

CROSSTALK -- Official Publication of the  
GLOUCESTER COUNTY AMATEUR RADIO CLUB, W2MMD  
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CROSSTALK STAFF

Tony Starr, WA2FZB	Editor	John Fisher, K2JF	Circulation
Milt Goldman, K3WIL	Publisher	Jim Mollica, K2OWE	Circulation
Ed Sumek, W2GSN	Printer	Len Kravitz, KD2CR	Circulation

AREA NETS

GCARC RTTY NET:	Tuesday,	8:00 PM 147.78/18 Rptr
ARES NET:	Sunday,	8:00 PM 147.78/18 Rptr

Club Repeaters: 147.78/18, 223.06/224.66, 447.10/442.10

General Meeting: First Wednesday of each month at the V.F.W. Hall in Woodbury, NJ. Meetings begin at 8:00 pm sharp.

Contributions: CROSSTALK, Tony Starr,  
Deadline: Ten (10) days before each general meeting.

PRESIDENT'S MESSAGE -- JANUARY 1987

I thank all of you for your vote of confidence. I am honored to be President of Gloucester County Amateur Radio Club. While holding this title I will do my best to work with the members to see that their requests are met, problems solved, and to promote new issues. This year I have some goals for the club and I strongly hope I can work hard to accomplish these goals for the betterment of the organization.

I urge all members to help me serve you better by placing your ideas and suggestions in the suggestion box.

Come out to the meetings and be a part of a great year for Gloucester County Amateur Radio Club.

Wishing everyone a very Happy New Year!

Respectfully,  
Virginia Martin, N2FJM  
President

LOCAL VHF GROUP TO DEFEND TITLE

Last year, the multi-op station N2SB, headed by Rick Connor, WB2NPE, took first place nationally in the January VHF Contest, defeating the "big guns" of New England. This year, the gang will be defending the title for South Jersey, and Rick invites everyone to get on the air and make a contact or two. The group will be operating on all VHF and UHF bands and modes, but they have set aside two periods of operation for FM simplex. They are from 8 to 9 pm on January 10, and 12 to 2 pm on January 11. Frequencies are 145.600 MHz, and 446.000 MHz. Let's give these guys our support by giving them a few contacts. Besides, VHF contesting is great fun! 73!

FIELD DAY KICKOFF

It is not too soon to be thinking about Field Day 1987. Before you know it, we will be in the midst of preparation for our annual event. I would like to introduce our new Chairman, Fred Walter, KB4NEN. Fred is a relative newcomer to the club, but is already an avid FD enthusiast. Last year, as my 75 meter crew was blasting the airwaves in the first few hours of the event, Fred showed up to see what we were up to. Later that evening and much of the following morning, Fred was shouting into the microphone and piling up contacts. Although we hadn't known Fred previously, he just fit in with our operation so well that it seemed as if he had been out there with us year after year. With such enthusiasm, and assistance from the committee, Fred should have everything under control this June.

If you are interested in Field Day, and have some new ideas, Fred

would like to hear from you. Also, if you are interested in being a band chairman, ditto the above. I will be updating all of you regularly on this, so watch this feature for the latest plans. It will be hard to top our great 1986 Field Day, but we are going to try! 73  
- Tony, WA2FZB, "FD NUT"

#### NEW MEMBERS

We are pleased to welcome the following new members:

James Thompson, N2EDT - a ham for 8 years.

Robert Houck, K2JOL - a ham for 40 years.

Ray Houck, WB2EHC - a ham for 11 years.

Tnx Ginny, N2FJM

#### CONTEST CORNER

January is full of contests -- including the ARRL VHF Sweepstakes, which is a club competition and counts toward your Megapoint Award totals. The 73 SSB contests count both individually and as a total for awards. I have forms for a number of these contests available at this meeting.

At the end of January there is a weeklong NOVICE ROUNDUP. Other classes of licensees can take part, but the main thrust is to introduce novice/technicians to contesting. The rules allow for selection of any 30 hours during this period...and all stations including DX will be taking part. Note that if additional privileges are available at the start of the contest period, they can be used. Please see the rules.

NOTE: The W2SUA Award for 1986/1987 contest season will be based on both scores reported for the ARRL DX CONTESTS, CW (February 21-22, 1987) and PHONE (March 7-8, 1987).

