Air Guide Systems'

New

GO-AC

Model SA

SPECIFICATIONS -

Size (overall) Length 2", Width 1-7/8", Height 1-3/4" (base dimensions) Length 1-7/16", Width 1-5/8"

Weight 1.7 oz.

Voltage Requirements 1.5 to 3.6 volts each side 1.5 - 3 v for 1/2A ships 2.4 - 3.6 v for larger ships

Current Drain Average In-Use 80 ma.

FEATURES -

Extreme small size. Small enough for $\frac{1}{2}\mathbb{A},$ yet powerful enough for .35 sized ships.

Encapsulated in two-piece aluminum frame for strength and riveted together to eliminate vibration problems.

Motor employs double brushes and industrial type self-centering bearings.

Gear train of Zytel to Brass mesh eliminating "noise" caused by metal to metal contact.

PTO to Torque Rod connection via "universal" (furnished) makes installation and removal of Go-Ac ultra simple.

Tripod-like three hole mount makes mounting easy - even on warped servo platform.

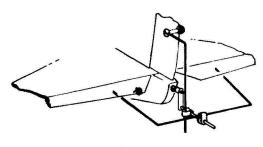
No throttle arm flutter during normal rudder and elevator control.

All parts used in the manufacture of the new Space Age Go-Ac Model SA meet industrial standards.

Unit is completely self contained including "soft" coiled spring centering which is pre-adjusted. No additional parts are needed except batteries and normal wire linkages to Rudder-Elevator and Throttle. For best results and almost instant Rudder-Elevator hookup equip each ship with an S.E.P. G-G Coupling Kit of pre-formed wire parts available at most hobby shops or direct.

And WIRING





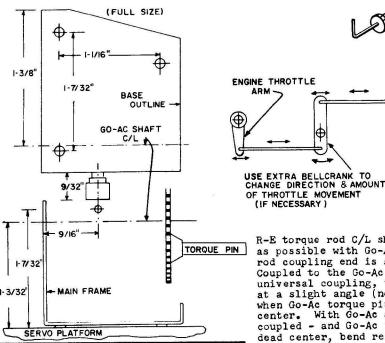
MAIN GEAR

(FACING REAR)

REAR CRANK

NOTE FOR RUDDER-ONLY, REMOVE ELEVATOR TIE-BAR & TAPE ELEVATOR IN NEUTRAL. SHIP CAN BE TEST FLOWN USING ONLY PROPORTIONAL RUDDER AND THROTTLE.

Basic Wiring Schematic



I-I/2 V. HOOKUP B ARC SUPPRESSION

FOR TINY SHIPS

R-E torque rod C/L should align as closely as possible with Go-Ac shaft C/L. Torque rod coupling end is a simple 90 degree bend. Coupled to the Go-Ac torque pin, via the universal coupling, torque rod bend will set at a slight angle (not quite perpendicular) when Go-Ac torque pin is at bottom dead center. With Go-Ac and R-E torque rod so coupled - and Go-Ac torque pin at bottom dead center, bend rear crank portion of R-E torque rod straight down as is normally the custom. (NOTE: the degree of offset on the coupling end of the torque rod is unimportant as long as when it couples to the torque pin, and the pin is at bottom dead center, the rear crank is also at bottom dead center. If installing the crank from S.E.P. G-G Coupling Kit, proceed in manner outlined above, substituting preformed crank parts for the rear crank wire bend. BE SURE the universal coupling moves freely after installation.

THROTTLE

P.T.O. ARM

RELAYLESS TO RELAY CONVERSION

NOTE OFFSET AT COUPLING END

TORQUE PIN

OF R-E TORQUE ROD

UNIVERSAL

R-E TORQUE ROD I/16" WIRE

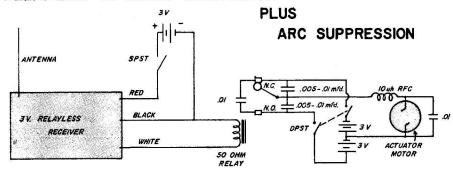
BEARINGS

MAIN GEAR

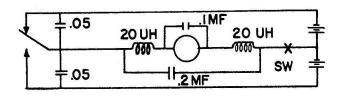
TORQUE PIN SHOWN AT

BOTTOM DEAD CENTER

MOTOR TERMINALS ON THIS SIDE



- CONNECT RELAY COIL AS IF IT WERE AN ESCAPEMENT
- MOST CAPACITORS CAN BE INSTALLED TO RELAY CONTACT PLATE
- AN ADDITIONAL IO UH RFC (CHOKE) CAN BE INSERTED IN OTHER MOTOR LEAD



GO-AC MOTOR

NOTE: Many of today's newer receivers will require no arc suppression whatsoever when used with the new Model SA Go-Ac. Begin hookup with the basic schematic shown above. Add capacitor and resistor to motor terminals if needed. Add other components only as required to eliminate arcing. Arc suppressor components do not detract from your system's performance...they merely isolate unwanted electrical spikes which affect some receivers.

Galloping Ghost application requires a pulser at the transmitter such as an ACE Phelps, Glass City or similar type designed to send varying pulse lengths and rates. Rudder-Only flyers can use simpler types. Pulsers must have ON and OFF push buttons in order to be able to activate the Throttle feature of your Go-Ac.

The New Space Age Go-Ac Model SA has been used with relay equipped receivers of most available types and also superhets such as the Min-X Superhet and Pulsmite Transmitter combination with flawless results. Some receivers will require the addition of arc suppressors such as are outlined here. Selection of the proper arc suppressor (if needed) is up to the individual - depending upon the receiver's requirements. Though most of today's receivers can be adjusted to work on pulse, some may be found which are too critical to electrical "noise" even with arc suppressors. In this instance another receiver will have to be employed.

Throttle control is achieved with the Go-Ac by sending either a solid ON or solid OFF signal via the push buttons on your pulse box. At such times, the Go-Ac goes into 360 degree rotation and moves the Throttle arm in one direction or the other. It is best to have your unit installed so solid ON signal gives HIGH SPEED and Solid OFF gives LOW SPEED. In this way you have fail safe if your ship wanders out of range. During 360 degree rotation of the Rudder-Elevator Torque Rod, the control surfaces have the effect of neutral and the throttle is in LOW SPEED. The throttle can be adjusted in flight for any degree of speed between high and low if you desire.

The easiest way to install your Go-Ac is to harness the Rudder-Elevator linkage first and test it out with your pulse box. If you get right when you call for left, simply reverse the polarity of the batteries or reverse the leads to the Go-Ac motor. Be sure you have eliminated all unnecessary friction in the torque rod linkage between Go-Ac and control surfaces. Once this has been done, observe which direction the Throttle arm moves during SIGNAL OFF and hook up the throttle linkage accordingly. Again, be certain there is no unnecessary bind in this linkage. The freer this whole installation works, the more satisfactorily the results and longer the life of your batteries.

Though this new Model SA Go-Ac was especially designed for larger ships, it is efficient enough to be used on the tinest of planes. This unit will actually perform its full function on a set of two pencells (one on each side)($1\frac{1}{2}v$) We find it to have as much power on one pencell as our earlier model had on two! The new Model SA Go-Ac is, by comparison with our earlier model, more than twice as powerful, about half the size and weight and draws less current.

Manufactured by AIR GUIDE SYSTEMS
a wholly owned subsidiary of

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