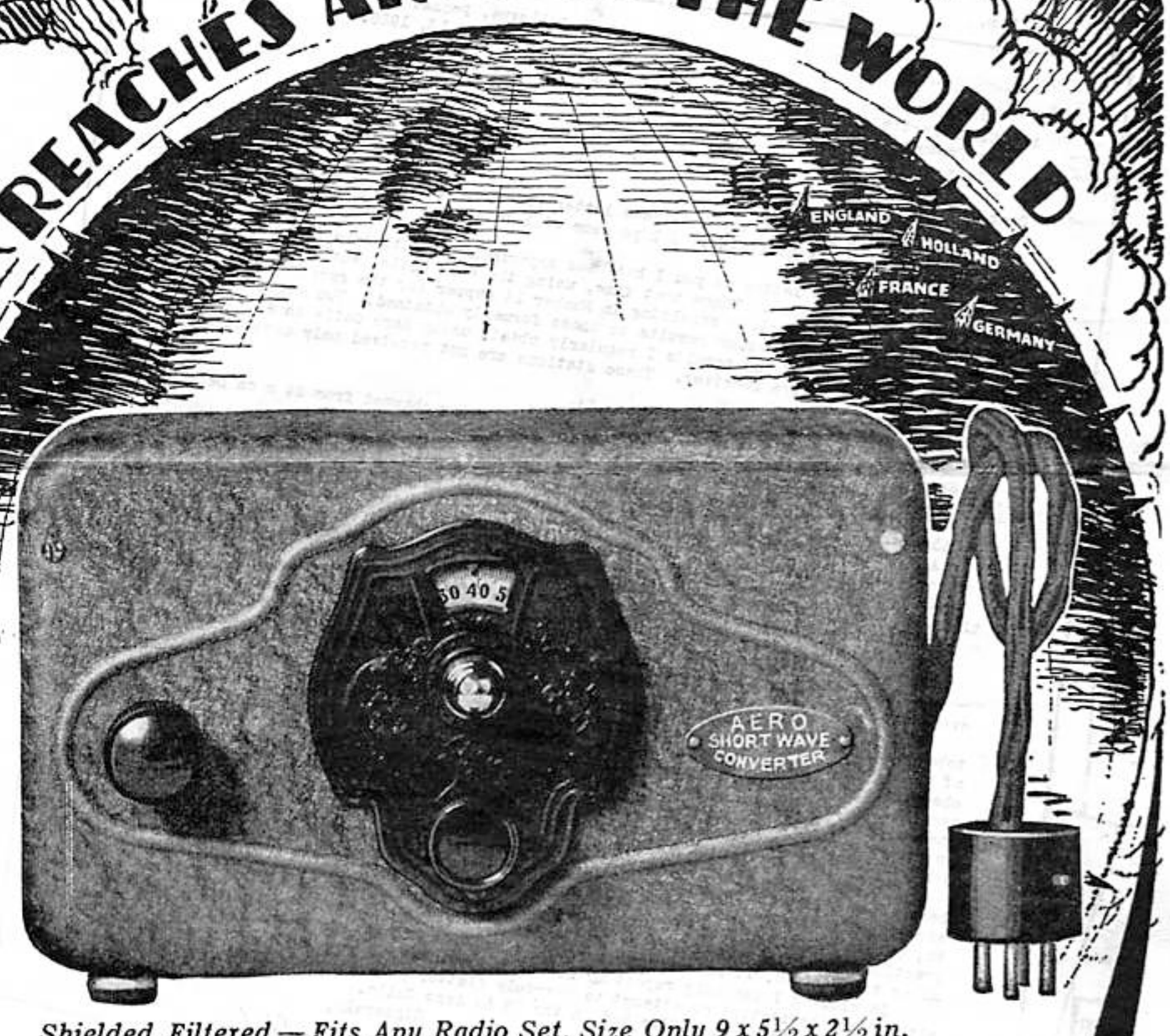
# AERO SHORT-WAVE RECEIVER

GERMANY
FRANCE
HOLLAND
ENGLAND
AUSTRALIA
COSTA RICA
JAVA
NEW-ZEALAND




# "Aero-Call"

## *Short-Wave*

## CONVERTER BOX

### *Fits Any Radio Set*

*Shielded, Filtered — Fits Any Radio Set, Size Only 9 x 5½ x 2½ in.*

THE new 1929 "Aero-Call" Converter Box is an entirely new adaptation of the wonders of radio. Heretofore, short waves were appreciated only by "hams." Now they can be enjoyed instantly by every radio set owner with the use of the Aero-Call Short-Wave Converter Box—a compact shielded, filtered, factory-built short-wave adapter equipped with special short-wave coils. Designed for both A. C. and D. C. sets. Operates perfectly without motorboating, by an auxiliary filter system control, an exclusive feature (patent applied for) that entirely eliminates the failure of most converters heretofore offered to the public. It can be plugged into any regular radio set. This amazing radio instrument now makes it possible to reach 'round the world — England, Germany, Holland, France, Australia, Panama, Java and many foreign stations are some that are tuned in regularly on short wave. Permits enjoyment of international programs and many others from coast to coast that regular receivers cannot get. What a thrill it is to plug this into a tube socket on any set and instantly be in another world! No change or wiring required. All complete, ready to operate, tubes and coils hidden, no apparatus in sight, except the neat, golden-brown, compact metal cabinet in crackle finish that harmonizes splendidly with the finest radio cabinet. Size, only 9 x 5½ x 2½ inches.

The public has already shown a decided interest in this remarkable new radio improvement and exceptional results have been secured by its users. The only converter we know of that really works on all sets. Write for literature. Call at your dealers' or jobber, or order direct, giving dealer's name.

**Model A, for A. C. Sets, List Price....**
**Model D, for D. C. Sets, List Price....** } **$25**

## FILTERED—SHIELDED

**One of the outstanding troubles on Short Wave A. C. Converters is motorboating. This is caused by the fact that the converter is plugged into a set with an efficient A. C. filter for the broadcast receiver, but when the converter is plugged into it, the A. C. filter system in the broadcast set is inefficient for the oscillating circuit in the short wave converter.