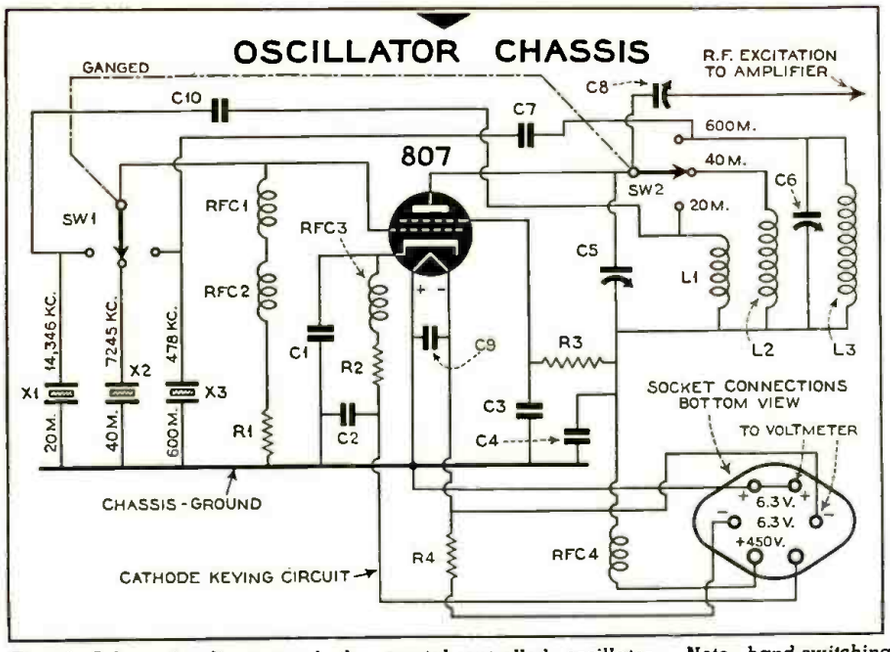


Fig. 2. Schematic diagram of the crystal-controlled oscillator. Note band-switching system for the three frequencies.

AEROVOX
C1—250 mmfd., 1000 v. mica
C2—25 mfd., 600 v. paper
C3—25 mfd., 600 v. paper
C4—.01 mfd., 1250 v. mica
C9—.25 mfd., 600 v. paper

BLILEY
X1—Type VP4 crystal, 20 meters
X2—Type VP4 crystal, 40 meters
X3—Type VP4 crystal, 600 meters

CARDWELL
C5—Type MT50GS variable, 50 mmfd.
C6—Type MT150GS variable, 150 mmfd.
C7—8 mmfd. midget padder (feedback)
C8—Type ZR25AS variable (coupling) 25 mmfd.
C10—Feedback condenser, 2 mmfd.

COTO
L1—20-meter inductor
L2—40-meter inductor
L3—600-meter inductor
RFC1—18 mh. r.f. choke
RFC2—2.5 mh. r.f. choke
RFC3—2.5 mh. r.f. choke
RFC4—2.5 mh. r.f. choke

OHMITE
R1—50,000 ohms, 20 watts
R2—750 ohms, 10 watts
R3—10,000 ohms, 20 watts
R4—5 ohms, 25 watts
SW1—Crystal selector switch
SW2—Inductor selector switch

PAR-METAL
1—15213 chassis
1—3604 panel

RCA
1—type 807 tube

sumed by the modulator while also serving as a check on percentage of modulation.

Outputs

With a total input of 250 ma. at 750 volts—the maximum output of the Pioneer dynamotor—this transmitter is capable of a measured carrier output of 60 watts fully modulated. The filament-heating current consumed when all tubes are energized for phone operation is 4.1 amperes, while the dynamotor draws a total of 28 amperes under these conditions. Due to a saving of 100 ma. when the modulator is cut for for c.w. operation, the output may be raised to 80 watts by tightening the link coupling to the feeder.

In view of Eurich's reports on island conditions, every precaution was taken in design, construction and choice of parts to preclude the possibility of breakdown. All resistors and fixed condensers were chosen to operate well below their ratings. Insulating materials were selected with great care. Mounting post insulators, bushings, terminals and inductor mountings are all made of Alsimag 196. The Cardwell variable condensers have Mycalex supports. Power circuits are carried to each successive deck by means of plugs and sockets, allowing each chassis to be pulled for repairs or check-up. All of the flexible wiring and cables have a specially treated, lacquer-coated wire since ordinary fabric-covered wire is often a source of trouble when exposed to moisture. Spare parts have been included to take care of any possible breakdown of the equipment.