The CQ WW DX and ARRL Sweepstakes yielded only one entry from Herb, K2HPV, in the CW portion of the CQ WW DX/CW, so no club entries could be made. It is up to YOU, the members, whether or not we are taking part in club competitions, all I can do is supply the forms and schedules.

If you enter a contest that counts for Megapoint awards, please give me a copy of your cover sheet indicating that you took part for the club. Even if we can't enter as a club, the Megapoints still count for your award.

Sheets for most contests are available from me for the asking -- give me a call or on "18" and we'll work out the details!

The contest list is updated below:

MONTH	DATE	CONTEST
1987		
JANUARY	3-4	73 10 Meter SSB Championship
	10-11-12	ARRL VHF SWEEPSTAKES
	10	73 15 Meter SSB Championship
	11	73 20 Meter SSB Championship
	17-18	73 160 Meter SSB Championship
	23-25	CQ WW 160 Meter CW Contest
	24	73 40 Meter SSB Championship
	24-(1)	ARRL NOVICE ROUNDUP
	25	73 75 Meter SSB Championship
	31-(1)	YL ISSB CW Contest
FEBRUARY	14-16	YRYL YL-OM Phone Contest
	20-22	CQ WW 160 Meter Phone Contest
	21-22	ARRL INTERNATIONAL DX CONTEST, CW
	21-22	YL ISSB Phone Contest
	28-(2)	YRYL YL-OM CW Contest
MARCH	7-8	ARRL INTERNT'L DX CONTEST, PHONE
	28-29	CQ WW WPX SSB CONTEST
APRIL	13	ARRL Spring 144 MC Sprint
	22	ARRL Spring 220 MC Sprint
	29	ARRL Spring 432 MC Sprint
MAY	8	ARRL Spring 902 MC Sprint
	14	ARRL Spring 1296 MC Sprint
	23-24	ARRL Spring 50 MC Sprint
JUNE	14-15	ARRL VHF QSO Party
	27-28	ARRL FIELD DAY

(TNX ARRL, CQ, QST, 73, WORLD RADIO)  
de KB2GW

SWAP & SHOP

The following items can be seen at  
NJ, or contact Bill Rahm

Delta Operating Impedance Bridge Model OIB-1 (like new) -- Make offer.

Henry Radio Power Supply Model PL 12201-B -- Make offer.

Clegg Apollo Six Amp -- Make offer.

CDE AR22R Rotor and Control Box (new in box) -- Make offer.

CDE TR44 Rotor and Control Box (used, excellent condx) -- Make offer.

3 Sections of Rohn 25G Tower -- \$25.00.

1 Top Section of Rohn 25G Tower -- \$32.00.

Rohn Bearing and Mounting Plate -- \$40.00.

Standard Power Supply 12 volt/15 amp (new) -- Make offer.

EIMAC 4CX-2500-A (unknown condition) -- Make offer.

RCA 4-250 (unknown condition) -- Make offer.

Two GL-810 Tube (unknown condition) -- Make offer.

Four CX-250 (looks new) -- Make offer.

Two CX-250 (looks used) -- Make offer.

Three 807 Tubes (new in boxes)

Six Element Cushcraft Yagi -- Make offer.

12-15 Hygain Dual Bander -- Make offer.

Twelve Element Cushcraft 2 mtr Yagi -- Make offer.

Heath Ham Scan Scope H013 -- Make offer.

Turner Plus Three Microphone (like new) -- Make offer.

Halicrafter HT 41-KW Amplifier -- 7094 Finalials -- Make offer.

#### LOOKING BACK...

At the last club meeting, I promised Tony, the Editor of Crosstalk, that I'd try to find something of interest to write an article for Crosstalk about.

After much thought, I decided that perhaps some of the past issues of Crosstalk would yield some interesting information for today's readers.

The first issue of Crosstalk that I could come across, from my records was for May 1962.

In the early years of the club, we had trouble finding editors for Crosstalk, so some of the earlier issues are missing from my files. In fact, there was no Crosstalk in the years 1966 and 1967.

A lot of the info in this article will not mean a great deal to the newer members of the club, but it may bring back memories to some of our older club members.