**

**This trouble is overcome in the Aero-Call Factory-Built Short Wave Converter by an auxiliary filter system which is operated from a small dial on the back of A. C. Converters. Simply turn the knob until proper adjustment is secured and leave it at that adjustment.**

**Our A. C. Model Converter—shielded with filter incorporated—is the only one on the market which has incorporated as an integral part of it a supplementary filter to still further control the current from the power pack in the broadcast receiver, thereby making it possible to use THIS model with any A. C. set operated from your electric light socket. In the D. C. model, the same filter system also makes smooth and stable operation possible with any D. C. set having for a B supply any make of B eliminator.**

**Aero-Call A. C. Converter—Shielded with Filter Incorporated—Model A**
**Aero-Call D. C. Converter—Shielded with Filter Incorporated—Model D** } **$25**

## AERO PRODUCTS, Inc.

4611 East Ravenswood Avenue — Chicago, Illinois, U. S. A.

# Short Wave Radio *brings New Thrills*

## Aero Coils Used on Commander Byrd's Expedition

The short-wave equipment carried by Commander Byrd on his Antarctic expedition includes Aero Short-Wave Coils and parts made by the manufacturers of the "Aero-Call" Short-Wave Converter.

## U. S. Forestry Service Uses Aero Coils

A recently designed portable short-wave receiver and transmitter, designed by the noted engineer, William S. Halstead of New York and Los Angeles, includes Aero coils and parts.

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### GETS ENGLAND, HOLLAND, AUSTRALIA

List of foreign short-wave stations received by Richard H. Addison, 29 Armandine St., Boston 24, Mass. from October 1st to December 12th, 1928 using Aero Short Wave Coils.

| | |
|---|---|
| 5SW | Chelmsford, England |
| 5XX | Danvery, England |
| PCJJ | Eindhoven, Holland |
| PCLL | Kootwijk, Holland |
| CJRX | Winnipeg, Manitoba, Canada |
| 2ME | Sydney, Australia |
| 3LO | Melbourne, Australia |
| ANH | Bandoeng, Java |
| 9RH | Heridea, Costa Rica |
| 1YB | Auckland, New Zealand |

Radio Electrique, Paris, France.

Phone Transmission between England and the United States.

STUDIO RADIO SERVICE
BANDOENG - JAVA

Bellevue, Penna.
December 13, 1928.

Mr. N. H. Martin,
Aero Products Company,
Chicago, Illinois.

Dear Mr. Martin:

