HANDBOOK OF INSTALLATION AND MAINTENANCE OF

465 Mc.

Two Channel Transmitter BCT-7

Two Channel Receiver BCR-7A

IMPORTANT

Read Your Warranty Policy
on Page 23

PRICE $2.00

Babcock Models, Inc.

Costa Mesa, California

This Instruction

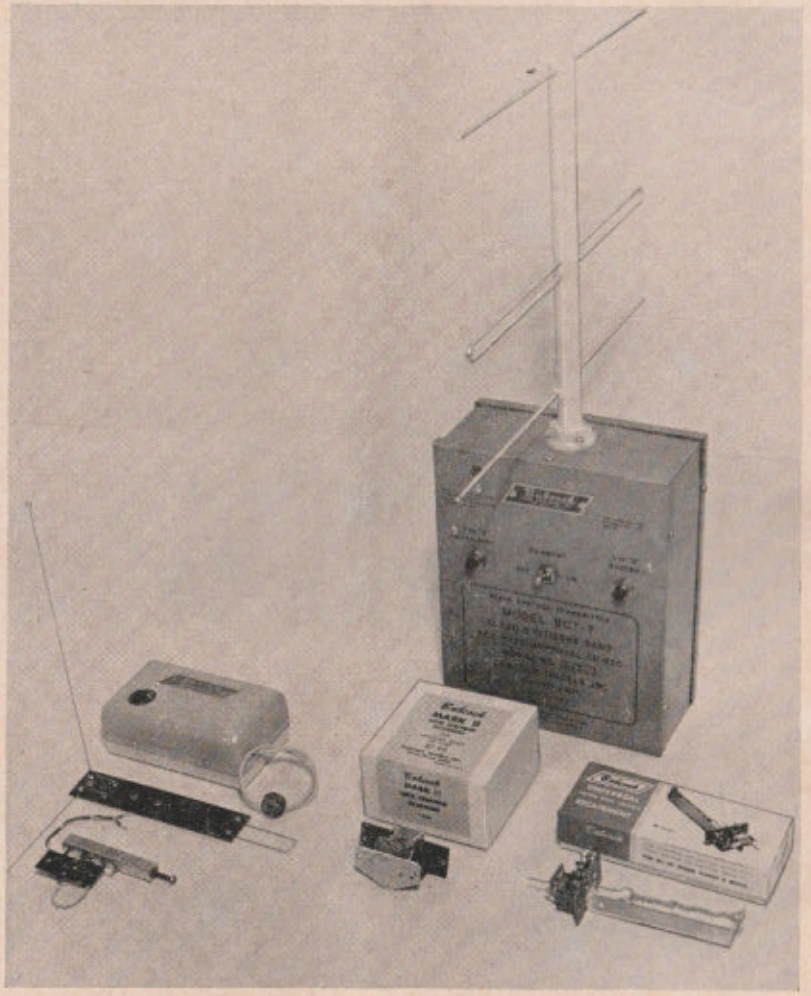
Book

Is

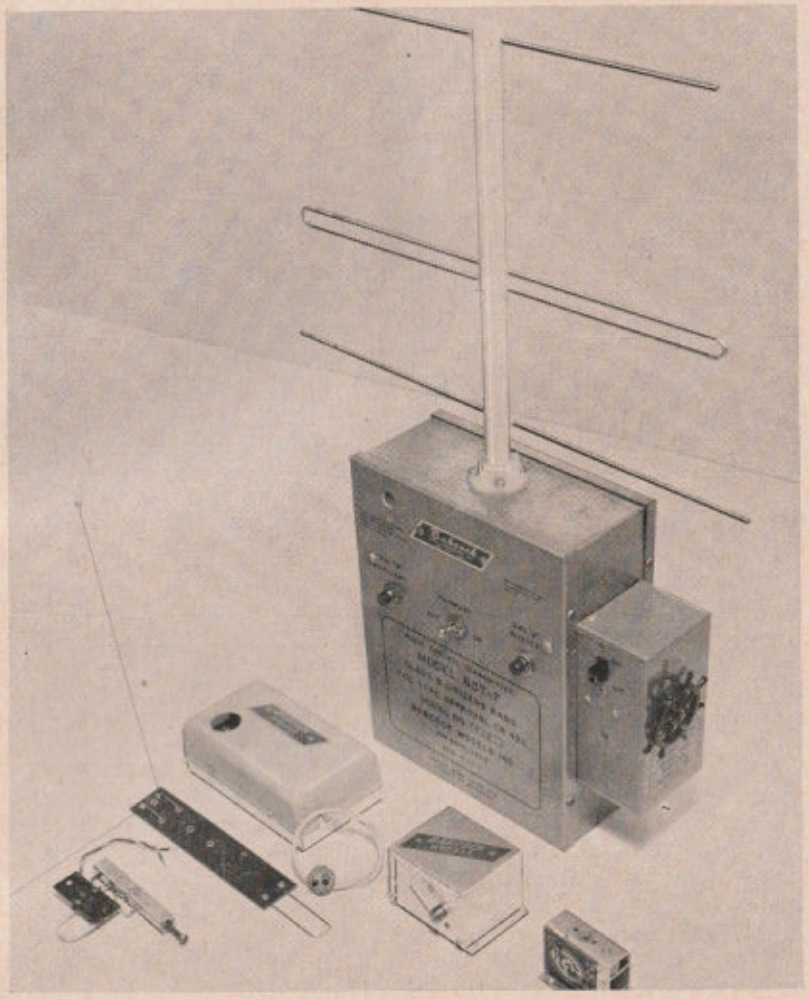
Important

★ ★ ★

Read Carefully



Two Channel 465 Mc BCR-7A, BCT-7
Aircraft Accessories
Mark II Escapement and Universal Motor Control Escapement



Two Channel 465 Mc BCR-7A, BCT-7
Boat Accessories
Proportional Pulser Proportional Servo and Sequence Reverser

