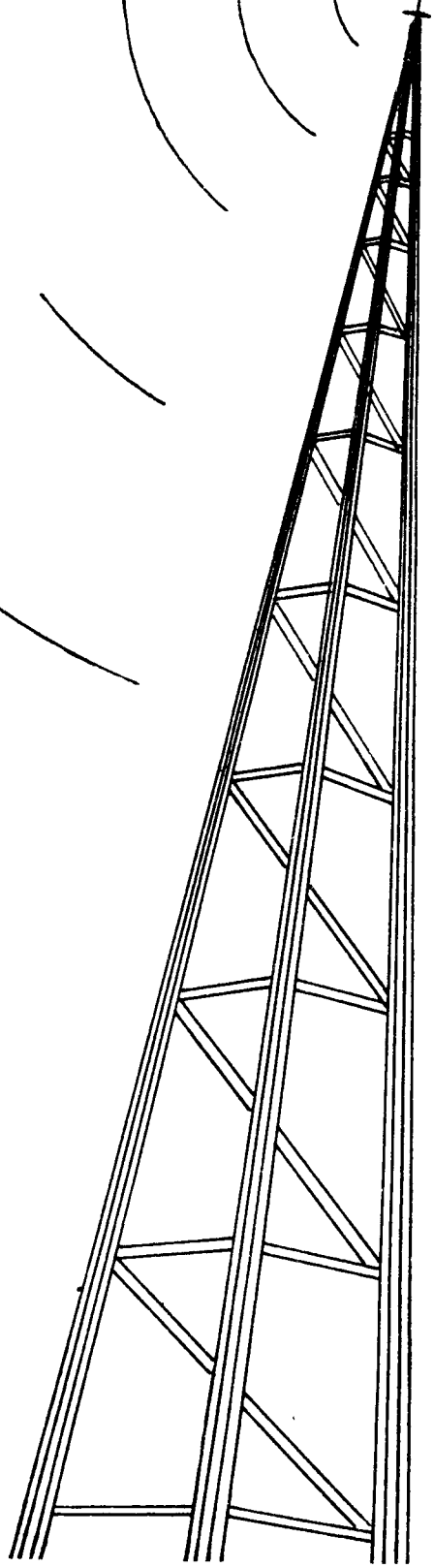
QSX PE



ZS2PE

FREQUENCIES:

Bulletin	3640 Khz
	7102 Khz
National Call	145,5 Mhz
P.E. Repeater	145,05/65
Grahamstown	145,15/75
Lady's Slipper	145,10/70

Port Elizabeth Branch of the South African Radio League

P.O.Box 462, Port Elizabeth. 6000.

8 MAY 1981

PORT ELIZABETH BRANCH.

NOTICE OF MEETING.

HOT NEWS!

The next meeting of the Port Elizabeth Branch takes place on Friday 15 May at 8 pm at the usual venue, that is, Y.M.C.A. Havelock Street, Port Elizabeth.

+++++++++

GUEST SPEAKER

Our guest speaker will be Mr Alistair Scott, a lecturer at the P.E. Technikon. His subject is communications. This promises to be a most informative talk so please make a special effort to attend. If possible, bring a friend.

HAMADS.

FOR SALE: Heath SB101 SSB/CW transceiver. 80 - 10 metres with matching AC power supply/speaker. In working order. With manual. R350. Please phone Brian ZS2AB at 21173 (business) or 303498 (home).

For A.N. Other seller: Yaesu FT 100 transceiver SSB/AM/CW. 80 - 10 metres. Built-in power supply 12v/240v. With speaker, microphone and manual. R200. Please phone 303498.

For A.N. Other seller: Yaesu FTDX 400 Transceiver with set of spare tubes. 3 element Mosley beam. R350. Please contact Neil ZS2AI, Queenstown. Phone 0451-4626.

