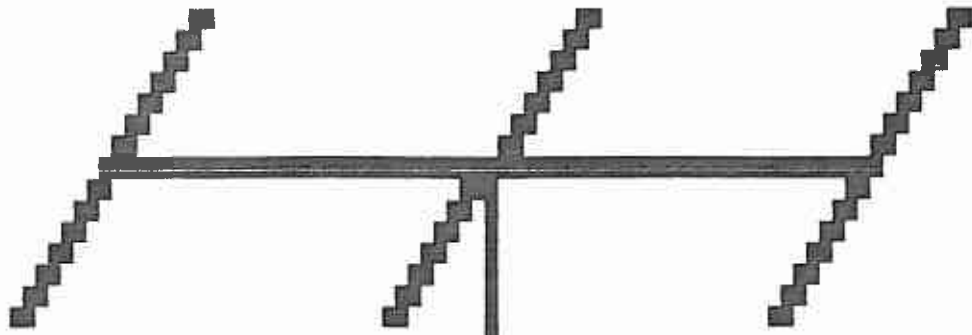


O.V.M.A.C.



FIELD DAY

1985

## GUIDELINES FOR THE O.V.M.R.C FIELD DAY 1985

### INTRODUCTION

A number of amateur radio clubs will be participating in the Field Day exercise on 22 Jun 85. To our best information, the Ottawa Amateur Radio Club will be set up at the Carleton University, the Club de Radio Amateur Outouais will be operating near the Gatineau River area, and Jack Belrose, VE2CV, will set up a Field Day station at Shirley's Bay.

### Assisting Organizations

We are grateful that the Canadian Forces Base Ottawa Amateur Radio Club and the West Carleton Club will be assisting us with operators/loggers. We would like to especially thank the XM49 Communications Squadron for lending us their communications trailer for F.D. Finally, we would like to thank the Regional Municipality of Carleton for providing three 2.5 kw generators.

### O.V.M.R.C. PARTICIPATION

The O.V.M.R.C. will operate its Field Day at the Museum of Science and Technology from 1800 Z (1400 EDT) on 22 June 85 to 1800 Z on 23 June 85.

### FIELD DAY OPERATION DETAILS

#### General Outline

The O.V.M.R.C. will be operating 3 H.F. stations, an OSCAR station and a packet radio station during the contest period. There will be 3 phases to the exercise: set up, operation of stations, and dismantling and clean-up.

#### Phase 1 - set up

The XM49 trailer will be on site at the <sup>depot</sup> trailer at approximately 1900 hrs on Friday evening. VE3JPC will be on site from that time on and those who are bringing equipment will be encouraged to bring it at that time. Security will be provided by VE3JPC in addition to the Museum staff.

VE3YK and VE3CV are the team leaders for erecting the masts and H.F. antennae.

VE3QJF will set up the 90 metre station using VE3JPC's IC-740. VE3JPC will assist with the C-64 installation.

VE3DAD will set up the his Yaesu 201D and his C-64 for 40 metres.

VE3LNH will set up the 20 metre station with his IC-735 and the club computer which has been recently donated by MITEL.

For those in the train depot, you will each be given a table and power bar/box. I am recommending the rigs operate from the batteries and the computers and lights operate from the generator. There are three benches along the wall and they can be turned around and used for the operators and loggers. It is highly recommended that you bring along a lamp for night operation. It is strongly recommended that those who are bringing rigs for operation should bring their operating manuals so that the operators may familiarize themselves with the controls.

VE3PAI will deliver the generators (3 x 2.5 kwatt) and the six foot tables to F.D. site early Saturday morning. He will liason with VE3JPC to get cash to fill the jerry cans with unleaded gas.

During Field Day, one generator (2.5 kw) each will be located at the depot and trailer respectively. The third generator will be on stand by. The 900 watt generator from VE3JDD will be used for charging batteries.

VE3OWL will deliver the club computer at the F.D. site Friday evening. Co-ordinate with VE3JPC.

VE3OFM will assemble satellite communications station in the trailer. VE3JPC will have the print outs for the satellite passes.

VE3JPC will assemble packet radio station in the trailer

VE3JPC will have banners and signs to advertise the club for placement on train depot building, sign indicating MITEL's donation and no smoking sign for the gasoline storage point.

