

Sonoma County Radio Amateurs, Inc.

Club Station
W6LFJ

P.O. Box 116
Santa Rosa, CA 95402

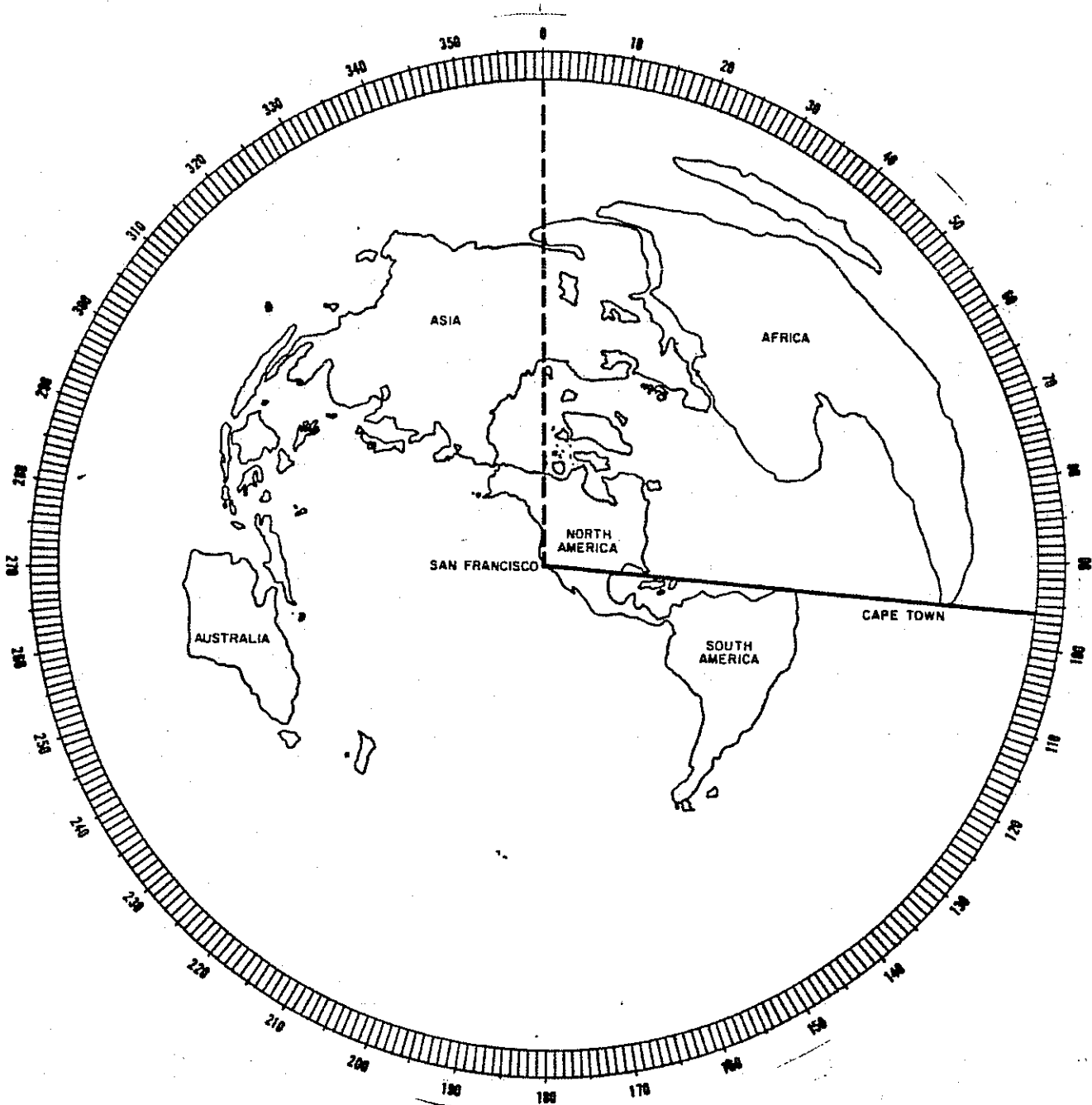
Repeater Station
WB6PVS



VOL. 8-4

Ched harris author of "DX Watch" has been very ill and is unable to produce his column this month. We all hope Ched gets well fast as he is a busy fellow.