We would like to welcome the following new members and wish them a long and happy association with the Branch and the League:
Kevin Eastwood, Gerald Meaker and Alwyn Snyman.
CONGRATULATIONS; To Sam ZS2SI ex ZR2CF and Andy ZS2CC ex ZR2CW on obtaining their ZS calls which seemed to take forever to get to them.
GOOD LUCK to James ZS2L who is now the proud possessor of a Kenwood TS 130. May you have lots of fun chasing DX James.
CONGRATULATIONS are also due to Selwyn for his fine achievements on 6 metres. After setting up his beacon, he worked two G stations and also KH in Hawaii.

BULLETIN ROSTER:

May [illegible]	Frank ZS2CY	811259
May [illegible]th	Selwyn ZS2SS	304651
May 17th	Peter ZS2PS	713612
May 24th	Trevor ZS2TJ	303591
May 31st	Dick ZS2RS	327111

If you have news or information which you think might be of interest to members and or ther interested listeners, please give the bulletin reader a call. It is not an easy task to prepare a newsy bulletin each week when there is no news. How about it! We would love to know what is going on in your part of the world.

MINUTES OF THE GENERAL MEETING OF THE PORT ELIZABETH BRANCH OF THE S.A.R.L. HELD AT THE Y.M.C.A., HAVELOCK STREET, PORT ELIZABETH ON 10TH APRIL, 1981.

PRESENT: 20 members and visitors.

APOLOGIES: ZS2L.

The Chairman welcomed all to the meeting and apologised for the late start, but said that in view of the fact that there were always a few late-comers, it didn't seem to matter! Viv ZR2CI thanked the Chairman! The Chairman said that it was very disappointing, but due to a sudden and last minute commitment, the guest speaker was not able to be present. He had hoped for a larger audience in view of the calibre of the speaker, who hopefully would address the May meeting. The notice would be made even larger in the next QSX-PE.

MINUTES: The Minutes of the February meeting having been published in QSX-PE and circulated, were taken as read, proposed by Cyril ZS2KX and seconded by Peter ZS2PS.

ARISING: -

CORRES: The Chairman read a letter from the Treasurer to Headquarters informing them of the error in the allocated Branch voting strength, which had appeared as 50. The meeting registered its approval in applause for Frank's action. The letter from Headquarters in reply was also read. The Treasurer was thanked for his letter. The Chairman said that the actual voting strength of the Branch as at 31st December, 1980 was 89 but the number had increased substantially since then.

FINANCE: The Treasurer stated that an amount of R200 had been paid for the hire of the bus to Grahamstown, and R5 for the Bonus Bond. An amount of R97 plus a donation had been paid in, and therefore the Branch subsidy was R108, but members expressed the opinion that it had been well worth it. There was a query re the attendance at the meetings and the country membership, and the Chairman replied to this.
The Secretary had written to Alan Armstrong thanking him for his help with the Social get-together.

GENERAL: The Chairman welcomed three new members - Kevin Eastwood, Alwyn Snyman and Gerald Meaker.
It was hoped that the get-together in Grahamstown would become an annual event, but preferably in February while the weather was still warm.
The Chairman thanked Gordon Harris ZS2GH for his article in QSX and also Marion ZS2AS for the drawings for the article.
Great Circle maps were available at 50c.
The Chairman said that he would be in Cape Town the following week for the League A.G.M. and would be able to see what the Cape Town Branch Clubrooms was like.
Peter ZS2PS said that he would like to revive an interest in V.H.F. and asked for permission to use the Branch call-sign for weekly bulletins.
The Chairman asked that the Committee be kept informed as to the time and frequency, so that notice could be given of this on bulletins and in QSX.
The Chairman asked that the relay of the Amsat bulletin be made on a simplex frequency in order not to keep the Lady's Slipper Repeater tied up for too long. Peter said that this would be done on 145,550 at 11a.m.

There being no further business, the meeting was closed and tea was taken. A rag-chew followed. The draw for the Bonus Bond took place, and this was won by Lionel ZS2DD.

sgd:
R.W. Schönborn ZS2RS
Chairman

sgd:
M.T. Colson ZS2OB
Secretary.