The Receiver

As the Sargent model 11-MF receiver aboard the *Yankee* had proved highly satisfactory under adverse climatic conditions, a similar set was obtained for PITC. The choice was further justified by the fact that Andrew Young had the opportunity of operating the receiver during the *Yankee's* stay at Pitcairn. Accordingly, the model 11-MF battery-operated receiver, covering all frequencies from 30 mc. to 100 kc. was procured. This receiver, with a total of four tubes, has a stage of r.f. and adequate bandspread for all com-

(Continued on page 98)

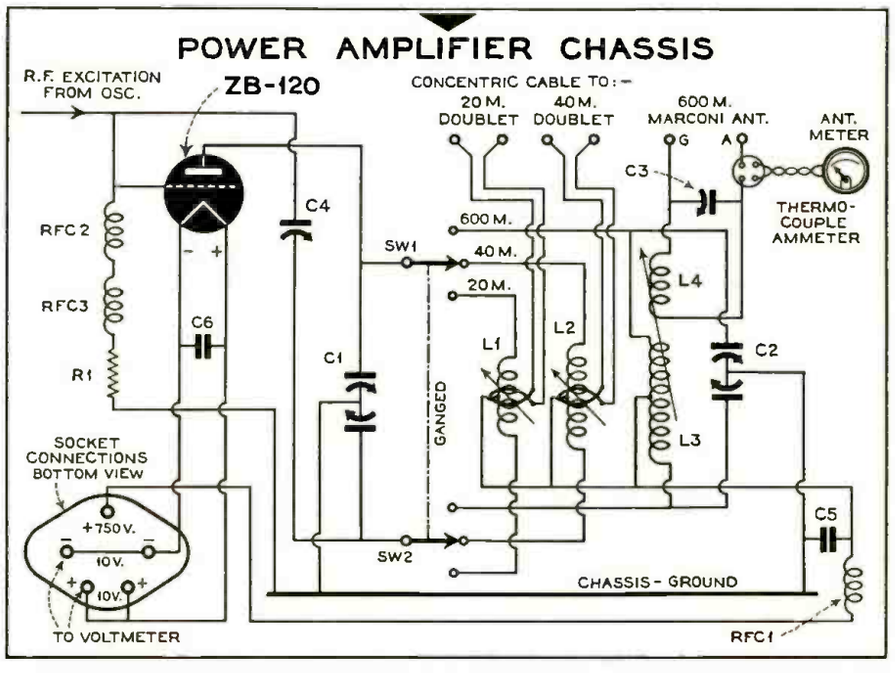


Fig. 3. Schematic diagram of the final amplifier using a ZB-120. Connections for three separate antennas are provided.

AEROVOX
C5—500 mmfd., 2500 v. mica
C6—.01 mfd., 1250 v. mica

AMPEREX
1—type ZB-120 tube

CARDWELL
C1—Type XG50KD split stator, 50 mmfd.
C2—Type XP325KD split stator, 325 mmfd.
C3—Type XT440PS single section, 440 mmfd.
C4—Type NA14NS neutralizing, 5-14 mmfd.

COTO
L1—Type 20BTVL tank inductor
L2—Type 40BTVL tank inductor
L3—Special tank inductor, 600 meters
L4—Special antenna inductor, 600 meters
RFC1—Type CI12 r.f. choke, 2.2 mh.
RFC2—18 mh. r.f. choke
RFC3—Type CI11 r.f. choke, 2.5 mh.

OHMITE
R1—2500 ohms, 20 watts
SW1—Inductor bandswitch
SW2—Inductor bandswitch

PAR-METAL
1—15213 chassis
1—3606 panel
1—MP-53 meter panel
1—SC3513 cabinet (for entire transmitter)