With the World Map, (below), centered on San Francisco you can aim your beam in an approx direction. Cut out and cement on a piece of wood. Make a plastic pointer with a center line and mount same with radius over SF. Rock your beam for best signal. Good Luck.
Tnx. N6RLN



OFFICERS FOR 83		
President	Al Bloom	NI AL
	838-4524	
V. Pres.	Spenser Barnes	WA6IXC
	526-1514	
Sect.	Doug Bender	WA6JRB
	526-5131	
Tres.	Bill Thomas	WD6DKW
	823-9429	
Trailer Mgr.	Gene Piety	KH6PP
	523-3081	
Activities	Al Schmidt	KD6NT
	542-4793	
Rptr. Chair.	Terry LaDuke	WA6RNF
	528-6412	
Board Member At Large	Don Osborne	WA6ACX
	829-0565	
Club Call	W6LRFJ	
Rptr. Call	WB6PVS	
Short Skip	Hank Davis	W6DIV
	823-7385	
	Sarah Davis	N6FAX
	Chod Harris	VF2ML
Explorer Post 599	Mike Ter Sarkisoff	N6DBZ
	823-3977	
Club Badges	Jim Tomer	W6CYM
	838-9464	
Club QSL MGR.	Jim Tomer	
Public Relations	Van Gross	W6GFY
	544-3485	

Club Meetings 1st. Wed. each month EOC
County Operations Room. 7:30 PM Board Meetings
week following. Location announced at regular
meeting or by phone.

Pacific Dir. Bill Stevens-2074 Foxworthy Ave.
San Jose, CA. 95124 W6ZM
V. Dir. Jettie E. Hill 22410 Janice Ave
Cupertino, CA. 95014 W6RFF
SF Sect. SCM Bob Smith, Fort Bragg, CA.
Phone 964-4831
SF Sect. EC Lyle Neek 526-3233
Sonoma Co. EC Hank Davis 823-7885

RACES--Radio Officer-Herb Sullivan 526-3307
K6QXB
Sonoma Co. Comm. Officer, Press Thomson, 527-
2677 WB6PUE

ROSEVILLE SWAP 1 MAY 83--More Later

AUTO PATCH

The primary purpose of the Autopatch will
be for emergencies, but members only may
use it at other times as well.

PRESIDENTS COLUMN

The upcoming April meeting is "FCC NIGHT"
There are two new Notices of Proposed Rulemaking
(NPRM) out, and we would like to submit filings
on each. Come to the meeting and vote on our
draft comments.

The more controversial of the two NPRM's
is the NO-CODE license proposal. The complete
text appears in the March QST, and is dis-
cussed in most of the other Amateur publications
as well.

The other NPRM has generated a lot less
publicity but could have even more far-reaching
effects on the future of Amateur Radio. This
is the Volunteer examiner docket. It proposes
to have all classes of Ham license (not just the
Novice), be administered by fellow Amateurs th-
rough the mail. It generally follows the ARRL
proposal, requiring 3 certified volunteer exam-
iners at least one of whom must hold an extra
class license. Also each examiner must hold a
higher class license than the class the exam is
for. Except Extra exams where all three examiners
must be Extras.

The exam questions would be selected by FCC
from lists submitted by ARRL or by individuals
holding a higher class of license than the exam
questions are for. ARRL (and possibly other
National Organizations), would act as "Volunteer
Examiner Coordinators". VEC's would issue cert-
ificates to successful license applicants and
would be the accrediting body for volunteer
examiners.

One advantage of this system is that the
exams would be graded by the volunteer examining
team on the spot, so you would be able to use
your new privileges right away. Another possi-
ble advantage would be better security of the exam
process. The questions would not be secret, but
(we hope) there would be such a large pool of
them that it would be practically impossible to
pass the exam by memorization.