#### Phase II - Operation of stations

Operation of the stations will normally be done with an operator and a logger using whatever mode you wish. Remember you will have to change the logging programme for the appropriate mode that you wish to operate. Everyone is encouraged to "get their hands dirty". Remember that CW contacts are worth two points and Phone contacts are worth one, so in all likelihood, if you are only capable of 5 w.p.m, you will get more points than a competent Phone operator.

VE3JPC will have blank operating schedules charts for the H.F. stations during the O.V.M.R.C. meeting on 20 June. You can at this time indicate a two hour slot that you would like to work. Those who sign in early will get the best times for operating.

One of our objectives with this exercise is to demonstrate

our capabilities to the public, but the public will not get much out of this demonstration if they are left on their own without anyone to show them around. In all likelihood, they will know absolutely nothing about ham radio and there is every possibility that they may be hostile towards it. If you see someone who looks perplexed, by all means, introduce yourself and give them the "cook's tour" and stress:

- what Field Day is and its relationship to amateur radio,
- what the stations are doing and show that we are completely emergency powered
- explain the relative distances that we can communicate with (the current logger/operator can give you an indication of what the current propagation is),
- ask if they would sign the guest book, and
- ask if they would like a message sent, presuming that we have volunteers to do this little job.

We will be trying to send messages for the public of up to 25 words of a non-commercial nature through the national traffic system. As of yet I have not been able to scare up an experienced traffic operator. I would appreciate if some one could volunteer. CW procedures are not necessary as they could be passed through the Ontario phone net on Saturday evening. VE3JPC will be attempting to make a sked, either through one of the two metre repeaters or on H.F.

Also, the club will be sending a message to the section manager, VE3GT. At this time, arrangements will be made direct through VE3KFG.

If demand warrants, VE3JPC'S Tono EXL-5000E can be used to demonstrate AMTOR and RTTY e.g. I may try to leave a message for LA9OK in Norway.

#### Phase III - Dismantling and Clean-up

Antenna masting will be removed under the direction of VE3YK and VE3CV.

Both the train depot and the XM49 trailer will be swept out and wiped down. The gas tanks of the generators will be siphoned out and run dry.

#### DITS AND BITS

##### Timings:

##### Friday --

1900 Hrs (approximately)

-delivery of trailer

-delivery of club computer

-VE3JPC on site to get equipment from club members

##### Saturday --

0800 (approximate)

-VE3JPC on the air for talk in

0900

-arrival of club members to set up stations

1000

-erect masts and antennas

1100

-instal stations

-run up of generators

1200

-Lunch for those who wish

-initial testing of H.F. stations

-usual run around for those little things that must be done (hi hi)

1400

-FIELD DAY BEGINS!!!!

Sunday --

0500 - 1000

-OSCAR 10 in sight

1400

-Field Day ends (boo-hiss)

-Start dismantling and clean up

1600 (approximately)

-clear out

QSO EXCHANGE:

The call sign to be used: VE3JW

QSO exchange: ~~A~~ ALPHA ONARIO on phone, <sup>3</sup>~~A~~ A ONT on CW

Sundries, Food and Accomodations

There will be a coffee available. We have a number of disposable cups, plates and cutlery, but for those who are staying, it would be appreciated that you bring your own eating implements. There is a Macdonald's, Burger King and Tim Horton's donut shop within walking distance. There is also a St. Hubert's Bar-B-Q nearby. You may bring your own food and cooking on site is no problem with propane or naphtha gas, but no cooking in the depot or the communications trailer. There are picnic tables available.

Jerry cans will be refilled when necessary

No smoking in the vicinity of the gasoline storage point or the generators.

Remember that we are in a public place so be discreet with the QO's.

VE3CDS will have his trailer on site for those who wish to go for a snooze.

It is highly recommended that you mark your gear for easy identification. It is suggested that you use masking tape and magic marker.

Just in case, bring wet weather clothing!!!

Comunications and maps

When on the site, VE3JPC, as VE3JW, will be monitoring VE3TWO (147.30/.90) and VE3MFC (147.15/.75).

See attachments for running the computer logs, and the location of antennae and accomodations.

ONLY YOU CAN MAKE THIS FIELD DAY A FUN EVENT!!!!  
GET IN THERE AND PLAY SOME RADIO!!!!

you enter "NLI" for the New York–Long Island section once, and then say "NYCLI", the logger will give you credit for two different multipliers.

