

U.S. POSTAGE PAID
PERMIT #320
MENLO PARK, CA. 94025

To:

Andy Korsak VE3FZK/W6
504 Lakemead Way
Redwood City CA 94062

RETURN REQUESTED:
PAARA P.O. BOX 911
MENLO PARK, CAL.
94025

AFFILIATED CLUB



EL PALO ALTO

VOL. XIX

AMATEUR RADIO
STATION W6OTX

1975

PAARA GRAPHS

PALO ALTO AMATEUR RADIO ASSOCIATION, INC.

MENLO PARK CIVIL DEFENSE RADIO CLUB, K6YQT

NOV. 75

OUR NEXT MEETING: will be on Friday, November 7, 1975, in the lovely, beautiful Menlo Park Recreation Center, near the library and the Police station.

THE PROGRAMME: All about how NOT to get lost! we've got Chuck Jackson WN6HES, assisted by our own Andy Korsak (VE3FZK/W6) to tell us about the NASA-SRI development of automatic radionavigation equipment. The title of the talk is "Radionavigation: Past, Present and Future," which will include a demonstration of gear that plots the course of your flight as you fly. WITH a slide presentation and other good-taste information on the very latest in navigational aids. Includes Very Low Freq. stuff, DME's, and lotsa genuine gunk. Re-freshments -- Cookies -- Raffle -- Ham talk ** Coffee Bring a Friend!!!

AVERT DISASTER! Rumour has it that there will be an attempt by a local radical CB organization to disrupt PAARA operations by actually moving our W6OTX "mobile" trailer a distance of 6 feet, $5\frac{1}{2}$ ". This will, of course, result in the immediate cessation of its existence, since the miserable thing has enough trouble staying together whilst absolutely still. Date and time of this Undergroud event is the Wed. following our meetin', November 12, at 7:32 PM. HALT this utter catastrophe and come to the Board of Directors meeting which will follow thereafter.

-----*****-----

THE PAARA net meets every Monday night on TWO (count 'em, 2) frequencies at one (1) & the same time. For the Amplitude modulators there we are on 145.24 mHz, while the FM'ers are deviating away on 147.45 mHz. This happens all at once at 8:07 PM local time, and continues as long as you do. Come join us.

CONGRATS go to Andy Korsak, VE3FZK for his recent acquisition of a Grand Piano, and for getting his name mentioned two times on the same page in this issue. CONGRATS also go to Dick Laird, who just became WA6BQY (advanced) from WN6BQY. 11 weeks of process time! Let's hope to hear you on Monday nites, Dick.

PAARAGRAPHS is the official organ of the Palo Alto Amateur Radio Assn., and the Menlo Park CD Radio Club.
Volume 19 - - - - - Number 11 - - - - - November 1975 - - -

PAARA and Menlo Park CD Radio Club Officers:

President: Fred Canham K6YT

Vice President: Andy Korsak VE3FZK/W6

Secretary: Terry Conboy WB6GRZ

Treasurer: Paul Churchill W6QBY

Trustee of W6OTX: Fred Canham K6YT

Trustee of K6YQT and M.P. Radio Club Officer: Bob W6WQD

Property Custodian: Ed Fairbanks WA6AIN

-

Board of Directors:

Chairman: Fred Canham K6YT

Members: Paul Thekan W6IJP Del Philpott WA6YOQ

Andy Korsak VE3FZK/W6

Terry Conboy WB6GRZ

Ed Fairbanks WA6AIN

Jerry Tucker WA6LNV

--*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*

POLICIES :

1. Membership includes PAARAGRAPHS subscription.

2. Dues are a mere \$4.00 a year.

3. \$1.00 will get you PAARAGRAPHS for an entire year.

4. Try to pay on a calendar year basis, please.

SEND Money, cheques, cash, coins, junk, etc., to:

PAARA P.O. Box 911 Menlo Park, Cal 94025

--*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*-*

*******WONDERFUL PEOPLE AT OR BY PAARAGRAPHS*******

Editor-in-chief: Richard Ferranti WA6NCX

Cover design: Bruce M. Rapp

Labels and Mailing: Ed Fairbanks and Paul Thekan

Printing: Due recognition will be given next issue.