The April meeting is also "Amendment Nite".
The texts of the 3 By-laws amendments we'll be
voting on appear elsewhere in this issue.

Don't forget the HOMEBREW CONTEST. Bring
along your latest project. A certificate will be
issued to winner plus your name engraved on the
Home Brew Contest Plaque. See you there...

AL NI AL

AUTOPATCH

There have been some questions about oper-
ation of the autopatch when it goes on the air.
The plan is to require both a multi-digit touch
tone code and a sub-audible tone to access the
patch. The sub-audible frequency will be the
same as on the 91 machine. A leading-one lock-
out will disable toll calls. Cont. left col.

W5YI REPORT

OBSCENITY ISSUE STIRS UP AMATEUR RADIO COMMUNITY

The FCC Review Board's Decision that the First Amendment allows private 2-way operators to express themselves in just about any way they care to has sent shock waves through ham radio.

I received many comments and letters from readers questioning how the FCC could possibly approve "4-letter words". Bob Wheaton W5XW, of San Antonio, Texas, probably said it best...

"In effect, the FCC Review Board has unanimously stamped its seal of approval on the use by U.S. Amateurs of the words which Hildebrand freely admitted using. I am, as if not already angry enough, totally disillusioned by the fact that the FCC Review Board was unanimous. ...Hildebrand's choice of words can hardly be improved upon if anyone is interested in what I personally think about the current Commission/Commissioners. Appropriate action would be to seek to abolish the FCC; or at least compel weekly sanity tests and certification for its employees."

ARRL PREZ. VIC CLARK, TO ADDRESS AMATEUR RADIO OPERATORS NATIONWIDE

On March 3rd, the Amateur Teleconference Radio Net took place. The keynote speaker was Victor C. Clark, W4KFC-ARRL President, who will be speaking from the Clifton, Virginia home on "The Future of Amateur Radio". More than 50,000 hams are expected to be tuned in to this unique amateur radio VHF lash-up. The audience will be, by far, the largest to hear a presentation over live amateur radio.

The Amateur Teleconference Radio Net is the brain child of the Honeywell Amateur Radio Clubs of Minneapolis, MN, Billerica, MA, and Phoenix, Ariz. Amateur repeater groups call into "an end-point commercial telephone bridge"-a teleconference device which is provided by Lou Apple, KØIUQ, of Darome, Inc. The technique offers great hope for "real time" amateur radio education and information dissemination. The device used is called "The Darome connection" and allows repeater groups from all over the country (and the speaker) to be telephone interconnected with two-way capability allowing amateurs to be able to ask Vic Clark questions from a participating repeater. (Our Club is looking into this for possible use June 2, 83)

FCC'S PRIVATE RADIO BUREAU CHIEF REVIEWS UPCOMING AMATEUR RULEMAKING

In our last newsletter we published a short note to the effect that a ruling providing for more phone privileges on 20 meters was imminent. The report originated from a conversation at the Tropical Hamaree--one which the FCC's Private Radio Bureau Chief, Jim McKinney, supposedly participated in. Nothing happened on this so I picked up the phone and called Jim to get the low down.

"The 20 meter phone subband expansion item is due to me for signature no later than March the 4th. It then has to go on minutes and the most likely date for Commission consideration is March 31st. The item is in the hands of staff.

10 year amateur radio licenses soon. "yes, that you will. The date on that is earlier I have already signed that item. That issue could make the FCC Commissioner agenda on the 9th of March. If it doesn't make it on the 9th, it would definitely make it on the 31st.

Elimination of logging--"That item is not expected to be concluded until the FCC third quarter, April or June.

CODELESS HAM LICENSE "I don't expect No-Code to finish out before this year is out. FCC year runs out in September. No-Code will or may come up near the Holidays.

COMMENT DATES ON FCC RULEMAKING

The "No-Code" Amateur Radio License-File comments by April 29-Replies by May 31st.