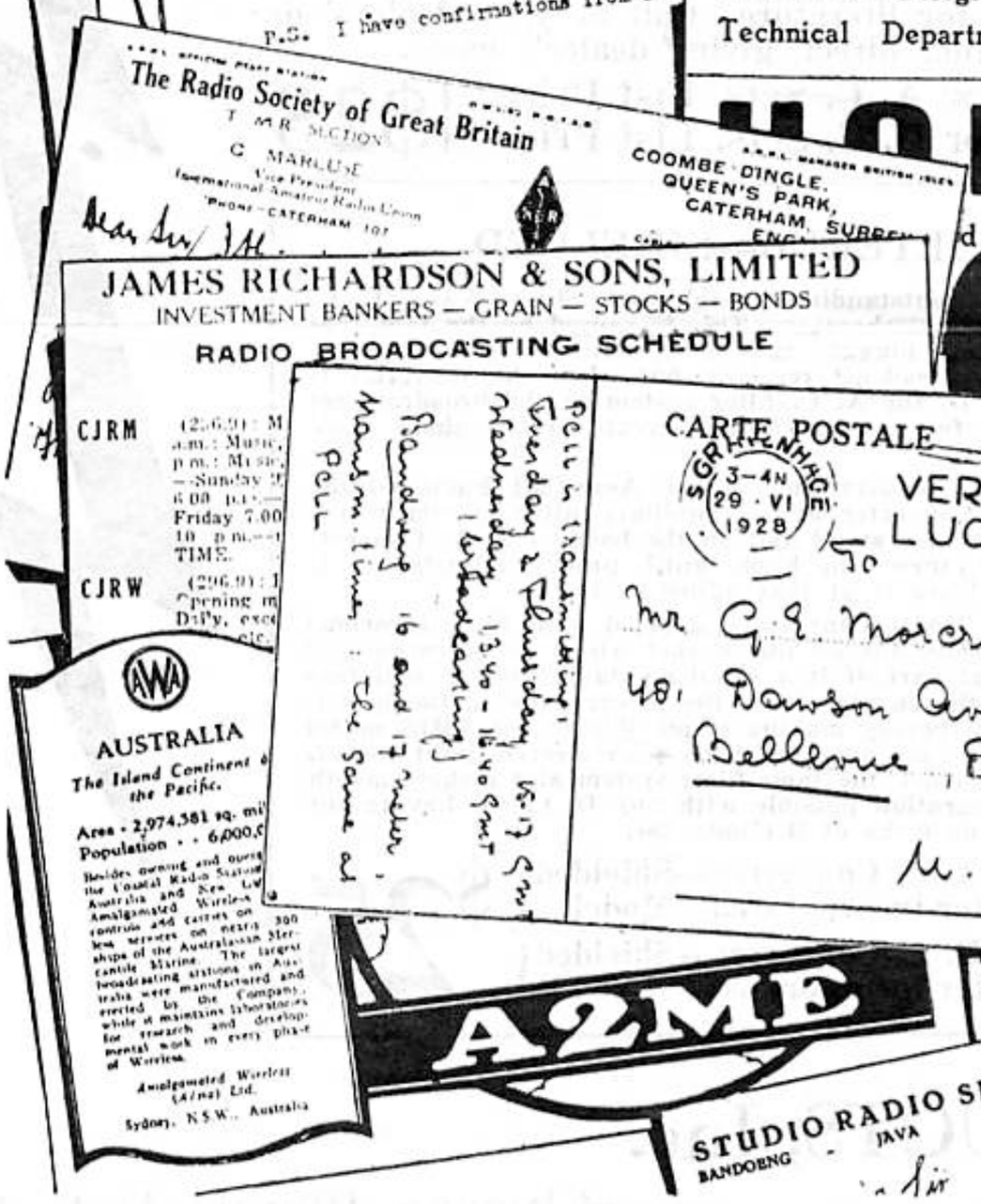
I enclose with pleasure the duplicate letter you requested, since my first letter to you has become lost by misfiling. I hope same will be of some use to you.

When I wrote that letter to you I had been experimenting with Aero Coils for only about four or five months. Since that time, using the same coils, but with some added refinements, notably complete shielding in Number 14 copper for the receiver I have been able to get even much superior results to those formerly obtained. You might be able to make use of a report of the results I regularly obtain using Aero Coils in a detector-2 stage audio regenerative receiver. These stations are not received only once in a while but regularly.

3. CJRX, Winnipeg, Manitoba, 25.6 m.
5SW, at Chelmsford, England, on 25.53 meters (having changed from 24 m on December Every day but Saturday and Sunday.
PCLL, Kqotwijk, Holland, on 18.1 meters, Tuesday, Wednesday and Thursdays.
PCJJ, Eindhoven, Holland, 31.4 meters, Tuesdays, Thursdays and Saturdays.
(Incidentally right at the moment PCJJ does not seem to be transmitting.)
AFK, Doberitz, (Berlin) Germany, 37.65 m. Testing at time Graf Zeppelin made its journey.
FW, Sainte Assise, Paris, France. 15.55 meters. Tests with Buenos Aires, Argentina, once or twice a week around noon E.S.T.
ANE, Bandoeng, Java. 15.93 meters: Tuesdays, Wednesdays and Thursdays.
ANH, Malabar, Java. 17.0 meters. Tuesdays, Wednesdays and Thursdays.
2NM, Caterham, England, reported in my previous letter is no longer transmitting.
GBS, the English side of the Transatlantic Phone on 16.375 meters and 24.7 meters every day.
2ME, Sydney, N.S.W. Australia, 28.5. When this station was testing with 2XAF in October and November the General Electric Company (MR.A.B.Hitt, is the engineer in charge of these tests) having heard somehow of my results sent me a telegram asking me to make observations on 2ME in Pittsburgh, and send report to them each morning by telegram. I was able to get 2ME on everyone of these tests with speaker volume every morning but one and had the pleasure several times of having heard Mr. McDonald and Mr. Farmer, the engineers at 2ME in Sydney talk to me and thank me for my reports (which Mr. Hitt at Schenectady read to them).
3LO, Melbourne, Victoria, Australia. Transmit several mornings a month and received best after 6:30 AM here. Speaker volume often, especially when they broadcast dance music with 5CL at Adelaide. I had them Sunday afternoon a week ago at 2:30 P.M. about R5, calling England. When you consider that at that time of day here it is daylight practically all the way to Australia via the west coast and that it is about 15,000 miles via England, it raises a nice question as to which way the wave travelled.
In closing I can only repeat my hearty endorsement of Aero Coils and can tell you, without any hesitation or attempt to overduly flatter your product, that I attribute a great deal of the success I've had on the SW to Aero Coils.