TABLE OF CONTENTS

Part I – General Introduction

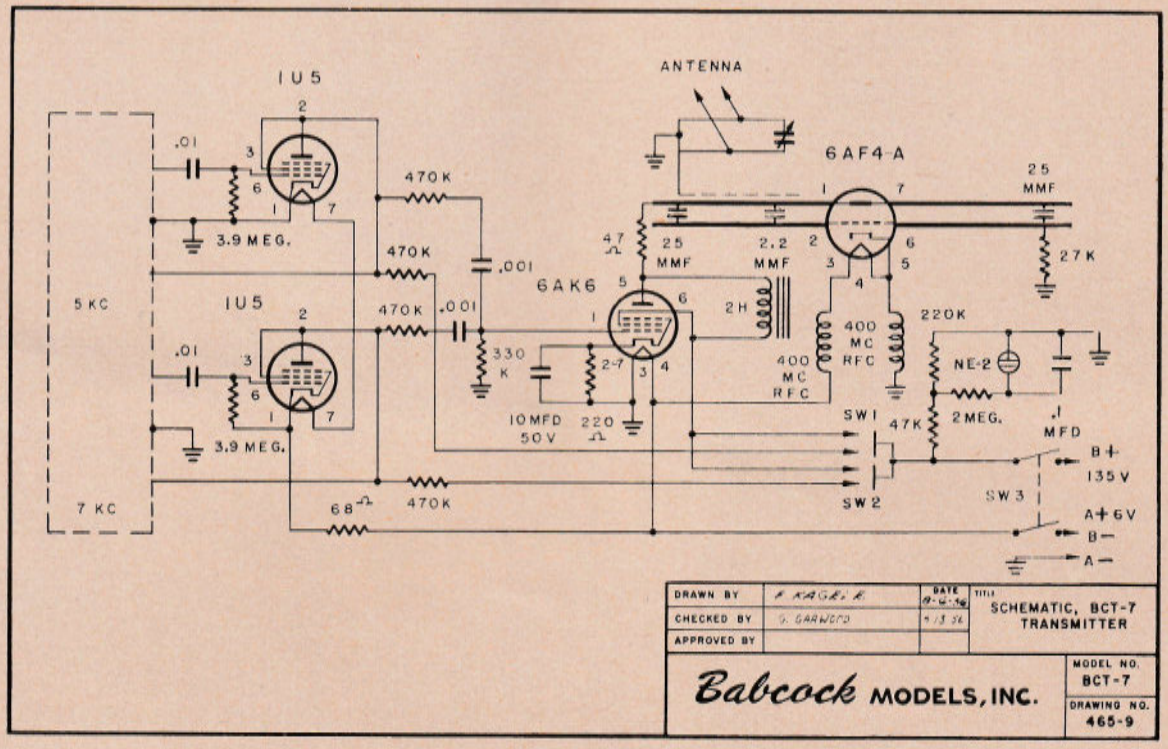
The Babcock 465 Mc. radio control equipment for models is the result of many years of Radio Control engineering. Flight tested, tested in boats, it is by far the simplest and most reliable equipment ever offered to the modeling public of the world. It is also the easiest to install and operate. It is BABCOCK policy to introduce only equipment that will give reliable and realistic control to the model that you build. Past history with our other radio control equipment, which is today accepted as the most reliable in the world, indicates that following the instruction book is the only requirment for successful radio control. Rewiring relays and changing connections to "improve" the equipment spells trouble **and voids our warranty.** If you are a new modeler and have bought this equipment because of the reputation of Babcock radio control, by all means use the systems described until you have gained more experience. We urge you to make no changes on the advice of others, thus risking **your** equipment. In this book you will find recommended schematics and instructions for installation in model aircraft and boats, as well as in vehicles. These installations have all been thoroughly tested in our own factory, and we guarantee them to work the way we say they will.

Part II – BCT-7 Transmitter Instructions (Schematic, Drawing No. 465-9)

1. LICENSING

No examination is required for the use of the Model BCT-7 Transmitter. However, a station license is required. The application for a station license is to be submitted to the Federal Communications Commission's nearest field office on Form 505. This form is packed with the transmitter or it may be obtained from any F.C.C. field office. The pertinent information for filling out the transmitter data on this form is as follows:

Frequency — 465 Mc.
Class — B
F.C.C. Type Approval No. CR425
Serial No. — will be found on the front panel

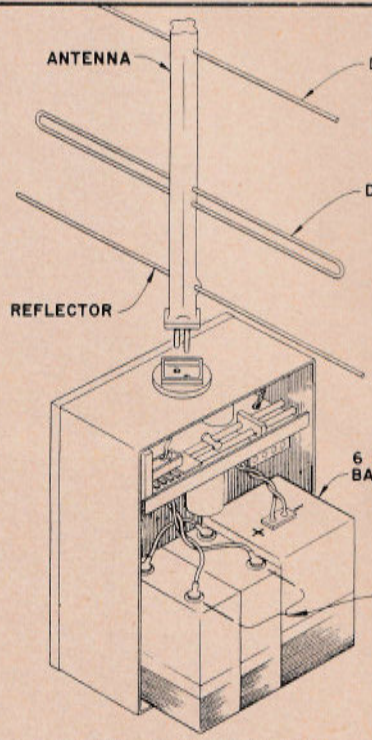


DRAWN BY	F. KARGER	DATE 9-6-56	TITLE SCHEMATIC, BCT-7 TRANSMITTER
CHECKED BY	G. GARWOOD	9/13/56	
APPROVED BY			

Babcock MODELS, INC.

MODEL NO. BCT-7

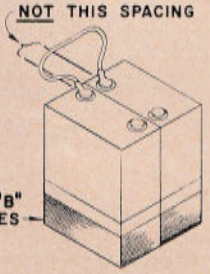
DRAWING NO. 465-9



BCT-7 TRANSMITTER WITH REAR COVER REMOVED

NOTE: BE SURE ANTENNA IS SEATED ALL THE WAY INTO THE TRANSMITTER SOCKET.

MINIMUM BATTERY VOLTAGES
"A"...4.5 V. UNDER LOAD
"B"...100 V. UNDER LOAD



TRANSMITTER BATTERIES

"A"

RCA	VS009
BURGESS	F4PI
EVEREADY	744

"B"

RCA	VS016
BURGESS	XX 45
EVEREADY	467

DRAWN BY	C. HOLLINGER	DATE 8-6-56	TITLE TRANSMITTER BATTERY INSTALLATION
CHECKED BY	G. GARWOOD	8-13-56	
APPROVED BY			

Babcock MODELS, INC.