Volunteer Testing in Amateur Service-File comments by April 8-Replies by May 9th.

Implementation of WARC-79 Treaty-File comments by April 11-Replies by May 10.

900 MHz PRCS-Personal Radio Communication Service-File comments by April 29th.-Replies by May 31st. Send all comments to: The Secretary; FCC; Washington, DC. 20554. See last months Short Skip for letter format. ED.

ONCE AGAIN AROUND THE CIRCUIT...

A successful "POT OUCK DINNER"---Around 40 members and family, and a wild rain storm, attended. Spence VA6IXG, got his wish of many desserts. Food was wonderful and plenty. Fun was had by all, just getting acquainted with those voices you knew on the air waves. Hope you can join the next one.

REMEMBER-the April meeting will be a full meeting and the new sked starts at 7:30 PM. FCC nite, Home brew, Voting on By-Laws, Field Day soon, and many other things.

APPLE BLOSSOM The Week End of April 9-10 in Sebastopol-The Sebastopol group will be working the Parade on Saturday the 9th. and the Apple Juice Run on Sunday the 10th.....

If you plan to visit Sacramento Swap, (Roseville Swap), it is programed for May 1st.. More later. Have not heard from sonoma gang on their swap and breakfast.

A new product out which is a plastic form of the teflon ribbon that is used on threads etc... This keeps away from rolled up or folded over tape., its number is PN90631--- You should be able to find it at some auto outlet, I hope..

MONEY REPORT -----

Beg. Bal.	\$754.02
Ending Bal.	\$862.81
INCOME	
Dues	\$135.00
Coffee etc.	--\$ 12.04
	<u>\$147.04</u>
EXPENSES	
SHORT SKIP	\$ 30.00
DONUTS	8.25
	<u>38.25</u>

RFI SCANNERS----If you have a scanner not too far from your 2 mtr. rig and you hear a pulse every 1/2 sec...You know where to look.....

FOR THOSE OF YOU GOING FOR THE EXTRA OR ADVANCED THIS CHART MAY BE OF HELP TO YOU.....

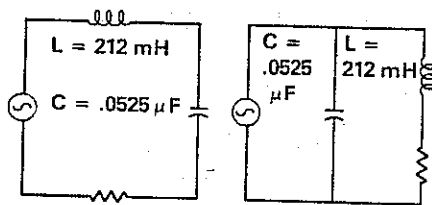
Shortcut to X_L , X_C , and f_r

By James P. McTernan

THE small numbers, powers of ten, and mathematical manipulations involved in determining inductive reactance (X_L), capacitive reactance (X_C), and resonant frequency (f_r) can confuse the most avid learners and send the most able teacher into reactive depression. I developed this chart to save some time and help in the design of practice problems for reactive and resonant circuits.

While there are an infinite number of possible combinations, this table contains a selection of inductance (L) and capacitance (C) values in millihenries (mH) and microfarads (μF) for solving X_L or X_C and f_r with relatively even results. Various problems can be designed with reactance, frequency, or inductance held constant.

To illustrate, the resonant frequency for a capacitor/coil combination of 2.12×10^{-1} H and 5.25×10^{-8} F can be determined as follows:



$$f_r = \frac{1}{2\pi\sqrt{LC}}$$

$$= \frac{1}{6.28 \times \sqrt{2.12 \times 10^{-1} \times 5.25 \times 10^{-8}}}$$

$$= \frac{1}{6.629 \times 10^{-4}}$$

$$= 1508 \text{ Hz (1500 Hz)}$$

For the inductive reactance:

$$X_L = 2\pi fL = (6.28)(1500)(2.12 \times 10^{-3})$$

$$= 1998 \Omega \text{ (2000 } \Omega)$$

For the capacitive reactance:

$$X_C = \frac{1}{2\pi fX_C}$$

$$= \frac{1}{6.28 \times 1500 \times 5.25 \times 10^{-8}}$$

$$= 2021 \Omega \text{ (2000 } \Omega)$$

Some rounding is necessary in working with numbers in unending decimals, but I tried to keep this to a minimum. □

