P. O. Box 292, Belleville ON K8N 5A2

MEETING

DATE:

Wednesday, June 16, 1993

TIME:

7:30 p.m.

LOCATION:

Room P1 Pioneer Building

Loyalist College

PROGRAM:

Discussion about Field Day

List of Amateur Radio Equipment from the Estate of the Late Ross Dryden this list is as of May 24, 1993

- (1) Kenwood TS-940SAT HF Transceiver + SM220 Station Monitor with BS-8 Pan Display + MC-60 Desk Microphone + HS-5 Headphones. Less than two years old. Sold as a package. Price \$2500.00
- (2) Ten Tec TRITON Transceiver + Digital Readout + Power Supply + RSO Low Pass Filter + Model 207 Ammeter. Price \$350.00
- (3) Yaesu FT2F 2 Meter Transceiver, crystal controlled with the following crystals: 16/76, 34/94, 145.010, 985/385, 37/97, 46/06, 46/94, 94/94, 37/94, 34/06. Price \$50.00
- (4) Hammarland HQ129X Radio Receiver covers 0.5MHz to 31 MHz. Price \$100.00
- (5) National HRO7 Radio receiver with general coverage coil 7-14 MHz. Also provides bandspread coverage from 14.00-14.40 MHz. Price \$75.00
- (6) Yaesu Linear Amplifier FL200B. Uses 2 X 527B Tubes. Price \$500.00
- (7) Nevada Antenna Tuner 1000W PEP, 500W CW. Price \$250.00
- (8) KW107 Supermatch Antenna Tuner. Price \$60.00
- (9) Heathkit Cantenna Dummy Load, oil filled, 1KW. Price \$40.00
- (10) MFJ 264 Dummy Load 1.5 KW. Price \$50.00
- (11) Hammond Low Pass Filter 1KW. Price \$60.00
- (12) Wattmeter & Dummy Load, Electro Impulse Labs 15 60W. Price \$40.00
- (13) Home Brew 2 EL 17M Beam. Price \$100.00
- (14) Pipe (160M) Antenna. Price \$30.00
- (15) Cybernex Terminal MDL 452. Price \$30.00
- (16) HP 2624B Terminal. Price \$30.00
- (17) MFJ 1270 TNC. Price \$100.00

(18) Bencher Paddle. Price \$75.00

(19) MFJ - 407B Keyer for bencher paddle. Price \$60.00

(20) Audio filter, Supper SCAF. Price \$120.00

(21) Sony Tape Recorder. Price \$40.00

- (22) Gould Double Beam Oscilloscope Model OS 300, 40 MHz. Price \$300.00
- (23) Coax Switch Alpha Delta 4.2 KW to 500MHz. New. Price \$75.00

(24) Coax Switch Heathkit 5 position. Price \$40.00

(25) Vibroplex Bug Key. Price \$70.00

(26) RF Signal Generator RCA. Price \$25.00

(27) Heathkit VTVM Model 1M-11 plus Heathkit HV Probe. Price \$55.00

(28) Climbing Belt. Price \$50.00

(29) Multimeter Supreme Model 542. Price \$10.00

(30) Frequency Counter Optoelectronic Model 1300H/A 1.3 GHz. Price \$100.00

(31) Palomar RX Noise Bridge. Price \$50.00

(32) Micronta Variable DC Power Supply 0-24V, 0-1A. Price \$40.00

- (33) Variable Inductor 20 uH. Suitable for antenna linear of tunner. Price \$35.00
- (34) Variable Capacitor Cardwell 70-1000 pf. Suitable for linear or tunner. Price \$20.00

(35) 3rd Hand. Price \$10.00

(36) Motomaster Automatic Battery Charger 12V 0-6 Amp. Price \$30.00

(37) Speaker 12". Price \$5.00

(38) Speaker 8". Price \$3.00

Please call either Al VE3OX 966-0668 or Syd VE3EGO 966-8670 for additional information.

Note: All the above items will be sold on a "first come first served basis"

The above list may be changed at any time due to sales.

We have come to the end of another year and this will be the last Newsletter until September. The meeting in September will be Wednesday September 15, 1993.

It will be in the same place and at the same time.

The Newsletter for September will be mailed before the meeting then we will resume picking them up at the meeting.

BUILD AN INEXPENSIVE SOLDERING STATION

Here is a reprint of an article that appeared in the Peterborough A.R.C. News from Don Kouri VE3BZE.

The uses for an inexpensive soldering station around the shack are many and varied. The same soldering station is required to , in most cases, do everything from printed circuit work to installing coax connectors. In order to achieve a high quality job control of the tip temperature is mandatory. Too low a heat and the coax connector will have a cold solder joint and too much heat will ruin that expensive component or damage the circuit board. The obvious choices are either buy several soldering irons in various heat ranges or find some way of controlling the heat of your iron. A low cost answer to the problem using a variable AC supply for heat control is presented here.