And if you forget to separate the nonscoring part of the exchange from the multiplier, you'll also have problems. Don't forget the all-important space between the report (or other nonscoring information) and the multiplier.

#### Starting a Contest

12. After you've set up the **LOGGER** for the rules of the particular contest, you're almost ready to begin operating. Now enter the date and indicate which band you want to operate. Finally, enter the mode, which can be up to three characters. As indicated earlier, the mode command can also be used to log band changes in a contest that only permits you to work stations once for credit, regardless of band. In such a contest you only specify one band for dupechecking purposes.
13. Now you're ready to go. You'll be asked to type a carriage return to mark the starting time when the contest begins and you're ready to start operating. If you're not using a real-time clock, you will also be asked to enter the starting time. At this point the main menu appears and you're ready to start operating. There will be a prompt for the first QSO ("COMMAND OR CALL?").

You can begin entering calls, exchanges, and (if you're not using a real-time clock) the UTC time. There's a short delay to initialize the dupechecking feature on the first QSO, but after that the **LOGGER** will do the dupechecking and be ready to accept each new exchange within a second or two. The duping information is stored in RAM to assure rapid responses even with a log-full of calls in memory.

In entering each QSO, you have two options:

- A. You can just enter the call sign and wait for a dupecheck; or
- B. You can enter the call sign, hit the space bar, enter the nonmultiplier part of the exchange (if any), hit the space again, and enter the multiplier—all on one line. If you're not using a real-time clock, you can also enter the time on that line, with a space separating it from the exchange. If you omit part of this information, you'll be prompted for the rest—provided you enter everything in the right order and separate the items with spaces. If you enter something in the wrong order or notice a typing error after hitting a carriage return, simply delete the QSO and try again. You can abort the current entry by typing a minus sign, or delete the contact just logged by typing "X."

If you enter everything at once, it's faster, but that means you don't get a dupecheck on the station before completing the contact. If it is a dupe, of course, the information won't be stored, and the "IT'S-A-DUPE" message will appear.

You can skip the UTC time entry by hitting another carriage return when the "UTC?" prompt appears. This feature was included because some operators prefer not to enter the time for every single

contact. If you have a real-time clock, of course, you don't have to worry about this—it happens automatically.

#### Suggestions for Computerized Operating

14. Suppose you're running a multi-operator contest, and you have someone you don't know doing your logging and dupechecking. It takes a while to get to know this person's style and capabilities, right?

When you first use a computer as your second operator, there is also an adjustment period. But you'll probably discover that a computer can be at least as valuable as having a second operator at your side—and it won't cost you your "single operator" status.

Once the learning period is over, you may be amazed at how convenient computerized contesting can be. Compared to the old way of juggling logs and big, clumsy dupesheets, it's terrific. And the versatility it gives you in terms of seeing what multipliers you still need on any band at any time! There's just nothing like it for efficiency, not to mention the dupes you avoid and the time and trouble you save after the contest.

Some people have difficulty getting used to the idea of doing the original entry of data on a keyboard. "Don't you write it down first and then type it later?" they ask.

The answer is no—just as the answer would be no if the question were, "Didn't you write the manuscript of this book in longhand first, and type it later?" Many computer users learn to type much faster than they can write with a pencil. After a while, it becomes a real nuisance to write anything out in longhand.

Yes, we do log directly on the keyboard.

If you are just learning how to log on a keyboard, we would suggest that you practice on a contest with a short and simple exchange before you tackle something like ARRL Sweepstakes, which has a long and cumbersome exchange. If all you have to type is the call and a short exchange, computerized logging procedures are easier to learn.

If you're an experienced contest operator, you've probably discovered the contesteer's trick of using headphones, a boom mike, and a foot switch so you have both hands free for logging, duping, and equipment adjustments. When logging a contest on a computer, this technique is recommended. The ideal logging computer is a small, low-profile one, so the keyboard can sit right in front of the rigs—or be pushed aside quickly if necessary. Some Apple users place the main transceiver *on top* of the computer and put the video monitor on a shelf, back out of the way! In terms of size, a computer with a small detachable keyboard is excellent for contest logging.