Want to remain on friendly terms with other repeater users and avoid purchasing a round for the ever-present silent majority? This little unit provides an economical answer. Build it and still have time to mow the lawn this weekend!

Build a Ragchew Clipper

With increasing 2-meter participation, more and more hams find themselves embarrassed — and some of their compatriots aggravated — by overrunning or "timing out" repeaters. Such operation is, of course, truly inadvertent, as we all know that no ham could ever be accused of being long-winded! [Ahem! — Ed.] However, if there are any in our fraternity who may subconsciously realize that they may, on very rare occasions "tell a long tale," they may feel inclined to change the name of the device described below from "Ragchew Clipper" to "Bull Shutter."

A Solution

Many 2-meter rigs have an auxiliary or accessory jack that has, among other inputs and outputs, a dc supply voltage output which is switched on when the microphone is keyed for a transmission. Those units which do not can be modified rather easily. Others may have access to the keying line, which may be used to complete the supply circuit of a Ragchew Clipper built with an internal battery.

The keyed power can be used to activate a timer automatically with some form of signaling means (visual, aural or both) to alert the guilty party that he is about to exceed his time limit. He can stand by or open the microphone key momentarily to reset the repeater.

Since repeaters are set to time out at different intervals, the "black box" should be adjustable. If you're not acquainted with time-out spans for a particular repeater, ask someone when you are on the machine, then set the timer to keep yourself from hosting all those listening with cool 807s.

Construction

You can build the timer in a few hours and at a cost of a few dollars, dependent, of course, upon your junk-box resources. All parts are readily available as indicated in the parts list. The author used point-to-point wiring on perf board and encased the circuitry in a plastic box.[1]

The Circuit

The timing circuit is rather conventional. The start pulse or trigger is generated by R1, C1 and Q1 when the microphone is keyed. The end of the timing cycle or reset is signaled by releasing the microphone button either momentarily or at the end of the transmission. The circuit shown in Fig. 1 is one which works well. With S1 open, a purely visual indication is provided by DS1. Closing S1 places the buzzer, LS1, in parallel with DS1, creating an audible reminder that your time is up. R3 can be a 1-MΩ potentiometer to provide timing adjustment from a few seconds to several minutes. The fixed version used here has a delay of about 45 seconds, keeping me out of trouble with local repeaters.

By Howard Hudiburg,* KB5NW

*302 Guadalupe River Dr., Seguin, TX 78155

[1]The builder may choose to adapt one of the popular Radio Shack IC experimenter pc boards (RS 276-024) to contain the required components. — Ed.]