X_L or X_C (Ω)	f_r (Hz)	L (mH)	C (μF)
100	500	31.2	3.25
	1000	15.9	1.58
500	500	159	.63
	1000	79.6	.312
1000	500	312	.325
	1000	159	.158
1500	500	478	.212
	1000	239	.106
2000	1500	212	.0525
	2000	159	.039
2500	1500	265	.0421
	2000	199	.0314
3000	1500	317	.0354
	2000	239	.0264
3500	1500	371	.03
	2000	279	.0225
4000	3000	212	.0131
	5000	127	.008
4500	3000	239	.0117
	5000	143	.00707
5000	3000	265	.0106
	5000	159	.00635
7500	3000	398	.0071
	5000	239	.00425
10000	7000	228	.00225
	10000	159	.00159
15000	7000	341	.00151
	10000	239	.00106
20000	7000	455	.00114
	10000	318	.00079
25000	7000	568	.00091
	10000	398	.000636

James P. McTernan is an electricity/electronics teacher, Whippany Park High School, Whippany, New Jersey.

4.

BY-LAW CHANGES-----VOTING NEXT MEETING IN APRIL....

2. Now reads....The fiscal year shall begin March 1st. and end on the last day of February.

2a.Added--The Dues Year shall run concurrent with the fiscal year.

4. Now reads---The regular meeting of this organization shall be held on the first Wednesday of each month at 8:00 PM unless otherwise specified by the Board and announced in the Club Newsletter.

4. Change---The regular meeting of this organization shall be held on the first Wednesday of each month at 7:30 PM unless otherwise specified by the Board and announced in the Club Newsletter.

5. To be added to the end of By-Law 5.

5. The word income shall mean the net income of each fund concerned in the budget at any time.

FORGOTTEN CHANGE---

4a..The Annual Xmas Party shall take place of the regular December meeting.

QST

re: Great Straights Dx-pedition
to: Liscensed amateurs interested in participating in
or contributing to the Great Straights Dx-pedition.

The Great Straights refers to Straights of Gibraltar, that narrow entrance to the Mediterranean that lies between Spain and Morocco and separates the continents of Europe and Africa.

Along this water way and separated from each other
by only 15 to 60 miles, are 4 DXCC countries:

- 1) CNB (Morocco)
- 2) EA9 (Ceuta)
- 3) ZB2 (Rock of Gibraltar)
- 4) EA7 (Spanish mainland)

This operation will set up and operate on all four corners of the Great Straights. At least 15 participants are sought and it is hoped that the Dx-pedition will have enough support to be able to operate from all four corners of the Straights simultaneously.

Liscenes for Spain (includes EA9) and Gibraltar are easily obtainable by American amateurs. Because of the difficulty in obtaining a Moroccan station liscense, my station liscense (CNBED) will be used for the operation from Morocco.