There are basically two ways to operate a contest: you can "hunt and pounce," or you can "run." If you hunt and pounce (i.e., tune around looking for stations to call), the dupechecking feature of the logger programs become especially important. You don't want to look

ridiculous by repeatedly calling stations you've already worked. If you're hunting and pouncing, enter the call as soon as you find a likely station to work. That gets you a dupecheck. Then if you make the contact, type the rest of the information on one line, using spaces to separate the portions of the data. If you don't make contact, just abort the entry and go on.

If you're running (i.e., sitting on a frequency and working stations rapidly, one after another), enter the call as soon as you're reasonably sure you have it right, and hit a return. The logger will do your dupecheck while you're sending your exchange. In most cases you'll know if it's a dupe before you can acknowledge the caller and say something like "five-nine Maryland." Then type in the exchange as the calling station gives it, again using a single line for everything.

We use a scratch pad only when a station is so weak that we're unable to copy the information in proper order. Normally, we do it all electronically. Airline reservation agents type everything directly into their computers as they hear it over their headphones. Why shouldn't contest operators be at least that efficient?

### Menu Options

Let's assume the contest is well underway now. It's time to look at the options on the main menu.

15. If you want to review the menu at any time, just type a "?" at the prompt. The menu will be immediately redisplayed.
16. After you have logged a number of contacts, try some of the menu options. "SAVE" will allow you to write all logged QSOs to disk, while

```

GENERAL CONTEST LOGGER MENU
'? ' DISPLAYS THIS MENU
'OSY <BAND> <MODE>' CHANGES BANDS
'DATE <MM/DD/YY>' CHANGES DATE
'MODE <MODE>' CHANGES MODES
'QRT' SAVES ALL CALLS AND EXITS
'SAVE' SAVES ALL CALLS AND RESUMES
      (NOTE: ALLOW 2-3 MIN FOR SAVE)
'STAT' GIVES STATUS ON CURRENT BAND
'SCORE' GIVES RUNNING TOTAL SCORE
'EDIT <QSO #>' EDITS ANY LOGGED ENTRY
'X' DELETES THE LAST ENTRY
' ' ABORTS CURRENT ENTRY
ENTRY FORMAT: 'CALL EXCHANGE <UTC>'
ENTER CALL ONLY FOR DUPE CHECK
ENTER CALL AND '?' TO LIST BANDS
      ON WHICH A STATION IS NEEDED
' ' DENOTES OPTIONAL ENTRIES

LOGGER READY FOR QSO #1-10-SSB
COMMAND OR CALL:

```

*The CONTEST LOGGER offers the operator many options as this menu shows. The LOGGER will give a quick status report on a band-by-band basis. It includes all of the features of the DUPECHECKER program, and it keeps track of such things as the total operating time and QSO rate.*

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"QRT" will terminate the logging session. In either case, everything in RAM must be written in a disk file, which will take several minutes, depending on the speed of your disk drive system.

Perhaps you want to take a break, but don't want to shut everything down. If you type "SAVE," the clock will keep running and your break time will count against your operating period. If you type "QRT," you'll be logged off the air and the break time won't be counted as operating time. But then you'll have to rerun the program to resume the contest.

That's where the "QRX" function comes in. It's halfway between "SAVE" and "QRT." It saves all contest data and stops the clock, but it doesn't terminate the session. When you type "QRX," the total operating time you have used so far will be displayed, along with your average QSO rate (in contacts per hour). To resume, all you have to do is indicate your new starting time (or enter a carriage return to log the new starting time if you're using a real-time clock). The LOGGER has prompts on the screen to lead you through these steps.

A closely related command is "RATE." This command doesn't interrupt your operation to write anything to disk, but it does display your QSO rate per hour and the total operating time you have used so far.

17. To change bands, just type "QSY." You'll be immediately logged onto the new band, and you'll get a quick summary of where you stand on this new band. You can also type "QSY 40" or the like, putting the QSY command and the new band all on one line, separated by a space. This will save time.

If, however, you're treating the entire contest as one "band," you can log a band change by typing "MODE" and specifying the new band as a new "mode." The final printed log shows both the "band" and the "mode" for each QSO, so this poses no problems in logging.

There are several commands, incidentally, that permit you to enter the data with the command on one line to save time. In addition to a command like "QSY 40," the logger will accept a command such as "MODE SSB" or "DATE 12/13/84."