MODEL NO. BCT-7

DRAWING NO. 465-1

2. BATTERY INSTALLATION

When the batteries are installed they must be positioned as shown in Drawing No. 465-1. The "A" battery may go in any position. The "B" batteries must be positioned so that their connectors are as shown. Note that the connections on the "B" batteries are offset to one side of each individual battery. Therefore place them side by side with these connectors as far apart as possible (see Drawing No. 465-1). The reason for this is to avoid short-circuiting to the clip which holds the "B" batteries down. The jumper is attached to the "B" battery wires when shipped from the factory. This jumper should be toward the front panel of the set when the "B" batteries are installed.

For the "A" battery the following makes and type number batteries may be used:

RCA — VS009
Burgess — F4PI
Eveready — 744
Or their equivalents

For the "B" batteries, two of which are required, the following may be used:

RCA — VS016
Burgess — XX45
Eveready — 467
Or their equivalents

3. BATTERY TESTS

A volt meter should be used periodically to determine the level of the batteries under load. "Under load" is meant with the switch turned "ON" for 30 seconds while measuring the "A" battery, whose voltage should not be allowed to go below 4½ volts before either replacing or reactivating by means of the optional "A" battery charger shown on page 13 of this book, Drawing No. 465-2. The filament drain of the transmitter is 420 Ma. at a nominal voltage of 6. About 3 hours life will be obtained in continuous service, and in practice considerably more, depending on the duration of each flight. Batteries give their longest total life when used intermittently. By use of the charger (see Drawing No. 465-2) the "A" battery life, within the limits specified above, may be extended 10 to 15 hours, or between 60 and 100 flights before need of replacing.

The "B" battery current drain is approximately 30 Ma. with either or both command buttons depressed. There is no current drain on the "B" battery when the push buttons are released, and in general one set of "B" batteries will outlast several "A" batteries. The "B" batteries may be tested **under load** after allowing the transmitter to be on one minute, then depress one push button for 15 seconds while measuring the voltage across both "B" batteries in series as they are installed in the transmitter. When this voltage has dropped to less than 100 the "B" batteries should be replaced. The indicator light will stop flashing at about 90 volts. "B" batteries vary widely in their voltage under load and life, and we caution the user against using undated batteries. We suggest that you purchase your batteries at a store which has a high rate of battery turnover, so that you are assured of receiving fresh ones. As an added precaution have the batteries checked with a voltmeter to see that they register at least their rated voltage. There are no adjustments on this transmitter to be made by the user.

4. FIELD USAGE OF TRANSMITTER

The warm-up time of the oscillator tube in the transmitter is about 30 seconds. In practice, with the model in flight, the antenna or top of the antenna case should be aimed approximately at the airplane when it is at its maximum range. A check on the functioning of the audio oscillators of the transmitter, as well as its modulator, may be made by listening to the output of the receiver with a pair of headphones connected between pins 1 and 9 of the connector plug. Pressing the right-hand or rudder control button will result in a very high pitch tone of 5,000 cycles per second. Pressing the left-hand or elevator button will result in a still higher pitched tone of 7,000 cycles per second. These frequencies are so high that it is quite difficult for some human ears to detect them; as well as the fact that the response of most headphones falls off above 3,000 cycles per second. However, if both buttons are pressed simultaneously, a beat note of 2,000 cycles, which is easily audible, will be heard in the headphones and will demonstrate the effective operation of those oscillators.

Please note the important caution below.

NOTICE AND CAUTION.

It is illegal to:

(a) make any adjustments to the transmitter, for the reason that such adjustments by inexperienced persons will cause a frequency deviation greater than that permitted by the F.C.C.

(b) change the oscillator tube (mounted inverted at the rear of the chassis).

(c) remove the shield on the oscillator tube. However, by removing the antenna connector mounting screws at the top of the case and removing the front panel, it shall be legal to replace the two audio oscillator tubes, Type 1U5, or modulator tube, Type 6AK6. A tube tester in any radio shop will show whether these tubes should or should not be replaced.

If the checks enumerated above indicate to the user that the RF or oscillator section of the BCT-7 transmitter is not operating properly, the transmitter should be returned to the factory for test and/or repair. Before returning, the transmitter, BE SURE TO READ AND UNDERSTAND THE FACTORY SERVICE AND WARRANTY POLICY.

The transmitting antenna should not be pointed at the receiving antenna when closer than 5 feet while either of the buttons are depressed. Receiving crystal burnout may result. Make close tests with antenna **removed** from transmitter.

Part III – BCR-7A Receiver & Antenna System

The BCR-7A Receiver is an extremely high gain ampliifer combined with a two-channel audio decoder. The audio sensitivity of the receiver is approximately 3 microvolts for the operation of either channel. There are no tuning adjustments to be made to the receiver.