Twenty five years ago in the May 1962 issue, I find that our Club President was Mal Mason, W2MMD. Most of the other club officials are now either silent keys or have moved from the area, except Charles Sketchley, K2PQD, who was Vice President, Doug Gehring, WA2NPD, who was Secretary, Della Parker, WA2AFZ, (now a silent key) was Corresponding Secretary, and Milt Goldman, formerly WA2ECR was on the Board of Directors.

Woody Frantz, K2AQL, now a silent key, was the Editor of Crosstalk.

The club was meeting in the Owens Illinois Clubhouse in Glassboro.

It was proposed that club nets be established on Tuesday at 8:00 pm on 28.8 MCs and Thursday at 8:00 pm on 50.52 MCs.

Milt Goldman, WA2ECR, (now K3WIL) was nominated for the office of President for 1963. Milt won the election.

In 1962, there were 79 paid up club members, 13 are still active in the club.

It cost the club \$.03 to mail each issue of Crosstalk.

Ten years ago in Crosstalk:

Mark Wilson, WB2OSQ, (now AA2Z) was the Editor of Crosstalk, Mark is now Senior Assistant Technical Editor of QST.

Herb Schuler, K2HPV, was Club President, Wayne Wood, W2SUA, and Milt Goldman, K3WIL, were Club Trustees.

The A.R.E.S. nets were on Sunday, the 2M net on 78-18 at 8 pm and the 6M am net at 8:30 on 50.9 MHz.

In January the club was running licensing classes, Bill Bachman, WA2VEE, was training chairman and there were 40 persons in the class.

In February 1977 Ray Martin, WB2LNR, became Editor of Crosstalk.

From the Amateur Radio News Service, they noted that "N" prefixes were first used in the 1930's for the Navy's Volunteer Communications Reserve, that operated in the Amateur Bands.

During the first six months of 1977 the club met on the third floor of the Pitman Boro Hall, that year there were no meetings in July and August. When meetings resumed in September, the club started to meet in the Municipal Building in National Park.

At the beginning of 1977 there were 77 club members, by the end of the year the membership had increased to 102.

Incidentally, the cost of mailing Crosstalk in 1977 was \$.13.

In closing thought from the column by Rose Ellen Bills, N2RE that appeared in the January 1977 issue of Crosstalk:

NOT HE WHO HAS MUCH IS RICH: BUT HE WHO GIVES MUCH.

De Harry, WA2SEA

IMPORTANT EVENTS OVER THE LAST SIX YEARS AND WHAT'S TO COME

Did you know that SIX YEARS ago Bill Dannemeyer (R. Cal) introduced legislation into Congress "to permit the FCC to employ voluntary CB and Amateur radio monitoring and to legally allow Novice amateur radio examinations to be given by volunteer examiners.

Did you know that FIVE YEARS ago due to massive budget cuts the FCC begins looking toward turning amateur testing over to the amateur community.

Did you know that FOUR YEARS ago the Senate ratified the 292-page WARC accord. Amateur self-testing got underway at the Dayton HamVention. The FCC expanded the 20-meter phone band. The U.S. invasion of Grenada was told by a young ham medical student over amateur radio. OSCAR-10 was successfully launched. The FCC approved ten year term amateur licenses and transmitter power measurement in terms of PEP output rather than input.

Did you know that THREE YEARS ago the FCC gave their final amateur radio examinations. A new amateur radio mode "packet radio" came to the forefront.

Did you know that TWO YEARS ago a massive earthquake in Mexico City knocked out regular communication channels and Amateur radio was the only form of communication for numerous days. Amateur radio provided much needed emergency disaster communication during the Mexico City earthquake, the Columbian volcano eruption and the Dallas Delta-191 plane crash. The FCC declared a limited pre-emption over state and local regulation of amateur radio facilities (PRB-1). Tony England WOORE operated amateur radio from space orbit.

Did you know that LAST YEAR amateurs made plans for PACSAT, a

global store-and-forward "flying mailbox". The FCC gave credit for written amateur radio operator examinations effective December 15. The Electronic Privacy Act became law and it became unlawful to monitor certain radio spectrum. Oscar-10 suffered a fatal malfunction. "Captain Midnight" appeared on satellite video and overtook HBO movie. The "Novice Enhancement" NPRM was introduced giving possible phone privileges to Novices on portions of the Ten meter band and 220 MHz band.