6.010 49.92	CJCX	Eastern Broadcasters, Ltd., Radio Bldg., Sydney, N. S., Canada. Irregular.
6.010 49.92	OLR2A	Prague, Czechoslovakia (see 21.450 mc. Irregular (see 15.230-11.840-15.230 mc.)
6.007 49.94	ZRH	Roberts Heights, South Africa (see ZRJ 6.097.5 mc.) Weekdays 10 a.m.-4 p.m., Sat. to 4:45 p.m., Sundays 10:30 a.m.-12 noon, 12:15-3:15 p.m.
6.007 49.94	Radio Burma	Burma Independent Wireless, Rangoon, Burma C: God Save the King. Daily 9:10-9:40 a.m.
6.005 49.96	HP5K	P.O. Box 33, Colon, Panama, C.A. S: 3 chimes, ea. 15 m. O-C: Merry Widow Waltz. Daily exc. Sun. 7-9 a.m.; 11:30 a.m.-1 p.m.; 6-11 p.m. Sun. 10 a.m.-12 a.m.
6.005 49.96	CFCX	P.O. Box 1690, Montreal, Quebec, Canada. Weekdays 7:44 a.m.-1 a.m. Sundays 9 a.m.-11:15 p.m.
6.005 49.96	VE9DN	Montreal, Quebec, Canada (see CFCX, 6.005 mc.) Sat. 11 p.m.-12 a.m. Fall, winter and spring.
6.000 50.00	CXA2	Rio Negro, Montevideo, Uruguay, S.A. O: Voluntary Trumpeter. C: Good Night Melody. Daily 10:30 a.m.-10:30 p.m.
6.000 50.00	XEBT	P.O. Box 79-44 Mexico, D.F. I: 3 blasts on cookoo horn. Siren near closing. O: Las Mananitas. C: Lieberstraum. Daily 10 a.m.-12:15 a.m.
6.000 50.00	FIQA	Director of Posts and Telegraphs Tananarive, Madagascar. Daily 12:30-12:45 a.m.; 3:30-4:30 a.m.; 10-11 a.m.
6.000 50.00 ◆	RV59	Moscow, U.S.S.R. (see RKI, 15.040 mc.) No I.R.C. required.
5.977 50.19	Radio Renascenca	Rua Capelo, 5, Lisbon, Portugal, OC: Our Lady of Fatima. I: none. Daily 2:30-4:30 p.m. Sunday and Thursday 6-7 a.m.
5.970 50.25	OAX4P	Cuzco 25, Huancayo, Peru, S. A. Daily 12-1 p.m., 9 p.m.-12:30 a.m.
5.969 50.26	HVJ	Vatican City (see 15.121 mc.) 2-2:15 p.m. Sun. 5-5:30 a.m.
5.955 50.35	HJN	Minister of Education Nacional, Bogota, Colombia. Daily 11 a.m.-2 p.m.; 5-10:30 p.m.
5.940 50.51	TG2X	De la Policia Nacional, Guatemala City, Guatemala, C.A. Daily 4-6 p.m. Mon., Thurs., Sat. 10-11:30 p.m. Sundays 1-2 p.m. No I.R.C. required.
5.930 50.59	PJCI	Curacaosche Radio Vereeniging, Willemstad, Curacao, N.W.I. O: Electrical gong, 4 strokes and repeat 5 mins. O-C: National anthem. Weekdays 6:36-8:36 p.m. Sun. 10:36 a.m.-12:36 p.m.
5.930 50.59	YVIRL	P.O. 247, Maracaibo, Venezuela, S.A. Weekdays 11 a.m.-1 p.m.; 4:30-9:30 p.m. Sun. 8:30 a.m., 2:30 p.m.
5.910 50.76	YV4RH	Valencia, Venezuela, S.A. Daily 8-11:30 p.m.
5.910 50.76	HH2S	Port-au-Prince, Haiti, W.I. (see 11.570 mc.) Daily 7-10 p.m.
5.905 50.80	TILS	P.O. Box No. 3, San Jose, Costa Rica, C.A. S: none. O: Washington and Lee Swing. C: Adios Mi Chapparrita. Weekdays 12-3 p.m.; 6-11 p.m. Sundays irregular.
5.900 50.84	ZNB	Government Engineer, Mafeking, South Africa. Mon. to Fri. 1-2:30 p.m. Sun. 1:30-2:30 p.m.
5.900 50.85	HJ4ABD	Medellin, Colombia, S.A. (see 6.138-5.780 mc.) Weekdays 10 a.m.-2 p.m.; 4-11 p.m. Sun. 11 a.m.-3 p.m.; 7-11 p.m. Veri slow.
5.885 50.98	HI9B	P.O. Box 95, Santiago de los Caballeros, Dom. Rep., W.I. O-C: Piano Solo—Vals Evocation. Weekdays 7:25-8:40 a.m.; 11:55 a.m.-2:10 p.m.; 4:55-7:40 p.m. Sundays 11:40 a.m.-2:40 p.m.
5.880 51.02	YV3RA	Barquisimeto, Venezuela (see YV3RB, 9.565 mc.) Daily 11:30 a.m.-12:30 p.m.; 5:30-9:30 p.m.
5.875 51.11	HRN	Tegucigalpa Honduras, C.A. C: Good Night Melody (Ted Lewis) Daily 7-10 p.m. Veris—10c U. S. cash. Veri slow.
5.865 51.15	HI1J	Apartado 204, San Pedro de Macoris, Dom. Rep., W.I. O-C: Waltz, Sweet Remembrance. English very seldom. S: none. Daily 11:40 a.m.-1:40 p.m.; 5:40-9:40 p.m.