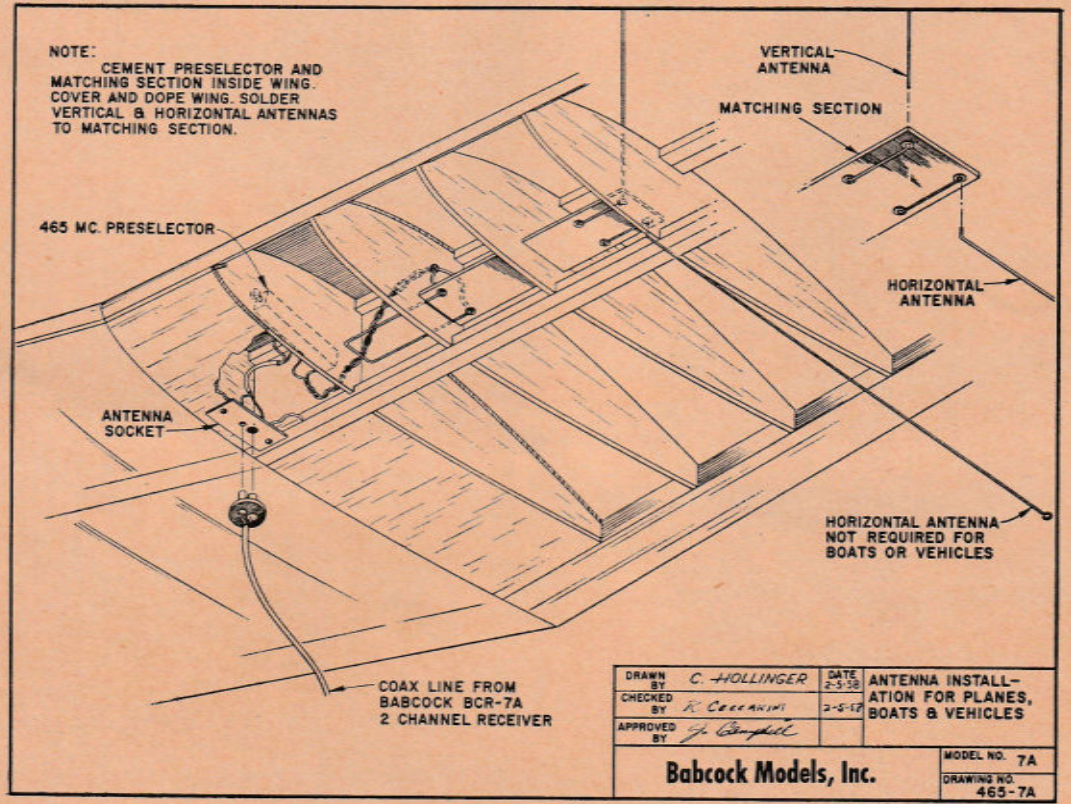
The antenna system employed with the BCR-7A receiver consists of a vertical and horizontal dipole antenna, or in the case of marine or vehicle operation simply the vertical antenna, with a quarter wave length matching section and a preselector. The preselector consists of a hi-Q tuned circuit, pretuned at the factory to 465 mc., a UHF crystal diode, and associated filter circuitry. CAUTION! DO NOT ATTEMPT TO RE-ADJUST THIS UNIT.

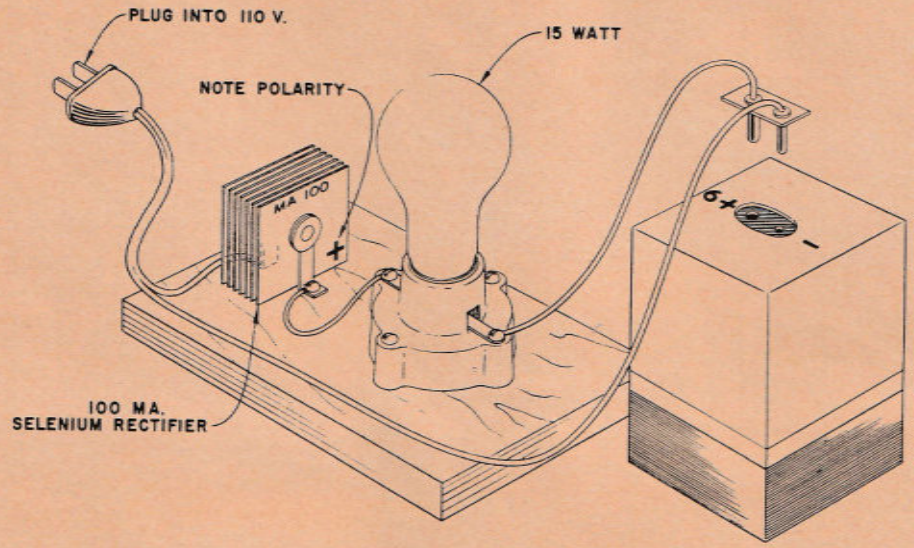
In operation, the RF signal from the transmitter is intercepted by the dipole antenna and coupled to the hi-Q tuned circuit. The UHF crystal diode demodulates the RF signal and recovers the audio components which are fed to the high gain receiver and decoder section, which in turn operates the respective control relays. Operation of each of the two channels simultaneously can be obtained with the BCR-7A receiver.

At this point we wish to give you some idea as to the range or distance of control to be expected under various conditions. Within the range of the transmitter the operation of these receivers is ultra-reliable. There is nothing that can fail, except a broken connection or run-down batteries, in either transmitter or receiver. Over the water for model boats a range of 400 to 500 feet may be expected. This will vary slightly with the height of the transmitter above the water, but in general when standing at the waters edge with the transmitter held waist high, should the boat run out of range it will be so small that you will have trouble seeing which way it is going.

The range with model airplanes is somewhat different. With both the airplane and the transmitter held shoulder high, the range on the ground will be from 500 to 600 feet. Experience has shown that this distance is multiplied from three to six times in the air. The Breezy Senior model airplane is almost impossible to see over 1,500 feet away. This is particularly true when the model is either coming straight on or going straight away from you.

A picture being worth several paragraphs of description, we refer you to Drawing 465-7A for the installation of the antenna system. As pointed out in the drawing, the two 12" piano wire antennas are added when used in model aircraft. The horizontal antenna length is not used for boats or vehicle installation and is simply left off of the matching section. Under no circumstances should the length of the antenna lead-in or coaxial wires be changed.


NOTE:
CEMENT PRESELECTOR AND MATCHING SECTION INSIDE WING. COVER AND DOPE WING. SOLDER VERTICAL & HORIZONTAL ANTENNAS TO MATCHING SECTION.
VERTICAL ANTENNA
MATCHING SECTION
465 MC. PRESELECTOR
HORIZONTAL ANTENNA
ANTENNA SOCKET
HORIZONTAL ANTENNA NOT REQUIRED FOR BOATS OR VEHICLES
COAX LINE FROM BABCOCK BCR-7A 2 CHANNEL RECEIVER
DRAWN BY C. HOLLINGER
DATE 2-5-58
CHECKED BY K. Cockayne
2-5-58
APPROVED BY J. Campbell
ANTENNA INSTALLATION FOR PLANES, BOATS & VEHICLES
Babcock Models, Inc.
MODEL NO. 7A
DRAWING NO. 465-7A



NOTE: CHARGE BATTERY UNTIL VOLTAGE IS UP TO 7 VOLTS.