THEORY

The heart of the control circuit here is the 'Bidirectional Triode Thyristor' better known as a 'Triac'. The Triac is a bidirectional device that will pass both the positive and negative half of the AC waveform when its gate is triggered. The three connection leads on the triac are called the Gate MT1, and MT2. The Gate is connected to the RC timing circuit via a Diac or 'Bidirectional Diode' which forms the Tirac's trigger circuit. The circuit presented is designed for use with resistive loads such as irons which do not use induction for heating such as a gun type soldering unit.

OPERATION

Circuit operation is simple. The load (soldering iron) is connected between MT2 and L1 of the AC supply cord (black wire) while MT1 is connected to the neutral (white) side of the supply. The Triac will not conduct until the gate receives a pulse from the trigger circuit. When the unit is powered, C1 charges through the variable resistor R2 until the breakover voltage of the diac is reached. The diac then conducts and the capacitor discharges through the diac and the gate of the tirac until its minimum holding current level is reached and turns off. The capacitor then charges in the opposite direction and again the diac's breakover voltage is reached and discharges through the diac and gate and again the tirac turns on or pulses.

The tirac turns on with both positive and negative pulses to its gate so, by controlling the pulse length, it should be possible to control the output. With the variable resistance set to zero, the capacitor turns on and off almost instantly, allowing the whole AC waveform to pass to the load.

If the resistance is increased, the capacitor charges more slowly, delaying the time the gate turns on and therefore allowing less of the waveform to pass. Adjusting the resistor will vary the voltage between 0 and 120 volts RMS thereby reducing the voltage to the iron and consequently the temperature.

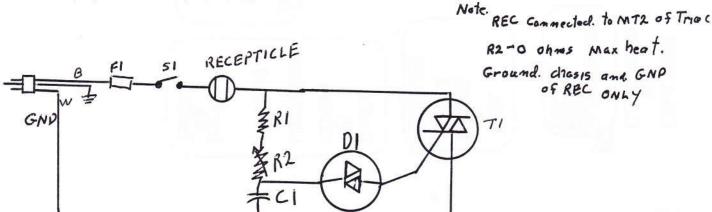
CONSTRUCTION NOTES

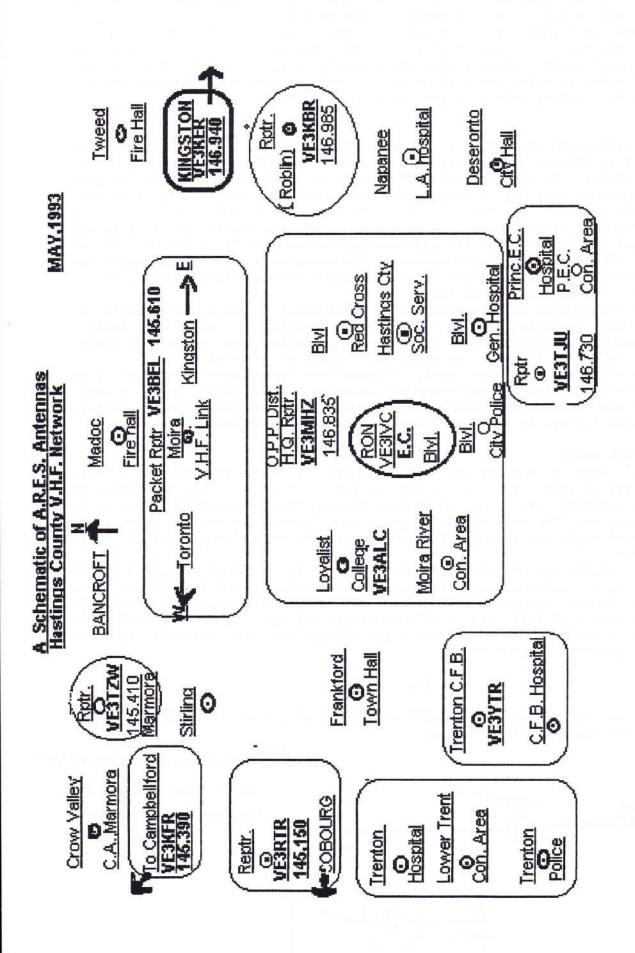
The schematic drawing and a parts list are shown at the end of this article. The project fits easily into a low cost utility box for enhanced appearance and will vary in cost from zero to about \$35.00 depending on the parts in your junk box. The most expensive parts are the cabinet and the power cord, both of which might be scrounged from someone at the next club meeting if thrift is your goal.

The components are easily mounted inside on standoff terminals using standard 'ugly' construction techniques. Students built and tested the above circuit as part of their studies in the area of phase shift circuits. The scope waveforms indicated full control of the output voltage from 0 to 120 VAC. The circuit also works as an excellent light dimmer and will certainly make an excellent addition to your shack.

Parts List

(T1) 4A Triac (D1) Diac (S1) 3A SPST SW (C1) 1 uf 50V AC (R2) 50K Linear Pot 1W (R1) 100 Ohm 1/2W (F1) 3A fuse





CJLX-FM DESCRIPTION OF PROGRAMMING.