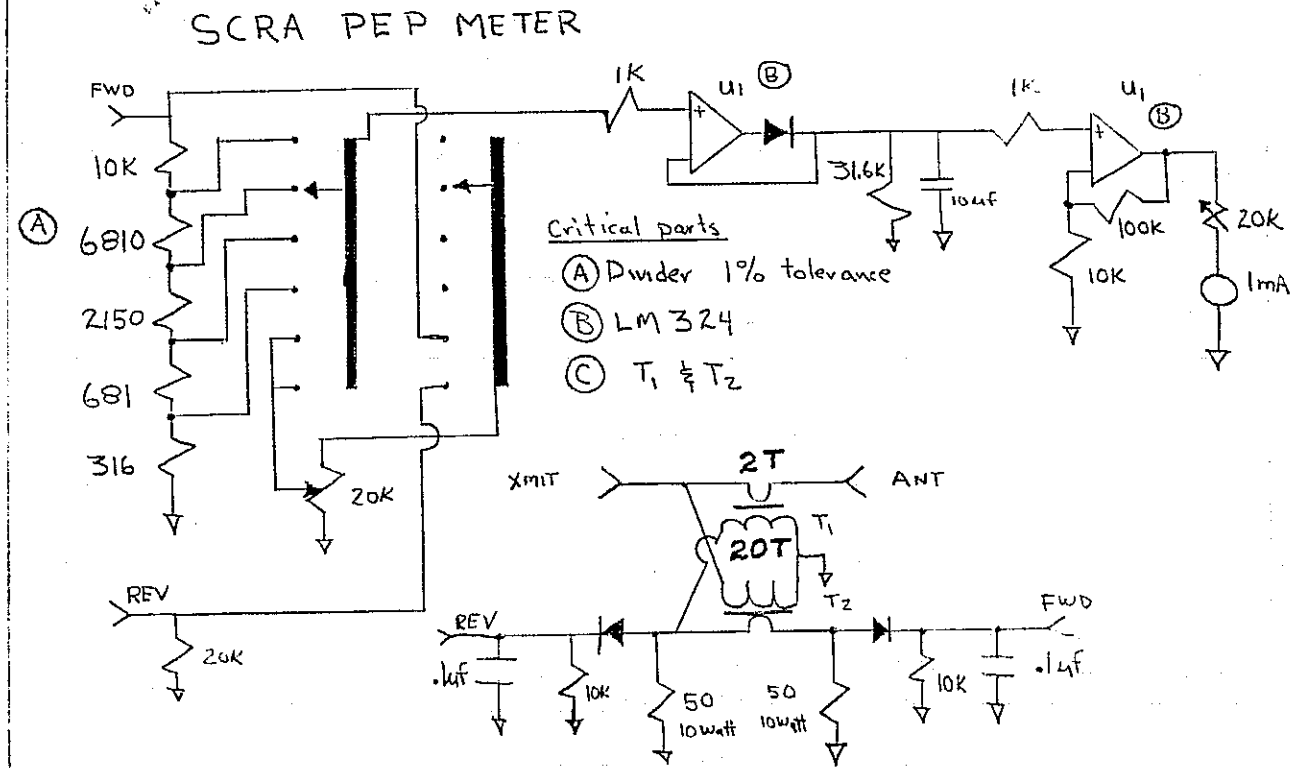
The dates for this Dx-pedition are tentitive and depend on the optimal time indicated by interested participants.

Anyone wishing more information about the Great Straights Dx-pedition should write:

Rashid "Ray" Johnson N9BSD
(CNBED: ZB2GV: N9BSD/EA)

PO BOX 27643
TUCSON, AZ 85726

SCRA, INC. PEP WATT METER
BY
AL SCHMIDT



This is the drawing of the circuit of the PEP watt meter Al designed for the Club project. It is estimated that the major parts will cost approx \$30.00 and in that way all meters will be identical. Al will say a word or two at the April meeting.

AGAIN AROUND THE CIRCUIT...

Activities chair. is still looking for a good Mini DX site--Any member that has a good idea call Al. 542-4793

Novice Class starts Friday March 18th at the EOC Spencer WA6LXC and Al Schmidt KD6NT will teach the class. Pass the word.

If you have weekends free more or less Al the activities Chair is looking for help with the March of Dimes Walk--Call him 542-4793.

Art Godfrey, a former member of the Winchester Virginia Radio Club, (years ago), passed away and is now a silent key. Few people knew of him as an Amateur Radio Person. May he find good DX and many of his friends to Rag Chew with in the sky above.

Hans Berg DJ6TJ will be back in the Santa Rosa area the last week of July. Hope we can have another breakfast with our friend.