Sincerely,
J.E. Morcroft Jr.

P.S. I have confirmations from all

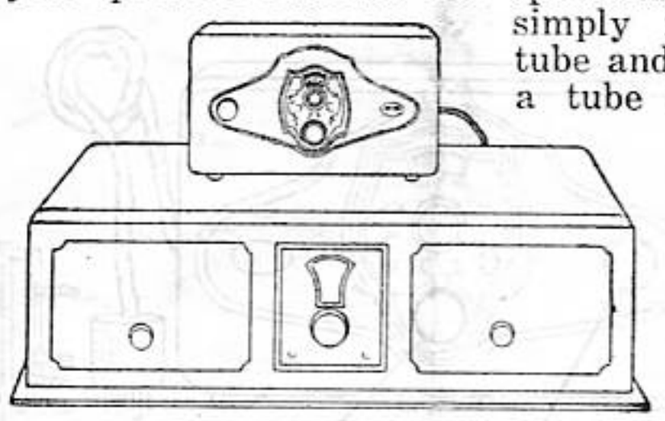




# *Musical Programs Broadcasted Regularly*

## ON SHORT WAVES FROM MANY STATIONS HERE AND ABROAD

DURING the last two years there have been memorable advances in the Science of Radio, more especially in the realm of Short Waves, among which operate a progressive group of broadcasters who realize the great advantages of the short waves over the broadcast bands for the dissemination of intelligence and entertainment. Two years ago the wave lengths below 200 meters were only though of as something to play and struggle with, but today the radio public realizes, that the short waves are "A Pearl of Great Price" since the average radio fan with the simplest of short wave receivers can bring in broadcast stations operating upward of 2000 miles distant and with slow and careful tuning, Trans-Atlantic and Pacific reception is by no means an uncommon accomplishment. Hundreds of short wave enthusiasts bring in English, Dutch, New Zealand, Java and even Australian stations quite frequently under ideal conditions, besides the American short wave broadcast stations can be received, whenever they are on the air regardless of daylight or darkness.

In order to open up the region of short waves for those already possessing a regular radio set, we have developed a highly efficient shielded unit used to convert or adapt your present receiver for operation on the low waves by simply removing the detector tube and plugging in the socket a tube base connected to the Converter by means of a cable, thus completely connecting this unit to your present radio set and power supply in one operation. The tube removed from the detector socket of your set is then inserted in the socket in the converter and the antenna is connected to the antenna binding post located to the right of the adjustable primary coil at the rear of the cabinet.



This little converter is housed in a neat attractive metal cabinet which is 9 inches long, 5½ inches high and 2½ inches deep. The metal cabinet in addition to serving as a shield is also very attractive as it is of a beautiful golden brown crackle finish and is a worthy companion to any radio set and will grace any living room.

# TUNE IN ON THE WORLD

## England, France, Germany, Australia, Java, etc., Leading Short Wave Stations

## *That Broadcast Musical Programs*

### U. S. SHORT WAVE STATIONS

| Call— | | Location | Meters |
|---|---|---|---|
| KDKA | | Pittsburgh, Pa. 8 to 11 P. M. | 42.75, 27.0, 62.5 |
| WGY, 2XAF, 2XAD | | Schenectady, N. Y. 8 to 11 P. M. | 21.96, 33.1 |
| WLW | | Cincinnati, O. 8 to 12 P. M. | 52.00 |
| WRNY | | New York City. 7 to 12 P. M. | 30.91 |
| 3XL, WJZ | | New York City. 7 to 11 P. M. | 59.96 |
| WOR | | Kearny, N. J. 7 to 11 P. M. | 65.40 |
| WCGU | | Brooklyn, N. Y. 7 to 11 P. M. | 54.0 |
| KEJK | (6XAN) | Los Angeles, Cal. | 105.9 |
| KEPY | (7XAB) | Spokane, Wash. | 105.9 |
| KGB | | San Diego, Cal. | 65.18 |
| 9XAB | (WNAL) | Omaha, Nebr. | 105.0 |
| KMOX | | St. Louis, Mo. | 49.0 |
| 6XAL | (KFQZ) | Hollywood, Cal. | 108.20 |
| WABC | (2XE) | Richmond Hill, N. Y. | 58.50 |
| Yacht MU1 | 2XAO | Richmond Hill, N. Y. | 58.50 |