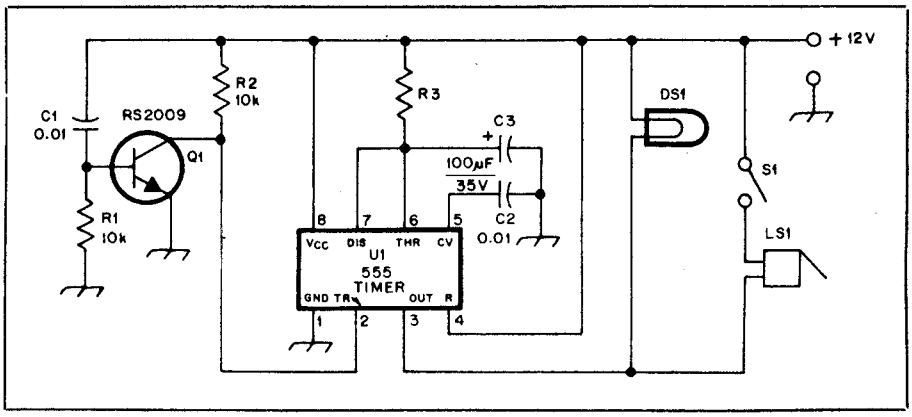
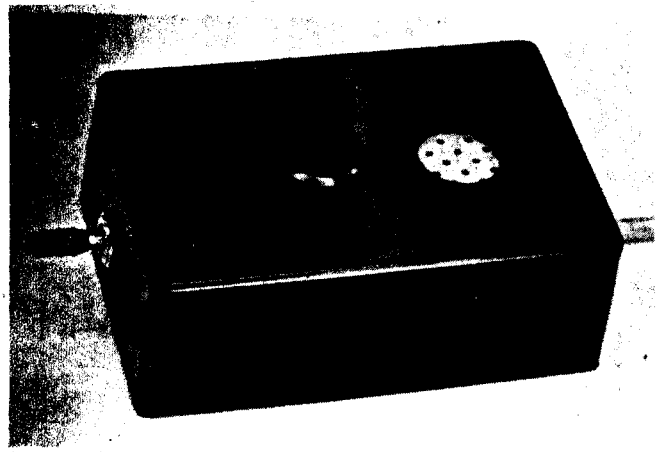
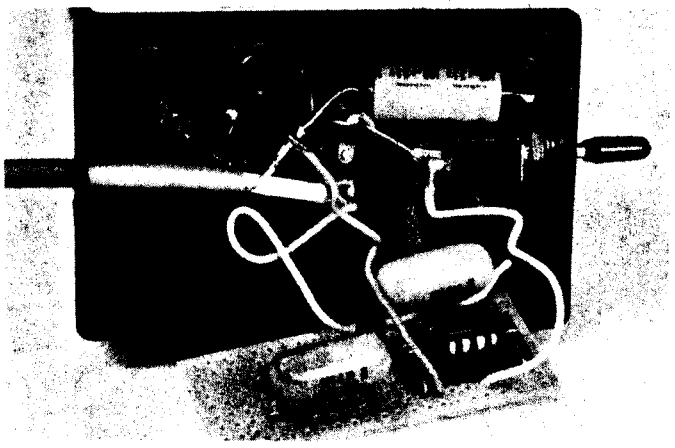


Fig. 1 — Circuit diagram of the Ragchew Clipper. Resistances are in ohms; k = 1000; capacitances are in µF. Part numbers in parentheses are Radio Shack.
C1, C2 — 0.01-µF Mylar, 50 V (RS 272-1065).
C3 — 100 µF, 35 V (RS 272-1016).
DS1 — Lamp assembly, 12 V (RS 272-323).
LS1 — Buzzer (RS 273-060).
Q1 — General-purpose npn switching transistor, RS2009 or equiv (RS 276-2009).
R1, R2 — 10 kΩ, 1/2 watt (RS 271-034).
R3 — 220 kΩ, 1/2 watt (RS 271-049) or 1-MΩ, 1/2 watt pot (RS 271-211).
S1 — Toggle, spst (RS 275-612).
U1 — 555 timer IC (RS 276-1723).
Misc. — Enclosure (RS 270-230).