It is also possible to change both the band and mode with a single QSY command as follows: "QSY 40 SSB". If there are more characters following an acceptable band name (and separated by a space), the contest logger programs assume the additional item is a mode change.

18. If you type "STAT," you get a rundown on the current band: the LOGGER will display your QSO total and it will list all of the multipliers you've worked on that band.
19. If you want a rundown on all bands, type "SCORE." Then your overall totals will be displayed. This is especially useful as the contest nears its conclusion. You can quickly see if you're closing in on a new record or

beating the competition across town (provided, of course, that the competition is also computerized, and is willing to give you an honest report of what his "SCORE" command is telling him).

20. The **LOGGER** has all of the dupechecking capabilities of **DUPECHECKER**, including the multiband dupecheck. To see whether you still need a particular station on any band, type the call sign followed by "?" You'll get a list of all bands on which you need the station, with the current band flagged—if you need the station on this band.

#### Editing Features

21. Sometimes during a contest you discover that an earlier log entry is incorrect. Perhaps band conditions improve and you discover you've miscopied someone's call or multiplier. The "EDIT" command allows you to revise any earlier entry, either during the contest or afterward. You can change any of the particulars, including the call, multiplier, time, date, band, and mode.

After you type **EDIT**, the **LOGGER** will ask you for the "record number" of the QSO you want to change. If you prefer, you can enter the record number with **EDIT** (as in "EDIT 307"). The record number appears in the left-hand column of the hard-copy printout, and at the right side of the final log that is printed after the contest. If you can't locate the record number immediately, write down the new information and make the correction after the contest.

22. The **EDIT** command has its own menu. Editing a QSO is very easy. You'll see all of the specific information about the QSO displayed, and you can either change each item or type a return to leave it as is.

```

EDITING RCD #7
DATE:      3/15/83
TIME:      2107
CALL:      WA2UNN
BAND:      15
MODE:      SSB
EXCHANGE:  59
MULTIPLIER NNJ

INSTRUCTIONS
HIT <CR> TO LEAVE AN ITEM UNCHANGED.
TO CHANGE, ENTER THE NEW VALUE <CR>
TO DELETE THIS ENTRY, CHANGE THE CALL
TO *

OK (Y/N)? Y

* NEW MULTIPLIER *

LOGGER READY FOR QSO #8-15-SSB
COMMAND OR CALL: ?
  
```

The three **LOGGER** programs provide full editing capabilities. Any aspect of a previous contact may be edited at any time, and the program will keep track of the effect the changes may have on the total score. If a change results in a new multiplier (or in the deletion of a multiplier), the **LOGGER** will take appropriate measures to correct the score.

When you're finished editing, you get one more chance to confirm that everything is correct, or you can abort the entire EDIT, leaving the QSO as it was before.

23. In addition to the EDIT command, there are two other ways to change entries, as mentioned earlier. Both are forms of what might be called a "banzai" command. Suppose you get a QSO logged and then discover the other guy didn't copy you. After much effort, you give up on the QSO. But it's in the log. Any time you want to delete the QSO that you have just logged, type "X". And if you give up on a QSO before you're finished logging it, type "-" (the minus sign) to abort the entry.

**Printing the Logs and Dupesheets**

24. When it's all over, don't forget to use the "QRT" command to save everything—and then get some sleep! Or if you prefer, you can show up on a 75-meter net right after the contest knowing your exact score and multiplier total—with all dupes removed. You may not want to admit your exact score at that point—there's something of a poker game that goes on during those post-contest brag sessions, isn't there? But you will know where you stand, in any case.

When you've recuperated from the big battle, you can run the LOGPRINT program to print a neat set of contest logs. LOGPRINT will read the data files generated by the LOGGER, and it will print out the results either in the usual time-sequential way or by bands (useful in certain specialty contests). In addition to a neat set of logs, you'll get detailed scoring and multiplier summaries. And if, heaven forbid, you see an error in the logs, you can always use the "RESUME" command to re-enter the logger program, edit out the error, and reprint the logs—painlessly!