5.850 51.28	YVIRB	P.O. Box 37, Marcaibo, Venezuela, S.A. English and Spanish. O-C: Strike Up The Band. Daily exc. Sun. 10:45 a.m.-12:45 p.m.; 4:45-9:45 p.m. Sun. 8:45 a.m.-9:45 p.m.; Mon., Wed., Fri. 5:45-8:15 a.m. Tues., Thurs., Sat. 5:45-9:45 a.m.
5.830 51.46	TIGPH	Apartado 800, San Jose, Costa Rica, C.A. C: Good Night Melody (Ted Lewis). Weekdays 8-11 p.m.
5.813 51.61	TIGPH-2	Apartado 800, San Jose, Costa Rica, C.A. C: Good Night Melody. Daily 7-11 p.m.
5.800 51.72	YV5RC	P.O. Box 2009, Caracas, Venezuela, S.A. I: 4 chimes. O-C: Official 1BB March. Bugles, whistles before closing. Sundays 8:30-11:30 a.m., 3:30-9:30 p.m. Weekdays 7-8 a.m., 10:30 a.m.-1:30 p.m., 3:45-10 p.m. (off Mondays 9:45 p.m.)
5.800 51.72	ZEC	P.O. Box 792, Salisbury, Rhodesia, South Africa. Sun., 3-5 a.m.; Tues. and Fri. 1:15-3:15 p.m.
5.780 51.90	OAX4D	All American Cables, Ltd., Casilla 2336, Lima, Peru, S.A. Signs on and off Morse code. No signals. English and Spanish. Wed., Sat. 9-11:30 p.m.
5.780 51.90	HJ4ABD	Medellin, Colombia, S.A. (see 6.138-5.900 mc.) Weekdays 10 a.m.-2 p.m.; 4-11 p.m. Sun. 11 a.m.-3 p.m.; 7-11 p.m. Veri slow.
5.758 52.10	YNDP	Radio Bayer, Managua, Nicaragua, C.A. Weekdays 8:30-10:30 p.m. Veri—5c U. S. Postage.
5.755 52.13	YV2RA	San Cristobal, Venezuela. English occasional and at closing. S: 6 strokes gong. O-C: March, El Capitan. Weekdays 11:30 a.m.-12:30 p.m.; 5:30-9 p.m. Sun. 5:30-10 p.m.
5.725 52.40	HCIPM	P.O. Box 664, Quito, Ecuador, S.A. O-C: La Marcha de Aida. Saturdays 9-11 p.m.
5.713 52.51	TGS	Casa de Presidencial, Guatemala City, Guatemala, C.A. Sun., Wed., Fri. 6-8 p.m. No. I.R.C. necessary.
5.146 58.30	PMY	Bandoeng Radio Society, Nillmy Bldg., Bandoeng, Java, N.E.I. O: March, Le Rene Passe. C: On chimes, Good Night and National Anthem. Sun. 6:30 p.m.-1:30 a.m. 4-10:30 a.m. Mon. to Fri. 5:30 p.m.-2:30 a.m. 4-10:30 a.m. Sat. 5:30 p.m.-2 a.m. 4-11:30 a.m.
4.900 61.22	HJ3ABH	Apartado 565, Bogota, Colombia, S. A. I: 3 chime notes. Weekdays 11:30 a.m.-2 p.m. 6-11 p.m. Sunday 12-2 p.m.; 4-11 p.m.
4.841 61.97	HJ3ABD	Apartado 509, Bogota, Colombia. O: Pari Ti Rio Rita. C: Rio Rita and National Anthem. Weekdays 9 a.m.-2 p.m., 6 p.m.-12 a.m., Tues. and Thurs. to 3 p.m. Wed. and Fri. begin 5:30 p.m.
4.820 62.24	HJ7ABB	Santander Broadcasting, Bucaramangs, Colombia, S. A. 6-11 p.m.
4.810 62.37	YDE2	Solo, Java, N.E.I. (see 15.150 mc.) Daily 5:30-11 a.m.; 5:45-6:45 p.m.; 10:30 p.m.-2 a.m.
4.790 62.63	HJ2ABC	Sr. Pompilio Sanchez, Prop., Cusuta, Colombia, S.A. Daily 11 a.m-12 noon, 6:30-9 p.m.
4.780 62.76	HJ1ABB	Apartado 715 Barranquilla, Colombia, S.A. I: 3 chimes. S: 1 chime between advertisements. C: La Golondrina 7-9 a.m. 11-1 p.m., 5:30-10 p.m.
4.740 63.29	HJ6ABC	Ibague, Colombia, S.A. Daily 6-11 p.m.
4.660 64.38	HJ2ABJ	Santa Marta, Colombia, S.A. Daily 11:30 a.m.-2 p.m.; 5:30-10:30 p.m.
4.600 65.22	HC2ET	P.O. Box 824, Guayaquil, Ecuador, S.A. I: 12 chimes. Wed. and Sat. 9:15-10:45 p.m. Veri—5c U. S. postage.
4.420 67.87	ZMBJ	Wellington, N. Z. (see 13.600 mc.)
4.273 70.21	RV15	Radio Committee, Khabarovsk, U.S.S.R. English, 2 a.m., EST and at announcements. Daily exc. 6th 12-18-24-30th 3 p.m.-8 a.m. On 6-12-18-24-30th 7:10 p.m.-8 a.m. English programs start at 2 a.m. No I.R.C. necessary.
4.107 73.05	HCJB-2	Quito, Ecuador, S.A. (see 8.831 mc.)
4.002 75.00	CT2AJ	Ponta Delgada, Island of St. Michael, Azores. Wed. and Sat., 5-7 p.m.
3.040 98.68	YDA	Batavia, Java, N.E.I. (see 15.150 mc.) Weekdays 5:30-10 a.m. (Sat. 11:30 a.m.) 6-7:30 p.m., 10:30 p.m.-2 a.m. Sun. 5:30-10 a.m., 7:30 p.m.-2 a.m.