Things to look for ahead in 1987:

Novice Enhancement...probably sometime in February or March to be approved. It is a sure thing. The question is what will be adopted compared to what was proposed. Strong rumors are that getting Novice licenses will NOT be as easy as it has been in the past. It will be interesting to see what happens as VEC's assume the various questions pools. Remember now the FCC no longer makes-up the questions for the exams, it is up to the individual VEC's and VE inputs. Tnx W5YI/K2JF

SENATOR GOLDWATER, K7UGA RETIRES

Our staunch supporter in the U.S. Senate, Senator Goldwater, K7UGA, has retired. Goldwater said "Communications law is in a state of disarray and that some opportunistic senators "which I classify as nuts" want to regulate the business because it plays well back home.

John, K2JF comments, "It would behoove us all to keep our ears open for possible problems and to cultivate one of our local Senators to have a "favorable" outlook on Amateur Radio." Tnx W5YI/K2JF

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Congress has been asked by the Motion Picture Association of America to require that all videocassette recorders contain technology to prevent illegal back-to-back copying of pre-recorded videos. Tnx W5YI/K2JF

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Despite FCC efforts to simplify cable-TV leakage rules and help systems address leakage problems, cable leakage continues as a MAJOR PROBLEM. The FCC is stepping up their enforcement. The FCC has the authority after sufficient notification to order cable systems to cease operation instantly. Tnx W5YI/K2JF

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From time to time I will give problems that will cover a particular section of the Amateur Classes. The Class will be noted and the problem is one that that class of license or higher should be able to answer with just a little thought. If you are that class or higher



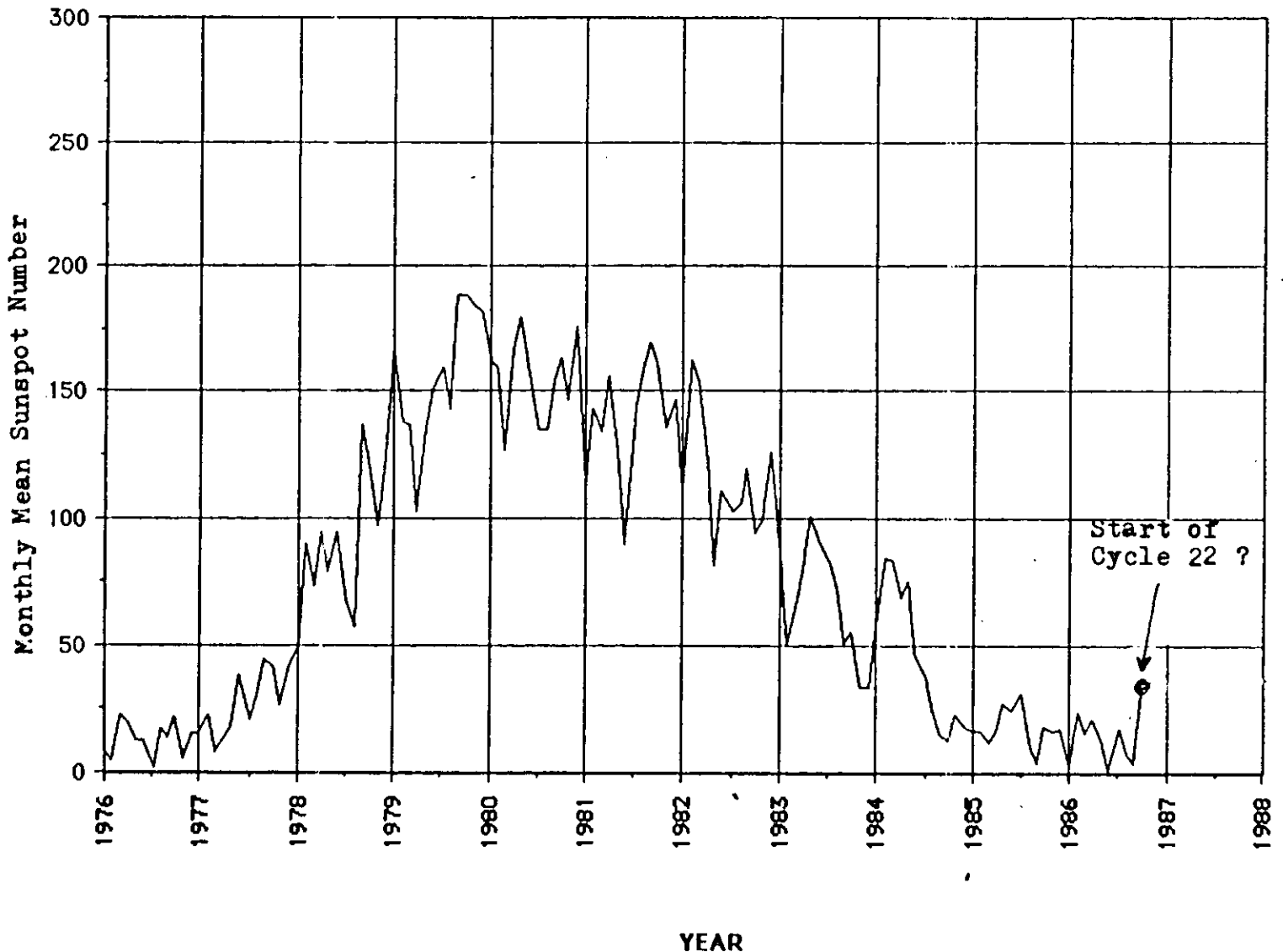
and cannot answer the question within 30 minutes, "SHAME ON YOU", hit the books.