### CANADA

| | | | |
|---|---|---|---|
| CJRX | | Winnipeg Manitoba | 25.6 |
| CF | | Drummondville, Quebec | 32.0 |

### AUSTRALIA

| | | | |
|---|---|---|---|
| 2ME | | Sidney | 28.5 |
| 2FC | | Sidney | 28.5, 32.00 |
| 3LO | | Melbourne | 32.0 |
| 5CL | | Adelaide | |
| 2BL | | Sidney | 32.5 |
| 3AR | | Melbourne | 55.0 |
| 6AG | | Perth West | 32.90 |

### SHORT WAVE RECEPTION DATA

**Central Standard Time**

**Most European reception is obtained in the daytime. To assist others we asked one user of Aero Short Wave Products to submit the hours at which he was accustomed to tune in foreign broadcasting. His name can be had on request. The hours on his schedule have been reduced to Central Standard Time and are as follows:**

| | LOCATION | CALL | HOURS OF OPERATION |
|---|---|---|---|
| 1 | Chelmsford, Eng. | 5SW | Daily, 6-7:30; 1-6 P.M.; Mon. and Wed. 6-8 P.M. Off Sat. and Sundays |
| 2 | Caterham, Eng. | 2NM | Off air temporarily |
| 3 | Rugby, Eng. | GBS | Daily, all hours |
| 4 | Paris, France | FW | Evenings and Mornings 8 A.M.-12 M. |
| 5 | Berlin, Germany | AFK | 6 to 7 P.M. mostly (not regular) |
| 6 | Bandoeng, Java | ANE | Tues. and Thurs., 6:40 A.M. to 11 A.M. Evening, Wed. 6:40-8:40 Broadcast |
| 7 | Malabar, Java | ANH | Tues. and Thurs., 6:40 A.M. to 11 A.M. Evening, Wed. 6:40-8:40 Broadcast |
| 8 | Melbourne, Australia | 3LO | 1 P.M.-2 P.M. regularly Sun. Aft.; 3 A.M.-7:30 occasionally |
| 9 | Sydney, Australia | 2ME | Wed. after 4 A.M. (Occasional test program) (Experimental, no regular time) |
| 10 | Sydney, Australia | 2FC | 3 A.M. thru 2ME (occasionally) |
| 11 | Eindhoven, Holland | PCJ | Tues. and Thurs. 12-2 P.M.; Thurs. Nite 5 P.M., 8 P.M.; Fri. 6 P.M.-12 A.M. (Call changed from PCJJ) |
| 12 | Kootwijk, Holland | PCLL | Evening, Wed. 6:40 to 8:40 Broadcast. (7:30 A.M. Experimental) Tues. and Thurs., 6:40 A.M. to 11 A.M. |
| 13 | Winnipeg, Can. | CJRX | Daily except Sat. and Sun., 4:30-6:30 P.M. Saturday 12:00 to 1:00 A.M. Central Standard T. |
| 14 | Argentina, Buenos Aires | PHI | Phone with Paris Wed., Thurs. and Fri. 6-10 A.M. |
| 15 | Madrid, Spain | EAM | 5-7 P.M. |

### AUSTRIA

| Call— | Location | Meters |
|---|---|---|
| EATH | Vienna | 37.00 |
| OHK2 | Vienna | 70.00 |

### BELGIUM

| | | |
|---|---|---|
| EB4A2 | Brussels | 42.00 |

### DANTZIG

| | | |
|---|---|---|
| EK4ZZZ | Dantzig | 40.00 |

### DENMARK

| | | |
|---|---|---|
| D7MK | Copenhagen | 32.05 |
| D7RL | Copenhagen | 42.12, 84.24 |

### FRANCE

| | | |
|---|---|---|
| YR | Lyon | 40.2 |
| | Nancy | 15.5 |
| F8AV | Nogent Sur Seine | 80. |
| F8GC (Radio LL) | Paris | 61. |
| | Paris | 37. |
| 2BD | Agent | 30.75 |
| FW | Ste. Assise | 24.50 |

### GERMANY

| | | |
|---|---|---|
| AFK | Doberitz | 37.65, 67.65 |
| AGC | Nauen | 17.2 |
| AGJ | Nauen | 56.7 |