DRAWN BY	C. HOLLINGER	DATE 8-6-56	TITLE: TRANSMITTER "A" BATTERY CHARGER
CHECKED BY	G. GARWOOD	8-13-56	
APPROVED BY			

Babcock MODELS, INC.

MODEL NO.

DRAWING NO. 465-2

Part IV – BCR-7A Two Channel Receiver Installation and Operation

We have experimented with many different installations for this equipment. Therefore, in this chapter we will only describe one installation for aircraft and one installation for boats and vehicles. These two installations are very easy to make and involve a minimum of time and wiring, and we recommend that they be used for the most complete and reliable control and that you do not vary from them until you have gained experience with these units. For the receiver "B" battery, the following makes and type number batteries may be used:

RCA — VS084
Burgess — U15
Eveready — 412
Or their equivalent

When the receiver "B" batteries voltage drops to 17 volts **under load,** they should be replaced.

NOTICE: Due to receiver battery drains, two hearing aid batteries **in parallel** are required for normal flying and mandatory in cold weather.

1. INSTALLATION FOR AIRPLANES

The wiring diagram for this installation is shown on page 16 in Drawing 465-5. Since the BCR-7A can operate either channel independently or both simultaneously, some pretty fancy maneuvers can be executed. The use of two Babcock #886 Mark II Super Compound Escapements result in an absolutely fail-safe system. If your airplane is inherently stable and you get into difficulties in the air, by releasing both transmitter buttons the airplane will right itself no matter what attitude you have it in. The BREEZY SR. kit is expressly designed for this type of operation. However, any other airplane kit capable of carrying 7 ounces of radio equipment and 4 or 5 ounces

of combined servo and servo batteries can be utilized. There are many such kits on the market, and any normally requiring .09 engine or larger may be used. When using Mark II Super Compound Equipment (#886) on the rudder, one pulse and hold gives right rudder, two pulses and hold is left. Three pulses holding a short time and releasing, gives a change in motor speed by triggering the Universal Motor Speed Control Escapement (#891).

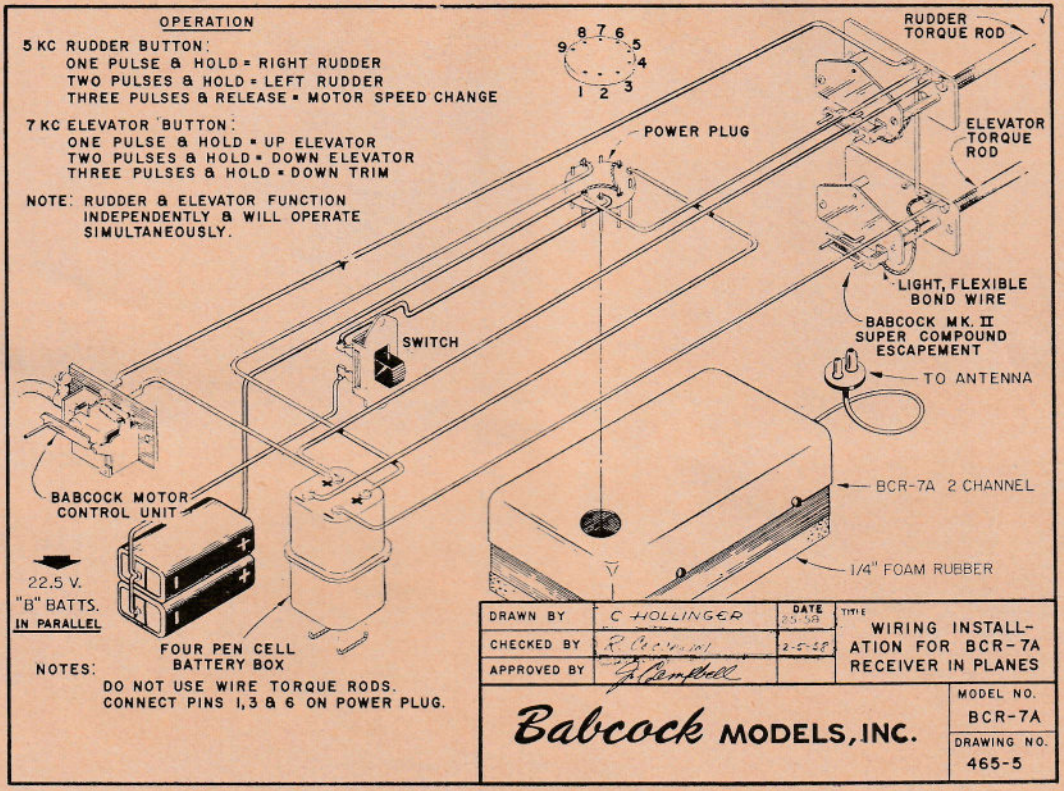
On the elevator escapement, (left-hand button of the transmitter), one pulse and hold is UP, two pulses and hold is DOWN, three pulses and hold is "DOWN TRIM". One pulse and hold on the ground results in a brake being applied to the tail wheel. By commanding rudder and elevator simultaneously during flight, a snap roll may be executed. Thus it will be seen that almost every point in a multi-channel contest may be garnered by this combination in a small easy-to-build airplane. The receiver is powered entirely by two **parallel** 22½ volt "B" batteries. **CAUTION!** Be sure that the polarity of these batteries are right, since reversing the batteries may ruin the transistors. **Under no circumstances** should a battery pack supplying over 22½ volts be used.