**\*NOVICE** -- List the resistances that can be obtained by combining three 100 ohm resistors in all possible ways. Show the schematic and the value of the total resistance in each of the ways listed.

**\*TECH/GENERAL** -- A 10- $\mu$ f capacitor, a 0.10-H inductor, and a 60 ohm resistor are connected in series across a 120-V, 60 Hz power line. Find (a) the current in the circuit, (b) the power dissipated in it, and (c) the potential difference across each of the circuit elements.

**\*ADVANCE** -- A circuit consisting of a capacitor in series with a resistor draws 3.6 A from a 50-V, 100 Hz power line. The circuit dissipates 120 W. (a) What is the precise phase relationship between voltage and current in the circuit? (b) What series inductance should be inserted in the circuit if the current and voltage are to be in phase? (c) How much current would the circuit then draw? (d) How much power would it then dissipate? Tnx K2JF

## Sunspot Cycle 21





# The World of DX

by W02VEE



ANTARCTICA...KC4AAC at Palmer Station is near 14.328 Mhz from 0001UTC. QSL via John Stagnaro, 2305 Panorama Dr., La Crescenta, CA 91214.....KD7P/KC4 is planning to go to Peter I Island. Stayed tuned for this BIG ONE!

CHINA...BY9GA, Zone 23, continues almost nightly check-ins to the W7PHD Family Hour on 14.227 Mhz shortly after 0001 UTC. Another zone 23 station, BY0AA, also calls in on cw at about the same time. The operator knows very little English so the exchange must be limited to callsigns and signal reports.

CRETE...SVOAC/SV9, is there for the next year with the U.S. Armed Forces Radio and Television Network, checks into the various 20 Meter DX nets. QSL via AA4LU.

CROZET Is...FT8WA is being reported on 21.259 Mhz from 1245 UTC and 14.236 MHZ at 0001 UTC. QSL via F6FNU.

HEARD Is...Until Jan. 20. VKODA by VK2EBQ. Frank meets Jim Smith net, 14.220 Mhz at 0700 UTC and then, as his schedule permits, comes back on the same frequency at 1100, 1300, and 1500 UTC. Listen closely because he is running barefoot into a dipole. QSL via VK9NS.

INDIAN OCEAN TOUR...The Colvins, W6KG and W6QL, presently signing FH/, were awaiting word on D6, S7, and 8Q licenses. If licenses awarded, please QSL via YASME.