Main Mobileer, Frequency Modulator, and Crystal Supplier:
 Dave Waters, WA6AWZ

FOR GOODNESS SAKE SEND ME STATION NEWS, PROJECT NEWS,

ARTICLES, AND OTHER GUNK TO RICK FERRANTI WA6NCX

1234 Santa Cruz Avenue, Menlo Park, Ca 94025

(415) 324-1539 or 246-1400 Rm 1001

PAARA PICKIN'S *** ANNOUNCEMENTS AND OTHER GOOD STUFF ****
 Many thanks go to all who helped out at our latest AUCTION
 on October 3. Lots of goodies were shuffled around
 and there was quite a turnout of interesting people.

Paul, W6QSY, our financial wizard/treasurer, reports:

Commission from auction sales:	\$92.75
Raffle tickets and Flea Market tables	105.15
Flea market sales of donated gear	25.01
Refreshment donations	25.27
Sub-total	\$248.18
Less cost of refreshments	30.09
Auction NET INCOME	<u>\$218.09</u>

Postage is due to go up go up 30% after Christmas. Our
 cheap \$1.00 subscribers can expect Dire Rate Increases
 as the money just barely covers postage now, leaving
 none for the Editor's Tsingtao beer fund. SO pay up
 for 1976 right now before we do something about it
 and increase China's export rate by 32%.

The SPECS net (W6ASH) will assist in the March of Dimes
 Jalkathon in November. If interested contact him, the
 Specs net on 146.00 mHz Monday at 7:45, or Fred K6YT.

The S.E.T. is Jan 24-25 this year, and the 1976 DX com-
 petition is for Phone on Feb 7-8 and March 6-7; and
 on CW on Feb 21-22 and March 20-21.

GREEN is PAARA's color -- used to identify calves, gear,
 and other good stuff. Makes it easy to remeber that
 Galway (in Ireland, natch) is Menlo Park's Sister
 City, and Vice Versa.

TWO illimitable members of PAARA, Mike Eccles, G3PPE/W6
 and Sy Stein, WA6ROM, are participating in a series
 of lectures at Foothill called "Exploring the Solar
 System and Beyond". Ye noble Editor has been to most
 of the lectures and is suitably "spaced-out."

Congrats to Steve Stuntz K6FS, our new Emergency Coodinator
 (since Hal Moore W6DEF moved). Glad he's on 2 FM!

PAARA ADS (STILL FREE) AND EDITORIAL

FOR SALE: Heathkit gear: SB303 receiver, SB401 Transmitter, SB600 Speaker, SB630 Control console, SB200 final amp -- all prices have yet to be established on the above. Call with your offer. ALSO Heath HW-7 QRP transceiver with AC P.S. for \$65.00. Contact Stephen Kaider, K6TV, at 773 Vista Grande Avenue, Los Altos, California, 94022.

FOR SALE: Hallicrafters SX-71 communications receiver. Covers .5 to 30 mHz and 47-55 mHz, with bandspread for the ham bands. Has crystal filter and phasing, receives AM/CW/SSB and narrow band FM with built-in demodulator. Dual conversion above 4 mHz, in perfect electrical shape and very good physical shape. Has excellent sensitivity and selectivity -- really a fine receiver. With manual. \$95.00

FOR SALE: Teletype model 19 Tapeset/Teletypewriter. Absolutely beautiful condition, perfect for a mini-computer or RTTY. With table, solid-state power supply, printer, tape punch, tape reader (TD) and accessory goodies. 8 rolls of carbon-copy type paper, five rolls of punch-tape included. Communications type keyboard, works flawlessly. A 65 wpm western Union machine, switchable 20 or 60 ma loop current. Synchronous motors. You'll never see a machine like this again for ... \$85.00

Come play with this stuff before you buy! (which you will hopefully do). CALL Rick Ferranti WA6NCX at 415-324-1539 OR 246-1400 Rm 1001 weekends and weekdays respectively, any reasonable hour. Help ye Editor pay off his ICOM IC-22A.