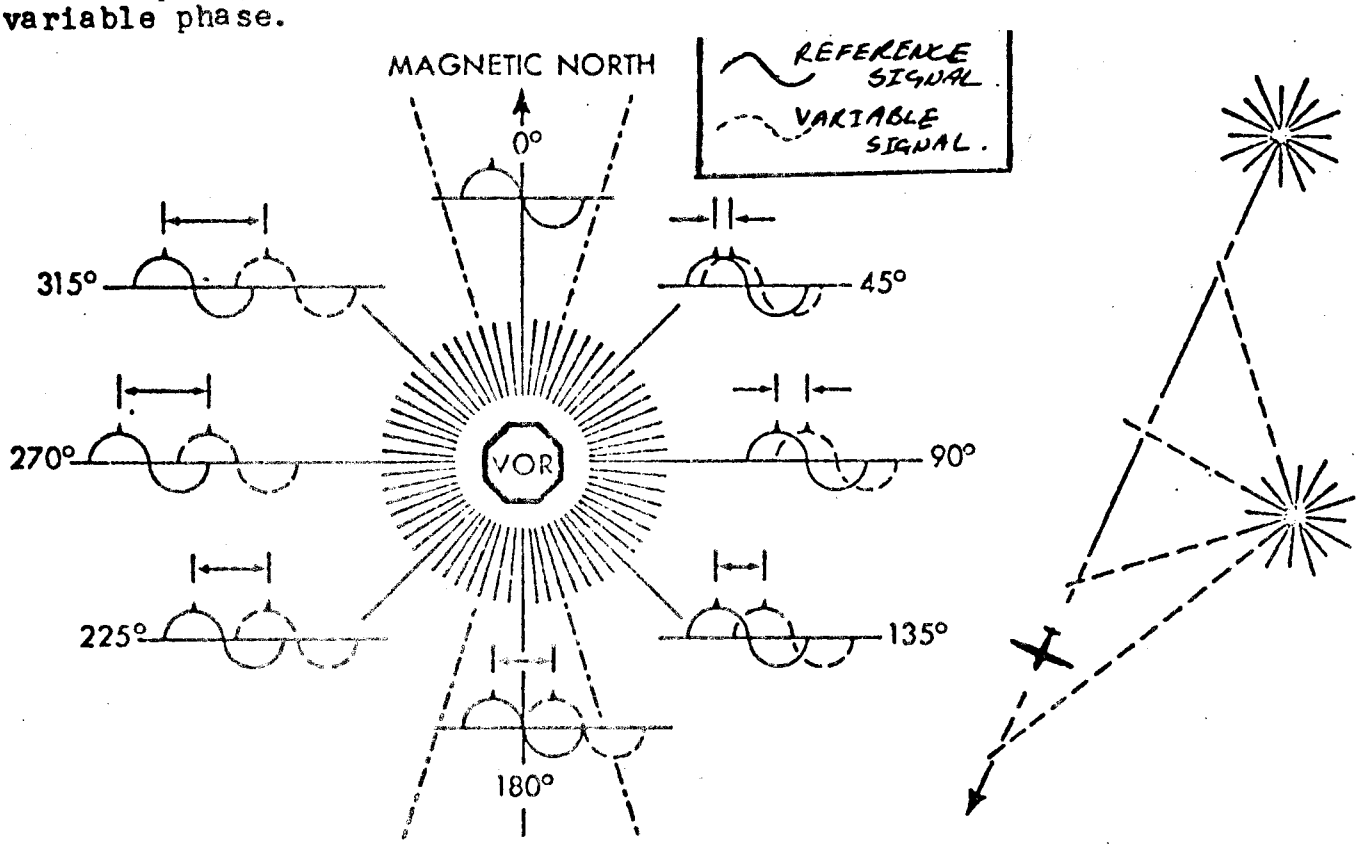
The completed Ragchew Clipper ready to go. The buzzer grille is made from a piece of perf board.



Parts placement both in the box and on the perf board can be seen here. All the components fit comfortably inside the plastic enclosure.

V.O.R. IN AIRCRAFT

The VHF OMNI RANGE (V.O.R.) gives exact directional information to the pilot at all times, regardless of the position of the aircraft but it must be in range of the station. The frequency is between 108 and 118 MHz. The omnirange theorectically produces an infinite number of courses which radiate from the station, analogous to spokes from the hub of a wheel. These spokes are known as radials. The principle of the V.O.R. is based on the comparison of the phase difference between two radiated signals; the difference in phase varying with a change in azimuth. One of these signals is omni-directional. It has a constant phase throughout its 360 degrees of azimuth, and is called a reference phase. In order to separate the two signals for comparison in the receiver, a 10 KHz FM subcarrier is used to carry the reference signal. The other signal rotates at a speed of 1800rpm (30Hz); varies in phase with azimuth and is called the variable phase.



VOR OPERATION

The rotating signal is initially set so that at magnetic north the reference and the variable signals are exactly in phase. In all other directions, the positive maximum of the variable signal will occur at some time later than the maximum of the reference signal. The fraction of the cycle which elapses between the occurence of the two maxima, at any point in the azimuth, will identify the azimuth angle of that point.