### ITALY

| | | |
|---|---|---|
| IMI | Milan | 45.00 |
| ILAX | Rome | 45.00 |

### NETHERLANDS

| | | |
|---|---|---|
| PCJJ | Eindhoven | 30.2, 31.4 |
| | Kootwijk | 184.00 |
| PSLL | Kootwijk | 16.00 |
| PCMM | The Hague | 46.50 |

### NORWAY

| | | |
|---|---|---|
| LGN | Bergen | 30. |

### SPAIN

| | | |
|---|---|---|
| EAM | Madrid | 30.7 |
| EAJ25 | Malaga | 100. |

### SWEDEN

| | | |
|---|---|---|
| 5AS | Karlsborg | 52.5 |

### SWITZERLAND

| Call— | Location | Meters |
|---|---|---|
| | Berne | 32.00 |
| HGXD | Zurich | 85., 32. |

### UNITED KINGDOM—ENGLAND

| Call— | Location | Meters |
|---|---|---|
| 2NM | Caterham | 32.5 |
| | Indefinite | |
| 5SW | Chelmsford | 24.00 |
| GBS | Rugby | 24.4 |

### RUSSIA

| Call— | Location | Meters |
|---|---|---|
| RA59 | Leningrad | 150.0 |

### DUTCH EAST INDIES

| Call— | Location | Meters |
|---|---|---|
| ANE | Bandoeng | 15.93, 31.26 |
| | Malabar | 33.00 |
| ANF | Malabar | 56.00 |
| | Batavia | 46.5 |

### JAPAN

| Call— | Location | Meters |
|---|---|---|
| JHBB | Hirasio | 37.5 |
| JFAB | Taipeh | 39.5 |

### KENYA

| Call— | Location | Meters |
|---|---|---|
| 7LO | Nairobi | 35.0 |

### MOROCCO

| Call— | Location | Meters |
|---|---|---|
| AIN | Casablanca | 51. |

### TUNISIA

| Call— | Location | Meters |
|---|---|---|
| 8KR | Constantine | 42.8 |
| TUA | Tunis | 45. |

### UNION OF SOUTH AFRICA

| Call— | Location | Meters |
|---|---|---|
| JB | Johannesburg | 32. |

### CUBA

| Call— | Location | Meters |
|---|---|---|
| 7GT | Camaguey | 195. |
| 7HS | Ciego De Avila | 192. |
| 8BY | Santiago | 150. |

### BRAZIL

| Call— | Location | Meters |
|---|---|---|
| SQBE | Bahia | 24. |
| | Para | 34. |

### MEXICO

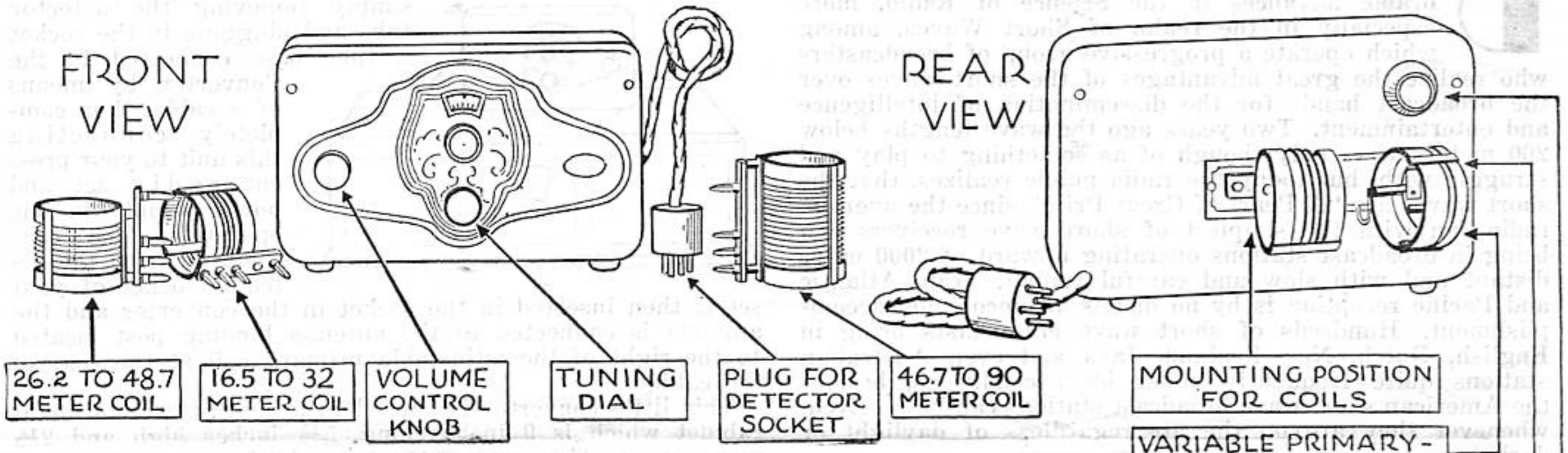
| Call— | Location | Meters |
|---|---|---|
| XC51 | Mexico City | 44.00 |