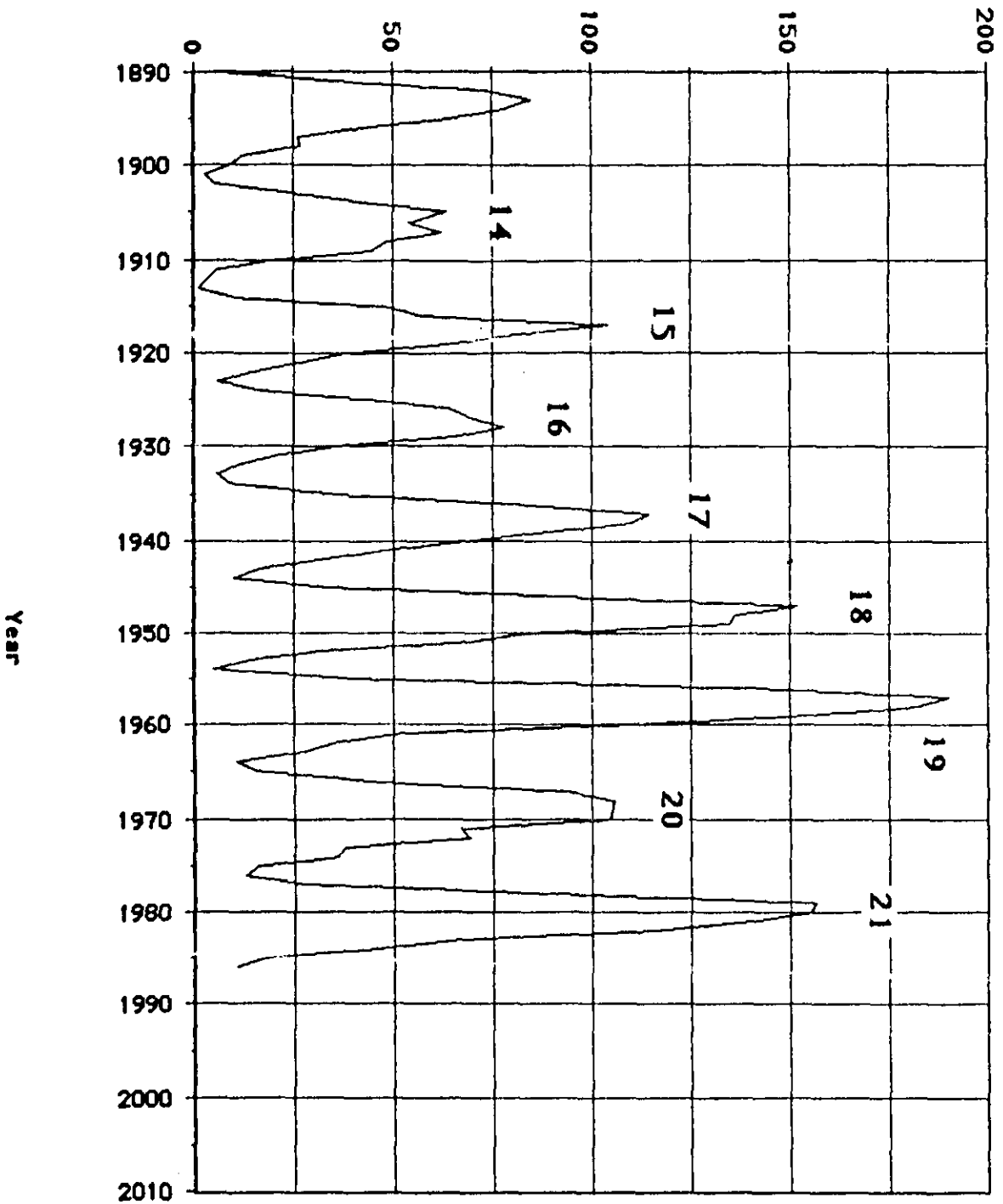
MACQUARIE Is...VKOSJ on 1.832 Mhz at 1015 UTC, saying he will be there until mid-January. QSL via WB6AFJ.

OGASAWARA...Until January 11. KA2PF on all bands with cw and ssb. QSL via W6CNA.

PETER I Island...3YOAK by KD7P. Landing by helicopter in the small saddle atop the peak of the icy mountain is scheduled for a day of opportunity between 28 December and 4 January. If the 24 hour operation is successful it will add another country to the DXCC Countries List. Operation will be concentrated near 14.145 Mhz QSL up. This has gotten the interest of LA1EE and LA2GV who want to make it a real expedition in February and a lot longer than 24 hours.

UGANDA...5X5GK is regularly in Snooky's Net on 14.183 Mhz at 1800 UTC. QSL via DJ5RT.

Annual Mean Sunspot Number



20th Century Sunspot Cycles