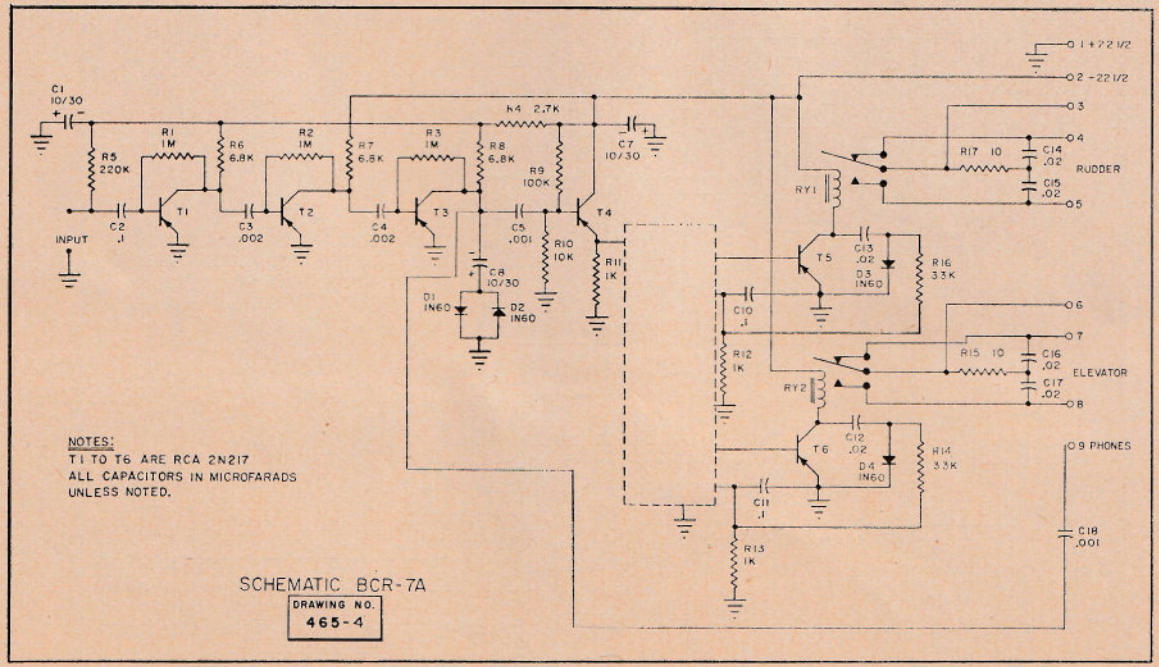
In the standard two channel installation previously mentioned, the "brakes on" position (3rd position) of the elevator compound escapement, can be effected by a mechanical linkage from the non-slotted arm furnished with the Mark II Super Compound Escapement. By this means, prototype takeoffs may be made.

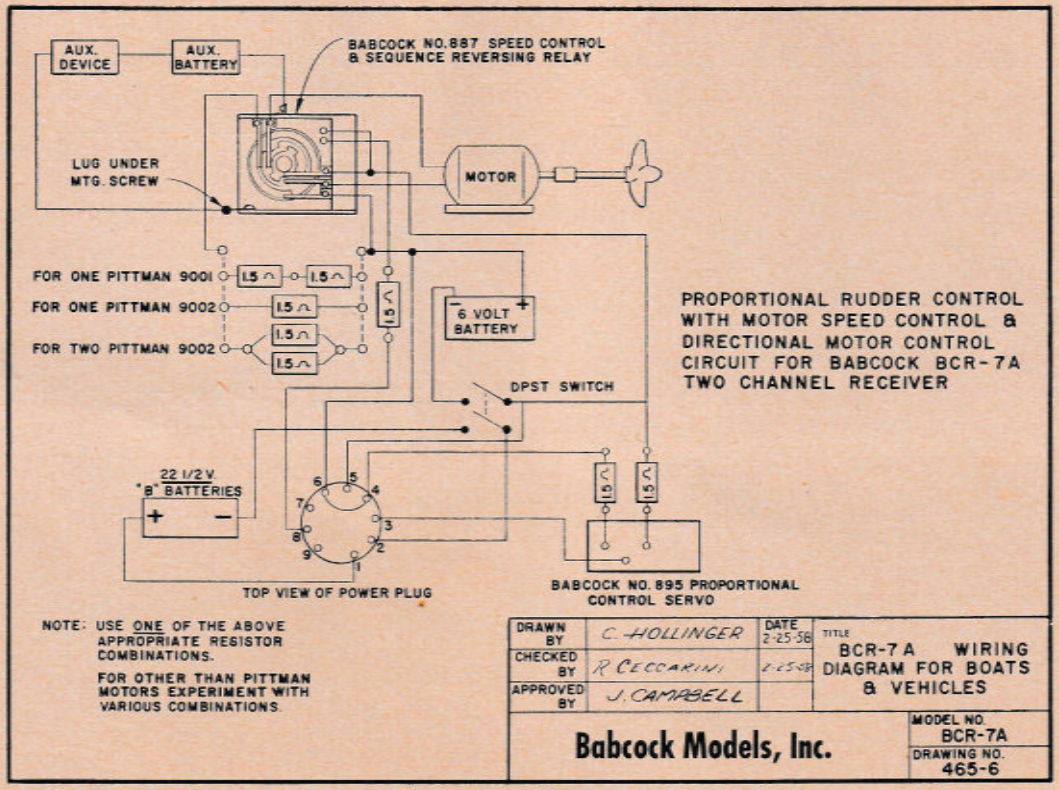
The BCR-7A is not designed for dual-channel pulse proportion operation.

2. INSTALLATION IN BOATS

We have tried a variety of installations in boats, and the one that stands "head and shoulders" above all for reliability and realism is to pulse the 5 Kc. channel of the BCT-7 Transmitter for rudder control and operate the Babcock Electric Motor Speed Control and Sequence Reversing Relay (#887) with the left hand on the 7 Kc. channel. A photograph of the Babcock Proportional Pulser (#894) mounted to the BCT-7 Transmitter is shown on page 3. We urge that you follow its instructions for installation on the transmitter. The Babcock