HERE WE GO AGAIN

Editorial

As you may have already guessed, I have resumed (till August) editing PAARAGRAPHS after a two-issue absence. During my "vacation" quite a lot transpired -- a new teaching job added to my full student load, grad school applications, and a fellowship nomination. Besides that sort of work, much has transpired in my world of amateur radio: a general consolidation of

HERE WE GO AGAIN editorial continued

gear (e.g. cleaning out the junk) with the result that I have only the SSB/CW HF transceiver and a new 2 mtr FM rig left (had to spend my income from previous sales on something, right?). It has finally sunk in that it really pays to buy the very best you can afford once and for all. One is never satisfied with second-best gear. Result: no more fighting the equipment but enjoying the conversation. One thing about FM--it sure spoils you! No drifting receivers, off-frequency stations, crummy copy, ignition noise, constant tuning and retuning. No hot tubes, either! As you may imagine, there will be a big push for our 147.45 mHz FM simplex frequency since Jerry WA6LIJ, Sy JA6ROM, Hal W6DEF, Steve K6FS, Lee WB6BJB, Dave WA6AWZ, and myself now have that capability. Let's see more people up there, eh?

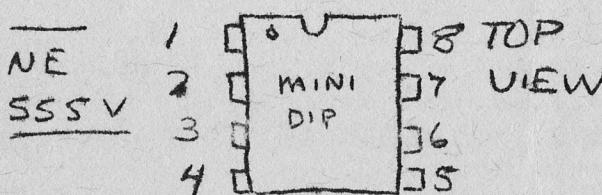
My basic idea about club participation in the paper is still very much alive. You will have also noticed one less sheet (4 pages less) in this issue. Articles fill the paper--especially ones from club members. 'Nuff said. Many thanks to the people who wrote and called about my previous editorial efforts. While praise is not necessary, it is certainly appreciated!

Sincerely, Rick Ferranti WA6NCX

TECHNICAL NOTES

de WA6NCX

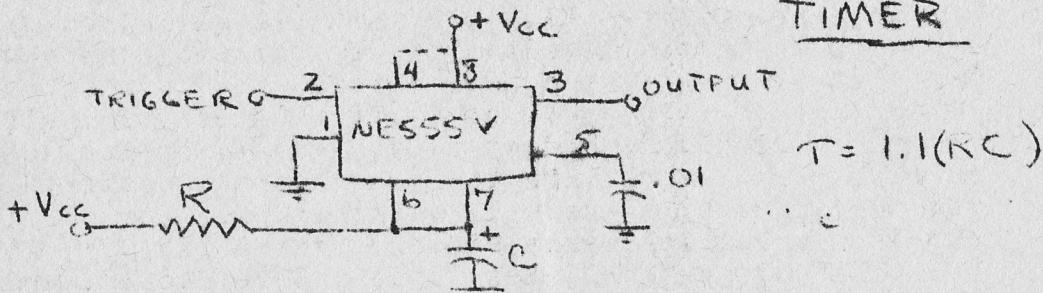
The NE-555V I.C. Super-timer is very stable with provisions for square-wave oscillator operation. The whole works is in a package half the size of a normal IC; the so-called mini-dip 8-pin package. The pin diagram is as follows:



1. Ground
2. Trigger
3. Output
4. Reset
5. Control Voltage
6. Threshold
7. Discharge
8. Vcc (4.5 to 16V)

7

NE-555V Timer notes, con't.
You can see that the output (pin 3) can drive C-MOS (12 V)
or TTL depending on what the timer has for input-
voltage. It can sink 200 mA of current by itself.
Here is the basic timer circuit:



The timing length is set by R and C; R should not be less than 2.2 kilohms. The length of the timing cycle is $1.1RC$, or approximately RC for ham-type stuff. Pin 5 is an input for F/F purposes, always connect it through a .01 uF cap to ground. To start the timing cycle by momentarily grounding pin 2, and the output will remain high (about the supply voltage) until the cycle is up, and it goes low again. The timing cycle is independent of the supply voltage. The reset function (pin 4) starts the whole thing over again -- even in the middle of a cycle -- when you temporarily ground it and pin 2. If you now touch pin 4 to the supply voltage things will start up again. If you don't want to use the reset function (and most of the time it isn't used) connect it to pin 8, where the Vcc comes in.