The basic function of the receiver circuits is to measure the phase angle between the reference and variable voltages. With this action a bearing from the aircraft to the station can be obtained Instruments on the cockpit panel present a picture to the pilot showing his relationship to a selected radial. When the radial is intercepted the pilot can manoeuvre his aircraft to bracket the beam and home in. The indicator on which the information is displayed is called a Radio Magnetic Indicator (R.M.I.), the same as the ADF mentioned last month.

DOUGLAS ZR6WO

HONDERD JAAR VAN INTERNASIONALE KOMMUNIKASIE.
(Met erkenning aan "Pulse" Mei 1980 en vertaal deur Anna ZS6ATN).

Tot 100 jaar gelede was die enigste kommunikasie tussen S.A. en oorsee die posboot. Die eerste telegraafkabel is in 1879 tussen Durban en Aden oor Zanzibar gelê en dit het die tyd wat nodig was om boodskappe tussen Europa of Amerika en S.A. oor te dra van verskeie weke tot 'n paar minute verminder. By Aden kon aansluitings oor ander kabels na Engeland en Amerika gemaak word. In 1899 is nog 'n telegraafkabel tussen Kaapstad en Brittanje oor St. Helena en Ascension gelê.

Al hierdie vroeë seekabels kon telegramme slegs per morsekode teen die stadige spoed van ongeveer 20 woorde per minuut oordra. Die koste van 'n telegram na die Verenigde Koningkryk was gelykstaande met 87,5 sent per woord in vergelyking met die huidige 24 sent per woord. Rekords toon dat sowat 10 000 telegramme gedurende 1881 na oorsese lande oorgesein is. Die twee oorspronklike telegraafkabels is in diens gehou tot in 1966 en 1967 toe hulle in onbruik geraak het omdat die onekonomies geword het om dit in stand te hou en te gebruik.

Die telegram, S.A. se vroegste middel van oorsese kommunikasie, is uitsluitlik by wyse van see-kabels oorgesein tot in 1924 toe 'n radio-telegraafdiens tussen Engeland en S.A. ingestel is om die kabeltelegraaffasiliteite aan te vul.

VROEGSTE RADIO; Radiokommunikasie is in 1910 vir die eerste keer in S.A. ingestel toe die Natalse Administrasie 'n kus-radiotelegraafstasie opgerig het om met skepe te see te kommunikeer. Die 3-kW-vonksender, wat vir werking in 'n bandbreedte van 300 tot 600 m ontwerp is, is in 'n gebou op die Bluff in Durban geïnstalleer. Die stasie kon in normale dagtoestande oor 'n afstand van tot 400 km met skepe kominikeer.

Laat in 1910 het die Regering van die Unie van Suid-Afrika nog 'n kusradiostasie by Slangkop in die Kaapse Skiereiland opgerig. Die stasie was sterker as die een in Durban en het 'n gewaarborgde bereikafstand van 650 km in normale dagtoestande gehad.

In 1922 is 'n klein kusstasie by P.E. opgerig wat 'n draagbare 1,5 kW vonksender en ontvanger gebruik het. Die stel is gedurende die Tweede Wêreldoorlog in Suidwes-Afrika gebruik.