OPERATION
5 KC RUDDER BUTTON:
ONE PULSE & HOLD = RIGHT RUDDER
TWO PULSES & HOLD = LEFT RUDDER
THREE PULSES & RELEASE = MOTOR SPEED CHANGE
7 KC ELEVATOR BUTTON:
ONE PULSE & HOLD = UP ELEVATOR
TWO PULSES & HOLD = DOWN ELEVATOR
THREE PULSES & HOLD = DOWN TRIM
NOTE: RUDDER & ELEVATOR FUNCTION INDEPENDENTLY & WILL OPERATE SIMULTANEOUSLY.
8 7 6
9 5
4
1 2 3
RUDDER TORQUE ROD
POWER PLUG
ELEVATOR TORQUE ROD
LIGHT, FLEXIBLE BOND WIRE
BABCOCK MK. II SUPER COMPOUND ESCAPEMENT
TO ANTENNA
SWITCH
BABCOCK MOTOR CONTROL UNIT
BCR-7A 2 CHANNEL
22.5 V. "B" BATTS. IN PARALLEL
1/4" FOAM RUBBER
FOUR PEN CELL BATTERY BOX
NOTES:
DO NOT USE WIRE TORQUE RODS.
CONNECT PINS 1, 3 & 6 ON POWER PLUG.
DRAWN BY C HOLLINGER
DATE 2-5-58
CHECKED BY
DATE 2-5-58
APPROVED BY
TITLE
WIRING INSTALLATION FOR BCR-7A RECEIVER IN PLANES
Babcock MODELS, INC.
MODEL NO. BCR-7A
DRAWING NO. 465-5


C1 10/30
R5 220K
R1 1M
R6 6.8K
R2 1M
R7 6.8K
R3 1M
R4 2.7K
R8 6.8K
R9 100K
C7 10/30
INPUT
C2 .1
C3 .002
C4 .002
C5 .001
R10 10K
R11 1K
C8 10/30
D1 IN60
D2 IN60
T1
T2
T3
T4
1 +22 1/2
2 -22 1/2
3
4
5
6
7
8
9 PHONES
R17 10
C14 .02
C15 .02
RUDDER
RY1
T5
C13 .02
D3 IN60
R16 33K
C10 .1
R12 1K
R15 10
C16 .02
C17 .02
ELEVATOR
RY2
T6
C12 .02
D4 IN60
R14 33K
C11 .1
R13 1K
C18 .001
NOTES:
T1 TO T6 ARE RCA 2N217
ALL CAPACITORS IN MICROFARADS
UNLESS NOTED.
SCHEMATIC BCR-7A
DRAWING NO. 465-4



PROPORTIONAL RUDDER CONTROL WITH MOTOR SPEED CONTROL & DIRECTIONAL MOTOR CONTROL CIRCUIT FOR BABCOCK BCR-7A TWO CHANNEL RECEIVER

NOTE: USE ONE OF THE ABOVE APPROPRIATE RESISTOR COMBINATIONS.

FOR OTHER THAN PITTMAN MOTORS EXPERIMENT WITH VARIOUS COMBINATIONS.

DRAWN BY	C. HOLLINGER	DATE 2-25-58
CHECKED BY	R. CECCARINI	2-25-58
APPROVED BY	J. CAMPBELL	

TITLE: BCR-7A WIRING DIAGRAM FOR BOATS & VEHICLES

Babcock Models, Inc.

MODEL NO. BCR-7A

DRAWING NO. 465-6

Proportional Servo (#895) mounted in the boat is of a new type and contains but one potentiometer, and it (as well as the Babcock Sequence Reverser #887) is energized by means of the storage battery which operates the driving motor. Thus, with this system you have proportional steering, start, stop and reverse, as well as high and low speed forward. This entire installation is shown on page 18 Drawing No. 465-6. It should be noted that there are but three batteries in this entire system. Two are the 22½ volt "B" batteries, and the other is the 6 volt driving battery. An alternative to this system (where glow plug motors are used) would be to replace the Babcock Sequence Reversing Relay (#887) with a Babcock Universal Motor Speed Control Escapement (#891). A high speed runabout type of model will give beautiful control and lots of action with this latter setup. For model vehicles propelled by electric power, the exact same system as shown for boats is employed; the antenna considerations and range being axactly the same as that for boats or aircraft, and described in Part III of this book. Instructions for mounting the Babcock Proportional Pulser (#894) on the BCT-7 Transmitter are included with this unit.

In Part II, paragraph 4, of the BCT-7 Transmitter Instructions, is noted the type of tone you will hear in earphones as a result of the modulation frequencies of the transmitter. Rather than installing a phone jack, we recommend that you clip directly to pin No. 9 of the connector plug. The other clip of the headphones going to pin No. 1 or any grounded part of the metal chassis of the BCR-7A Receiver. In general, this will eliminate any possibility of audio feed-back causing oscillation in the receiver amplifier. These cautions and method of clipping on are noted on the installation diagram for the BCR-7A Receiver. It will be noted from the schematic diagram of the receiver, Drawing No. 465-4, that each connection of each relay (6 in all) is brought out separately to the 9 pin connector plug, although not all of them are used in either of the two installations. This has been done to accommodate future advancements in radio control.

Part V – Model Airplanes and Flying
by Dick Schumacher

One of the questions we have most frequently been asked is — "What airplane shall I build for Babcock equipment?" This question has been repeated so often that Chuck Hollinger has designed the Babcock BREEZY SR. airplane specifically for use with this equipment. It has been thoroughly tested, and we can recommend it to beginner and expert alike.

The BREEZY SR. is intended for use with the BCR-7A Receiver. It is a shoulder wing design, modeled after the beautiful Goodyear Racers. By using two Babcock Mark II Super Compound Escapements (#886), rudder, elevator, motor speed control, and brakes are possible. It is an extremely maneuverable airplane capable of outstanding performance in any multi-channel contest, while at the same time idealy suited to the beginner as well as the expert because of its smooth flight characteristics.

Many other kits may be used, due to the light weight and simplicity of the BCR-7A equipment. Most planes designed for use with a .09 engine or larger are suitable for the BCR-7A Reeciver.

In fairness to the beginner, it is well to caution him against tackling a complicated airplane for his first model. Obviously all would like a sleek 4-engine airplane with all controls functioning at all times, but even the pilot of such a plane had to learn to fly a training airplane first. Remember that in radio control flying you must also be the mechanic and flight engineer, as well as pilot — so we emphasize — START SIMPLY AND SLOWLY. You will have no difficulties flying if you will follow the few simple rules stated below.