### CHILE

| Call— | Location | Meters |
|---|---|---|
| WHD | Cruz Grande | |

# THE "AERO-CALL" SHORT-WAVE

## CONVERTER BOX IS EASY TO OPERATE
## READ THESE SIMPLE INSTRUCTIONS




# INSTRUCTIONS

TO CONNECT to Broadcast Set: First hold the converter firmly in the left hand and with the right hand grip the black adjustable knob on the rear of the converter and remove this knob by simply pulling toward you, then remove the three screws that hold the rear cover plate of the cabinet and then turn this plate sideways, so that the movable coil can easily slip through the slot in same without being scratched or injured. Next remove the detector tube (usually a 201-A or a 227) from the broadcast receiver and place same in the detector socket in the converter. Now slip the cover back over the movable coil and towards the cabinet and turn it back into position, replacing the three screws to hold the cover in place. In passing, it is well to point out that the D. C. Converter works better using a 112-A tube in the Converter, though a 201-A may be used. The Arcturus 127-tube is best for the A. C.

Finally replace the knob on the filter control shaft by simply placing same over end of shaft and pushing on it, while holding the converter with left hand. (We strongly recommend that an extra tube be purchased and left in this converter in order that the above mentioned procedure does not have to be repeated when you desire to receive the regular broadcast waves again.)

After the tube is inserted in the converter, plug one of the three removable coils that are furnished, into the little bakelite panel on the rear of the converter, that projects thru the cover plate. Next connect the aerial (about 25 to 100 feet in length) to the binding post to the right of the movable primary coil. Now you are ready to plug in the tube base on the end of the converter cable, in the detector tube socket of your broadcast receiver and then turn on your receiver. No ground wire is required for the converter, as it is already attached to your broadcast receiver. You are now ready to tune in on the short wave stations.

TUNING: The small front knob in the center of the converter panel is your tuning control and should be rotated slowly and carefully while you listen for a station's signal. (The dials on the broadcast set are not used.) The small knob on the lower left corner of the converter panel is the volume control and should be turned toward the right to increase volume and not quite to the point where the set squeals or howls. If no signals are heard, turn this knob a little further to the left, and re-tune as before, being careful not to pass over a station, since the short waves are very sharp and tuning must be carefully done. When a signal is heard or the set squeals, turn the volume knob to the right just enough to stop the squeal and readjust the main tuning control for the loudest signal. To change from one wave band to another, simply pull off the plug-in coil on rear of converter and insert one of the other coils and tune the set as previously done.

When you want to receive stations operating on wave-lengths between 16.5 to 32 meters, use the smallest plug-in coil which contains four turns of wire. When you desire stations sending on wave-lengths between 26.2 and 48.7 meters, use the medium size coil which has nine turns of wire, and when stations between 46.7 to 90 meters are wanted, use the largest coil which has eighteen turns of wire wound in its frame.

The small primary coil, which is hinged on the rear of the converter, is adjustable and can be moved to or from the secondary or plug-in coil for best results. After once being set it is rarely changed while the same plug-in coil is used, though this may be varied for maximum signal strength.

Please remember that reception on the short waves is not the same as the broadcast ones and there are fewer stations on the air, therefore the handling of the converter must be learned the same as anything else. When finished with the converter, shut off by turning off the switch on broadcast receiver. When operating the converter, the radio frequency tubes in front of the detector socket perform no useful purpose, therefore so they may either be turned out or removed from their sockets or left in as you may so desire.

When this converter is to be used with a Superheterodyne, the tube base plug should be inserted in the second detector socket.

### "B" POWER FILTER ADJUSTMENT

Facing the rear of the converter you will notice in the upper right-hand corner a variable knob for the "B" power filter. This knob should be turned gently to the right as far as possible previous to starting to operate the converter. Then insert the smallest plug-in coil which has four turns of wire on it, turn on receiver switch and adjust for quiet operation without motorboating. Should the converter begin to squeal or howl violently or emit a sound similar to a motorboat engine, this is caused by incomplete filtration in the eliminator of broadcast receiver and may be corrected by turning the above mentioned filter adjustment knob to the left until this motorboating stops or the squealing is less violent.

There should be minor squeals but only of a character which can be stopped by using the volume control on the front of the panel and the set can be tuned with ease. After this adjustment is once made there should be no further need of varying this control. In fact, after you obtain a satisfactory adjustment, leave the knob set in that position and do all tuning with the knobs on the front of the converter, regardless of the plug-in coil used.