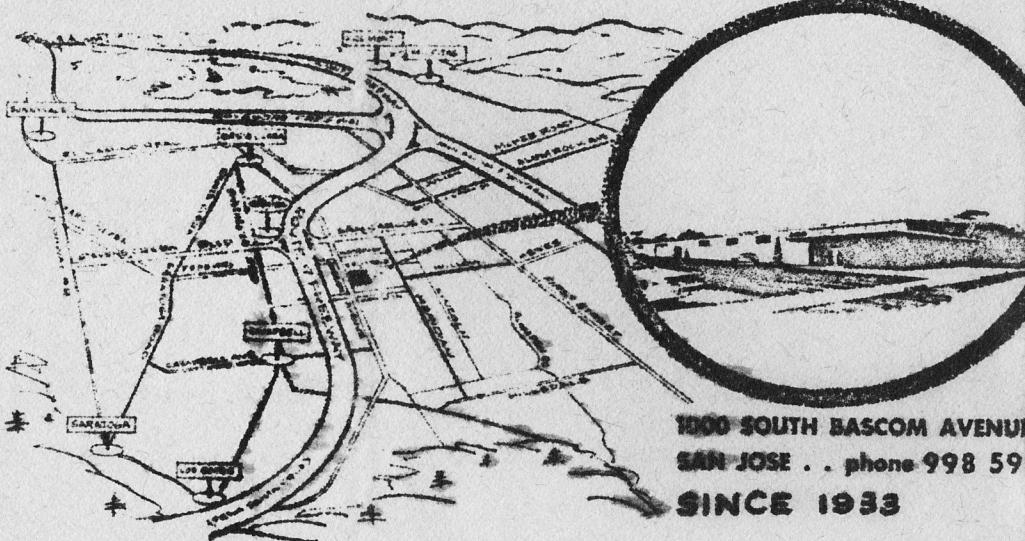
A very versatile timer--from milliseconds to hours, at 79¢ each!

VOTE (if you are a member) for the ARRL candidate of your choice. Should be an interesting Director election!

Thanks to Ed W6AIN, Fred K6YT, and Paul W6QBY for issue info.

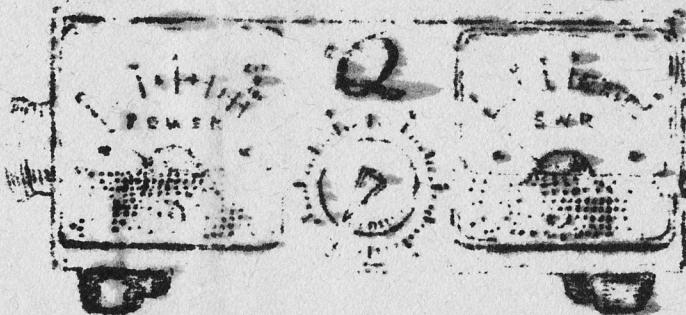
--

"Eclectic musicians" note that this issue was typed whilst listening to Ravel, Britten, and Bach. One notices that PAARAGRAPHS reeks with eclecticity, no doubt!



1000 SOUTH BASCOM AVENUE
SAN JOSE . . phone 998 5911
SINCE 1933

SWB-2



\$22.95

**SWR BRIDGE READS FORWARD & REFLECTED POWER
SIMULTANEOUSLY**

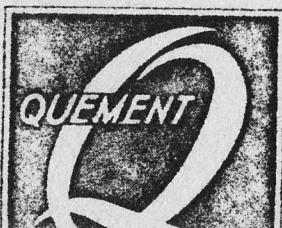
'EASY READ' METERS

SIZE 5X2X2

DUAL 100-MICROAMP METER MOVEMENTS

LOW INSERTION LOSS

MAY BE LEFT IN LINE UP TO 2,000 WATTS



**40,000 SQ. FT. OF ELECTRONIC PARTS,
COMPONENTS, TUBES AND ACCESSORIES.**

- ANTENNAS - NEW SERVICE DEPT.
- MAIN GEAR - ACOUSTIC SOUND DEMONSTRATION ROOM
- CITIZEN'S BAND - COMPLETE STEREO HI-FI DEPT.
- COMMERCIAL AND INDUSTRIAL PARTS SUPPLY
- BANKAMERICARD • FIRST NATIONAL • MASTERCHARGE

1000 SO. BASCOM AVENUE, SAN JOSE

998-5900

All roads lead to Quement Electronics

**3 TO 150 MHZ
ADD \$1.25 FOR POSTAGE**