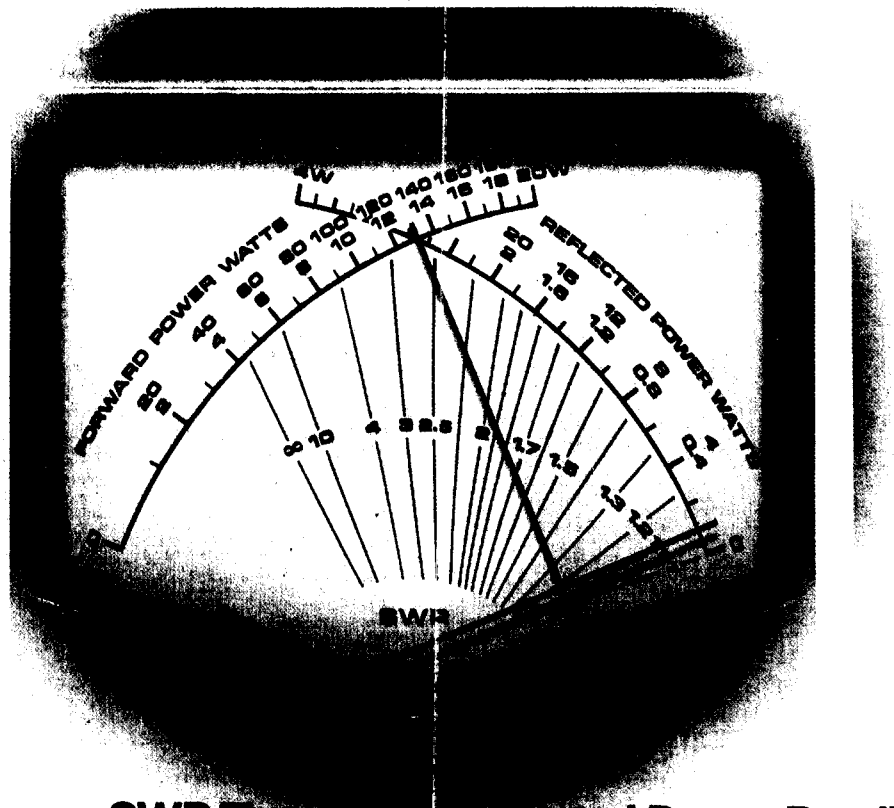
Deur die jare heen is al hierdie stasies van tyd tot tyd gemoderniseer om die bereikafstand van kommunikasie met skepe te verbeter.

(Meer volgende maand).

A HAM'S PRAYER.

O Lord, thou knowest I am growing old.
Keep me from becoming talkative and possessed with the idea that I must express myself on every subject.
Release me from the craving to straighten out everyone's affairs.
Keep my mind free from the recital of endless detail.
Give me wings to go to the point. Teach me the glorious lesson that occasionally I may be wrong. Seal my lips when I am inclined to tell of my aches and pains.
Make me thoughtful, but not nosy; helpful but not bossy.
With my vast store of wisdom and experience, it does seem a pity not to use it all; but thou knowest, Lord, that I want a few friends in the end. Amen.

DAIWA INDUSTRY CO., LTD. Cross Needle Meter

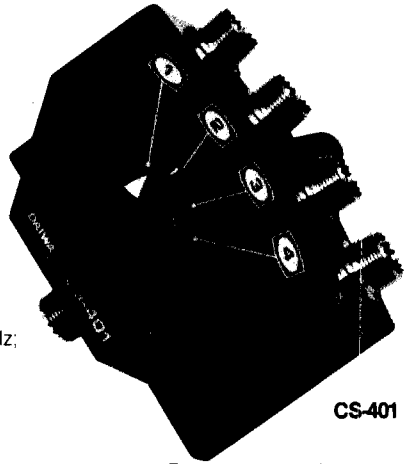


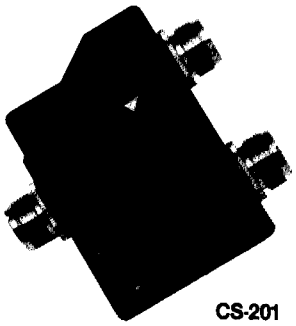
Simultaneous SWR/Forward & Reflected Power Readings

Coaxial Switches
2 Position/Model CS-201
4 Position/Model CS-401

Professionally engineered cavity construction.

Power Rating: 2.5 kW PEP, 1 kW CW
Impedance: 50 Ohms
Insertion Loss: Less than .2 dB
VSWR: 1:1.2
Maximum Frequency: 500 MHz
Isolation: Better than 50 dB at 300 MHz; better than 45 dB at 450 MHz; adjacent terminal
Unused terminals grounded
Connectors: SO-239


CS-401


CS-201

SUMMIT DISTRIBUTORS (Pty.) Ltd.

25/27 Reed Street
PORT ELIZABETH
P.O. Box 500
6000

Telephones:
541461/2
Telegraphic Address:
"SUMMIT"