"PITC" EQUIPMENT

(Continued from page 75)

munication work. A p-m speaker is built into the cabinet and jacks are provided for employing headphones in either the first or second a.f. stages. The tubes, of the heater type, are energized from a 6-volt section of the storage-battery supply, the required plate supply of 40 ma. at 200 volts being derived from a Pioneer Genemotor. The receiver and Genemotor add another 5 amperes to the storage battery load.

Upon the completion of the transmitter it was subjected to rigorous tests in an endeavor to detect any defects that might exist. It was then put on the air under actual operating conditions at W1BES using a frequency of 14,165 kc. and several stations contacted. Using the same antenna signal reports averaged only two R's under the kilowatt rig on 14,166 kc. normally used at W1BES. Under ideal radio conditions such as exist at Pitcairn Island, and avoiding the QRM of the American phone band, PITC should have no difficulty in being heard in every quarter of the world.

The services of the Rocke International Export Corporation were enlisted, and through their cooperation the shipment of the seven cases of equipment left New York on January 8th from Pier 60 on the Panama-Pacific liner *Pennsylvania* to connect with the New Zealand Shipping Company's *Arangitiki*, which sailed December 1st from Cristobal for Auckland. If conditions permit a stop at Pitcairn on this voyage, the equipment should be in Andrew Young's hands by the first week in February.

The author desires to extend his thanks to the companies listed, for their cooperation and donations of equipment which brought the original idea to a successful conclusion: Aerovox Corp., American Lava Corp., Amperex Electronic Products, Bassett Research Corp., Bliley Electric Co., Allen D. Cardwell Mfg. Corp., Coto-Coil Co., Inc., Eby Manufacturing Co., Kenyon Transformer Co., Ohmite Manufacturing Co., Par-Metal Products Corp., Parris-Dunn Corp., Pioneer Genemotor Corp., RCA Radiotron Corp., E. M. Sargent Co., Shure Brothers, Triplett Electrical Instrument Co., Willard Storage Battery Co., Rocke International Export Corp., Panama-Pacific S. S. Co., New Zealand Shipping Co.

Last Minute Flash!

Shipment was held up for a month so that the author could accompany the equipment to the island. He will install the station and instruct Andrew Young in its operation. An ample supply of QSL cards with the amateur call VD6-A donated by the Kenyon Transformer Company will be taken to the island by the author who will attempt to contact American amateurs on either 14,346 or 7245 kc. Who will be the first to receive a QSL card from this new radio outpost?