SPOKEN WORD:

	Agricultural News	Sat 7:00am	-Local & national issues of interest to the Quinte farmer. *on-air fall '93	
	Barth Chronicles	Mon 9:05pm	-Environmental program.	
	It's A Small World	Sun 11:30am & Tue 10:30am	-Bramination of the multi-cultural make-up of the Quinte area.	
	Buroquest	Pri 10:00am	-Dutch newsmagazine dealing with European issues. "Arts Monthly" airs every third week.	
	Prancophone Weekly	Sun 9:30am	-Locally produced in Canada's second official language. * on-air fall '93	
	Global Rendezvous	Sun 7:30am	-Pocusing on Canadian multi-culturalism & third world development.	
	Greek-Canadian Show	Sun 6:00pm	-*Echoes of the Mountain & the Valley.* Music and news for the Quinte Greek community.	
	Holland Calling	Sun 11:00pm	-News and music from the Netherlands. English & Dutch.	
	Lectures	Tue, Wed 10:00am & Sun 6:30am-Lectures & open forums by various speakers on a multitude of issues.		
	Loyalist Today	Hon, Wed & Fri 1:30pm	-Peature interviews with Loyalist faculty & staff. Varsity & Intramural reports.	
	Now Hear This	Sun 11:00am	-A look at the hobby of short-wave radio listening. Followed on alternating weeks with "Media Metwork" & "Wondrous World".	
	Open College	Mon, Thu 10:00am & Sun 8:00am-University courses by radio. Accredited by Ryerson and York University. Current course: History of the Canadian People.		
	Perspective	Sun 5:30pm	-Newsmagazine focussing on Europe and the U.K.	
	Radio High	Mon-Fri 7:00pm	-Local high school students with reports from their schools.	
	TransAtlantic	Sat 12:10pm	-Newsmagazine from Britain.	
	Quinte Today	Mon-Fri 12:10pm	-Public affairs program focussing n local issues & newsmakers.	
	Quinte Weekend	Sat 5:10pm & Sun 12:10pm	-Expanded version of Quinte Today.	
Voice for the Pirst Mations Sun 9:00am			-Produced in co-operation with Mohawk Council at Tyendinaga.	

MUSIC PROGRAMMING:

Art of the Musical The	atre Wed 10:00pm	-Dave Sovereign examines music of the stage from Oklahoma to Miss Saigon.
Big Backyard	Sat 5:30pm	-New music from Australia.
Big Band Ballroom	Thu 10:00pm	-Host Andy Sparling with the great orchestras of the swing era.
Cuant L Gusto	Sun 9:00pm	-Unusual, rare and sometimes downright strange recordings of the past.
Fresh Trax	Sat 7:00pm	-Brand new releases. You definitely heard it here first.
Handmade Music	Sat 6:00pm & Sun 10:05am	-Bach week Joe Callahan welcomes a Quinte musician to perform 'live' (acoustically) in the studio.
Jazzworks	Tue 10:00pm	-fraditional to contemporary jazz hosted by Martin Burke.
Music of the Masters	Mon 10:00pm & Sun 7:00pm	-Bugene Lang hosts twice weekly "serious" music program.
Remember When	Sun 1:00pm	-The early days of Rock & Roll. Hosted by Bill Huffman.
Saturday Night Jam	Sat 8:00pm	-Not Dance, Rap, Hip-Hop, Techno and more!



CJLX-FM PROGRAM SCHEDULE

SPRING-SUMMER '93

	MONDAY-FRIDAY	SATURDAY	SUNDAY
6 AM		CJLX Music	CJLX Music
6:30	CJLX		The Lectures
7 AM	MORNING	Agricultural News	
7:30	Today's Rock, News	(starts fall '93)	Global Rendevous
8 AM	on the half-hour,		Open College
8:30	local information	CJLX	
9 AM		MORNING	Voice/First Nations
9:30		Today's Rock, News	Francophone Weekly
10 AM	Open College Mon&Thu Lectures Tue&Wed	hourly.	Handmade Music
10:30	Small World (Tue) First Nations (Wed)		
11 AM	CJLX Music		Now Hear This
11:30			It's a Small World
12 PM	News-Quinte Today	News-TransAtlantic	News-Quinte Weekend
12:30	CJLX Music		CJLX Music
1 PM		CJLX	Remember When
1:30	Loyalist Today M-W-F	AFTERNOON	Oldies
2 PM:		Today's Rock,	CJLX
3 PM:	CJLX	News hourly.	AFTERNOON
4 PM	AFTERNOON		Today's Rock,
5 PM	Today's Rock, News &	News-Quinte Weekend	News hourly.
5:30	information	Big Backyard	Perspective
6 PH		Handmade Music	Greek-Canadian Show
7 PM	Radio High	Fresh Trax	Music of the
8 PM	CJLX Music	Saturday Night Jam	Masters
9 PM	Earth Chronicles(Mon)	Party	Cuant L Gusto
IO PM	SPECIALTY MUSIC>>	Dance music	
II PM	Mon-Music/Masters Tue-Jazzworks Wed-Musical Theatre Thu-Big Band Ballroom Fri- CJLX Music		Holland Calling