Each and every converter is very carefully tested in the factory under actual operating conditions and is in perfect operating condition before being packed, hence should you have any difficulty when first operating it, make sure the tube plug on the converter panel is plugged into the detector tube socket and not a radio or audio frequency socket. Furthermore, remember a short wave receiver requires patient and careful tuning, therefore do not expect to have the world at your finger-tips, until you are thoroughly familiar with the operation of your short wave adapter.

When changing from one wave band to another by interchanging the plug-in coils used, it is advisable to vary the position of the movable primary coil for maximum signal intensity and clarity.

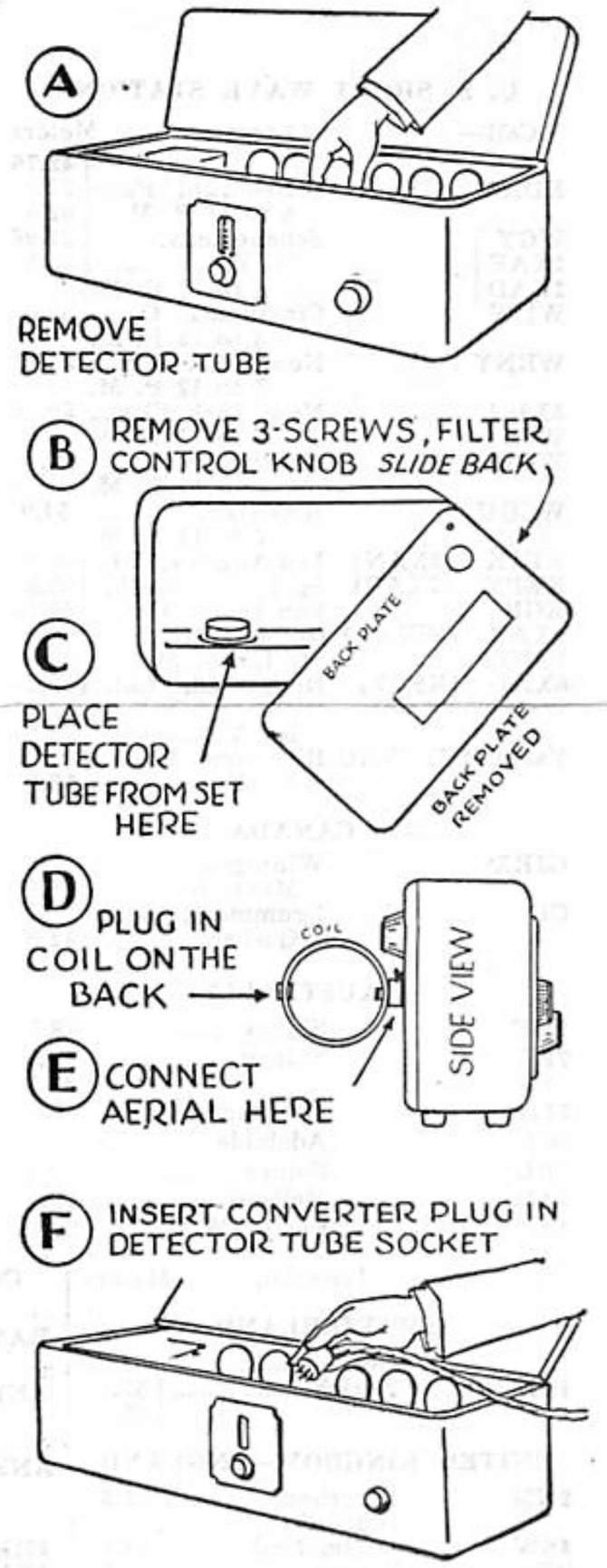
Motorboating may be stopped, for example, when using the largest coil by turning filter adjustment knob to the left, but may reoccur when using a smaller coil. In which case, readjust filter adjustment knob again to eliminate motorboating on the smaller coil. Leave this filter adjustment knob in this position when going back to use the larger coil. It does not impair the efficiency of your circuit. A safe rule is to eliminate motorboating by making this adjustment on the smallest coil. This same adjustment also will do for the larger coils and will not impair the operation of the converter. You may notice that if you turn this filter adjustment knob all the way to the left, your converter stops working since you have cut off all B supply. Therefore, turn this knob back again to the right, seeking the proper adjustment.

Recommend this to your friends—send us their names. The more short wave users, the better the programs.

If Interested in larger sets for short wave reception and transmission, the Aero Green Book will help you. Aero products are made by the world's largest manufacturer of amateur short-wave apparatus. The Green Book is a treatise used by over 40,000 professionals and amateurs and is authoritative. Sent on receipt of 25 cents, stamps or coin.


## AERO PRODUCTS, Inc.

4611 East Ravenswood Avenue Chicago, Illinois, U. S. A.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