His sked is as follows if you wish to work germany--
 13.00 UTC 14.295 Sat., 16.00 UTC 21.075 Wed/Sat/Sun, 16.10 UTC 14.075 Wed/SAT/SUN,
 16.30 UTC 21.400 Wed/Sat/Sun, 17.00 UTC 21.370 Wed/Sat/Sun, 17.15 UTC 14.260 Wed/Sat/
 Sun--Try and work your Sister Club Area. Good Luck

INDUSTRIAL AND MILITARY RECEIVING TUBES CROSS INDEX

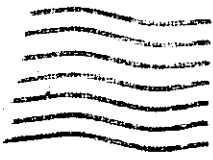
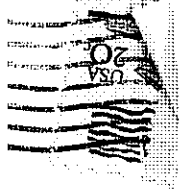
Military--Commercial- Military--Commercial

407A---2G51	6113---6SL7GT	7061---12AB5	7543---6AU6
408A---6AK5	6132---6CH6	7105---6AS7G	7581---6L6G
5591---6AK5	6134---6AC7	7137---6J4	7717---6CY5
5654---6AM5	6135---6C4	7167---6CY5	7724---14GT8
5656---6AK5	6136---6AU6	7244---6J6	7728---12AT7
5670---2051	6137---6SK7	7245---6J4	7729---12AS7
5691---6SL7GT	6180---6SN7GT	7258---6AN8	7730---12AU7
5692---6SN7GT	6186---6AG5	7316---12AU7	7731---6U8
5693---6SJ7	6189---12AU7	7320---6BQ5	7732---6CB6
5725---6AS6	6197---6CL6	7408---6V6GT	7733---12BY7
5726---6AL5	6201---12AT7		
5727---2D21	6202---6X4		
5749---6BA6	6203---6X4		
5750---6BE6	6265---6BH6		
5751---12AX7	6336---6AS7G		
5814---12AU7	6384---6AK6		
5838---6X5GT	6385---2C51		
5839---6X5GT	6386---2C51		
5852---6X5GT	6394---6AS7GT		
5871---6V6GT	6485---6AH6		
5881---6L6G	6496---6AS6		
5915---6BE6	6515---6AM5		
5930---2A3	6520---6AS7G		
5931---5U4G--	6626---CA2		
5932---6L6G	6627---OB2		
5933---807	6660---6BA6		
5992---6V6	6661---6BH6		
5993---6X4	6662---6BJ6		
6004---5Y3GT	6663---6AL5		
6005---6AQ5	6664---6AB4		
6028---6AK5	6669---6AQ5		
6042---6SN7	6676---6CB6		
6045---6J6	6677---6CL6		
6046---25L6GT	6678---6U8		
6057---12AX7	6679---12AT7		
6058---6AL5	6680---12AU7		
6059---6BR7	6681---12AX7		
6060---12AT7	6829---12AV7		
6061---6BW6	6830---CA2		
6063---6X4	6841---OB2		
6064---6AM6	6913---12BH7		
6066---6AT6	6927---6J6		
6067---12AU7	6928---6AQ5		
6072---12AY7	6968---6AK5		
6073---CA2	6973---6CZ7		
6074---OB2	7025---12AX7		
6080---6AS7G	7036---6BE6		
6082---6AS7G	7054---12BY7		
6087---5Y3GT	7055---6AL5		
6094---6AQ5	7056---6CB6		
6097---6AL5	7057---6BZ7		
6099---6J6	7058---12AX7		
6101---6J6	7059---6U8		
6106---5Y3GT	7060---6AU8		

Submitted by

Donald W. Lievan
Donald W Lievan AD7PMN
Hood River Oregon

BOB OLSTEN
WD6DPE
3723 ARIZONA AVE
SANTA ROSA CA 95405



CA. 95
116

ATI RADIS, INC.

LAST MINUTE ITEMS.....

CALL WR6RNP at 632-5459-- For WESOO programmable 2 intronites each.....
Foothill College swap meets for the summer??? (summer I mean)
8:00 am to 2:00 PM each time.
April 16, May 14, July 16, Aug 13, Sept. 10.....
Again Roseville, (sacramento), May 1.....

CALL SEYMOURV6FPL-996-5012...Has a work bench 2 by 4 feet on \$20.00.....



SMILE AMER
NATIONAL CHILD
HEALTH