1. LINE-UP.

(a) Check all surfaces for warp. The easiest and most important way to remove these is by generous use of an old-fashioned steam kettle.

(b) Check alignment of surfaces. Make sure the wing is set straight across the fuselage. The vertical fin is lined up with the fuselage center line; the stabilizer is lined up both horizontally and parallel to the wing.

(c) Check the wing incidence. This angle must follow the plans exactly. Two or three degrees difference between the stabilizer and wing is the normal requirement.

(d) Check the thrust line for both DOWN and RIGHT thrust, as shown in the plans. RIGHT thrust is required on practically all models to offset the torque of the motor, which tends to turn the model to the left under power. Three degrees DOWN and three degrees RIGHT thrust is the average requirement.

2. BALANCE.

Normally, lateral balance is not critical. Slight wing heaviness one way or the other is immaterial since it does not show up in flight. However, the longitudinal balance must follow the directions on the kit. Usually 30% to 35% of the wing cord from the leading edge is proper. If the model does not check out as specified, components must be shifted or weight added until it does.

3. DETAILS.

(a) All components must be properly fastened down and shock-mounted as required. A battery not properly fastened down can cause damage during a rough landing, and a receiver too stiffly mounted can cause excessive vibration to adversely effect the normal operation of the relays.

(b) Check all escapements, torque rods and hinges for absolute freedom of movement. Any stiffness or friction in this system means that much less useful power is delivered to the control surfaces by the rubber band of the escapement.

(c) Check the model for vibration on the ground by running a tank full of gas through the engine with all equipment functioning. Holding the model back with a piece of thin wall vinyl tubing or a rubber band will simulate actual flight conditions.

When the above steps have been completed and rechecked, you are ready for that first flight with confidence! Subsequent flights should only require minor adjustments to the thrust line and rudder for straight flight, power ON and OFF with the controls neutral.

FIRST FLIGHT

If you are a beginner, it is recommended that the first flight be take-off, if a runway is available, because a major misalignment will show up after take-off and before the airplane is too high. For the first flight, let the model gain altitude and use control sparingly. Always be ready to release the controls. Any well-designed model will straighten itself out if left alone. In the glide, do not attempt to spiral the model, as even the most stable airplane tends to recover very slowly in a gliding spiral dive, and sometimes even opposite rudder or up elevator will not react quickly enough. As your flying time progresses and you gain experience with your equipment, you will develop a sense of timing that will bring forth radio control at its best.

Part VI – Trouble Shooting and Testing

Because of the tremendous reliability of semiconductors in general, which include transistors and the crystal diodes installed in the antennas, problems with the BCR-7A is generally nonexistent. In order to check the current drain on the receiver, a milliameter may be clipped directly across the contacts of the "ON" "OFF" swith. With the switch in the "OFF" position the entire current of the receiver will then flow through the millimeter, which should have a 0 to 10 ma. scale. With no command from the transmitter, depending upon the condition of the battery, the idling current will be between 4.5 and 5.5 millamperes. Upon command this current will rise to from 8 to 8.5 ma., the difference in the "idling" and "command" currents flowing through the relay. When both channels of the BCR-7A Receiver are commanded the meter will go off scale. (SEE CAUTION WITH REGARD TO "B" BATTERY POLARITY.)

Part II of the BCT-7 Transmitter Instructions has cautioned against aiming at receiver antenna from too close a distance. The result may be antenna crystal burn-out and is evidenced by a loss in sensitivity or range. The only third possible trouble would be

audio feed back caused by running the antenna leads too close to the connector or leads attaching thereto which go to the switch and servo system. A distance of one inch or more will eliminate this possibility. Relay failure is almost unknown. The BR-3 Relay used in this receiver is of our own manufacture. It has a 5,000 ohm coil, a maximum pull-in current of 2 ma., and a minimum drop-out of 1 ma. This relay is the finest subminiature relay made today. We wish to reassure you that Babcock Models, Inc. stand solidly behind their equipment and their warranty, which is called out in subsequent sections of this book.

Factory Warranty and Service Policy

IMPORTANT! READ EVERY WORD!
AVOID MISUNDERSTANDINGS!

Your BCR-7A Receiver and/or BCT-7 Transmitter is unconditionally guaranteed for 90 days from time of purchase under the following terms and exceptions.

READ CAREFULLY

1. No warranty will be honored unless the Warranty Registration Record card (on the back cover) is completely filled in, mailed, and is on file at Babcock Models, Inc.
2. Tubes and transistors are not guaranteed.
3. Relays will be replaced or repaired for the 90-day warranty period on these terms only:
   a. No charge if factory inspection indicates faulty workmanship.
   b. $3.50 service charge if factory inspection indicates damage from crash, submersion, tampering, or excessive shock.

WARNING

Mail in your Warranty Registration card now. It's to YOUR benefit. Not only does it make the guarantee effective, it also serves as a record for YOU if your equipment is lost or stolen.

SERVICE POLICY

Your BCR-7A Receiver and BCT-7 Transmitter are good for many years of operation. If you have any reason whatsoever to return your unit to the factory, either before or after the warranty period expires, proceed as follows:

1. Carefully pack the unit and enclose a note with your name, address, and serial number of the unit, ship parcel post prepaid.
2. Write us a letter stating the circumstances as clearly as possible.
3. If the warranty has expired, you will be charged a base service charge of $3.00 plus parts used.
4. If the warranty has expired and if your equipment has suffered extensive crash or submersion damage, we will inform you of repair estimate before proceeding.

Cut Out and Mail At Once

WARRANTY REGISTRATION RECORD

Name_____ Date of Purchase_____

Address_____
No. & Street City Zone State

BCR-7A Serial #_____ **BCT-7 Serial #**_____

Dealer from whom purchased_____

His Address_____
No. & Street City Zone State

To be used in Boat ☐ Airplane ☐

Postage Will be Paid by Addressee

No Postage Stamp Necessary If Mailed In the United States

BUSINESS REPLY CARD

FIRST CLASS PERMIT No. 43 COSTA MESA, CALIFORNIA

Babcock Models, Inc.

BOX 344

COSTA MESA, CALIF.