As the text of this chapter explains, when you re-enter the program after the contest to edit out errors, you should not use a real-time clock even if you have one. Instead, select the option of entering the time manually. Whenever you RESUME the contest (even if it's just to edit), a time on and time off will be written into the data files. To

9/8/79			N6NB		PAGE1	Sample printout of dupesheet from: CONTEST LOGGER
			SEPT 79 VHF CONTEST			
			DUPESHEET 144			
			-0-			
WOFY	WDOFZP	NOIS	KOJXI			
			-1-			
NIABA	K1BKK	W1EHL	W1GRH	W1JSM	K1RT	W1VUW
W1ABL	K1BRD	W1EIH	K1GSR	K1JX	W1RVQ	W1WDL
W1AC	K1BRL	W1EJ	K1GVM	AE1K	VE1SJ	K1WGN
N1AF	K1BU	K1EM	W1GXM	W1KCR	K1SND	W1WRM
K1AIK	W1BVR	W1EUC	W1GXN	W1KUL	K1SU	W1WS
W1AIM	W1BZJ	W1EUY	W1GXT	K1LIQ	W1SVR	W1WVY

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Another contest that poses a special problem is the VHF Sweepstakes, in which the scoring is based on the multiplier total *plus 10*. The LOGGER works fine in VHF SS, but you'll have to add 10 to your multiplier and then recompute the final score, correcting the score shown on your summary sheet.

There are a number of contests that require the exchange of consecutive serial numbers. The LOGGER displays a consecutive "record number" for each contact, and that number can be sent as a serial number. In that way, the LOGGER serves the specific requirements of many additional contests.

In general, the LOGGER works for any contest in which there is a multiplier based on the exchange (or just the last part of the exchange), with each QSO worth a specified number of points (which can vary from band to band), and with the final score determined on a QSO-points-times-multiplier basis. The LOGGER will work whether multipliers count just once or there are separate band-multipliers. And its dupechecking feature can be set up for either a once-per-contest or a once-per-band type of dupecheck.

That's pretty versatile, but it doesn't work in all contests. In two cases we decided a particular contest was so popular and specialized in its exchange or scoring procedure that a specialty logging program was justified: Sweepstakes and Field Day.

#### The Field Day Logger—Operating Notes

Most of the operating procedures for the GENERAL PURPOSE LOGGER apply equally to the FIELD DAY LOGGER and the SWEEPSTAKES LOGGER programs, but there are a few differences that should be noted.

In the Field Day rules, there's no multiplier based on geography. Thus, the FD LOGGER ignores the geographical exchange in computing the score. In Field Day, a contact across town is just as good as one with Ulan Bator, and 100 contacts across town are just as good as contacts with 100 different DXCC countries.

The FD LOGGER asks several questions at the beginning to determine your power multiplier, whether you are a Class D station (i.e., a home station not running emergency power), and the like. If you're a Class D station, the FD LOGGER doesn't count contacts with other stations that send Class D as their category, thus complying with the Field Day rule in that regard.

The FD LOGGER is tailored to the Field Day exchange: entry class (or signal report for foreign stations) and section (or country). You can enter it all on the same line as the call sign, or enter the call sign first for dupechecking purposes.

Another unique feature: when you specify bands, you must say either "PH" or "CW" along with the band, since voice and CW count as separate bands in Field Day. For dupecheck purposes, each is treated separately.

Almost all of the menu commands we described earlier work with the FD LOGGER. You can edit any entry, call up your SCORE or STAT (status

on a single band), delete the last entry with "X" or abort the current one with "-", display the menu with "?," and use "QSY," "SAVE," and "QRT" in the usual way.

The QRX and RATE features were omitted from the FD LOGGER due to that contest's rules. During Field Day, each station may operate for 24 hours from its starting time (or for the full 27 hours of Field Day if certain other requirements are met). Thus, it doesn't matter how many breaks you take during your operating period—you still have to stop at a specified time. You should write down your official starting time so you can comply with the rules by shutting down 24 (or 27) hours later.

Given the immense popularity of Field Day (every year, some 25,000 radio amateurs participate), and because Field Day is usually a group project, we suspect that the FIELD DAY LOGGER will be a widely used program. Some people may hesitate to take their computers off into the countryside, and only the most cavalier would run a computer on a flaky gasoline generator without a good regulator in between, but nevertheless, we think a small, portable computer will soon be as standard a piece of Field Day gear as the generator, the beer, and the insect repellent!

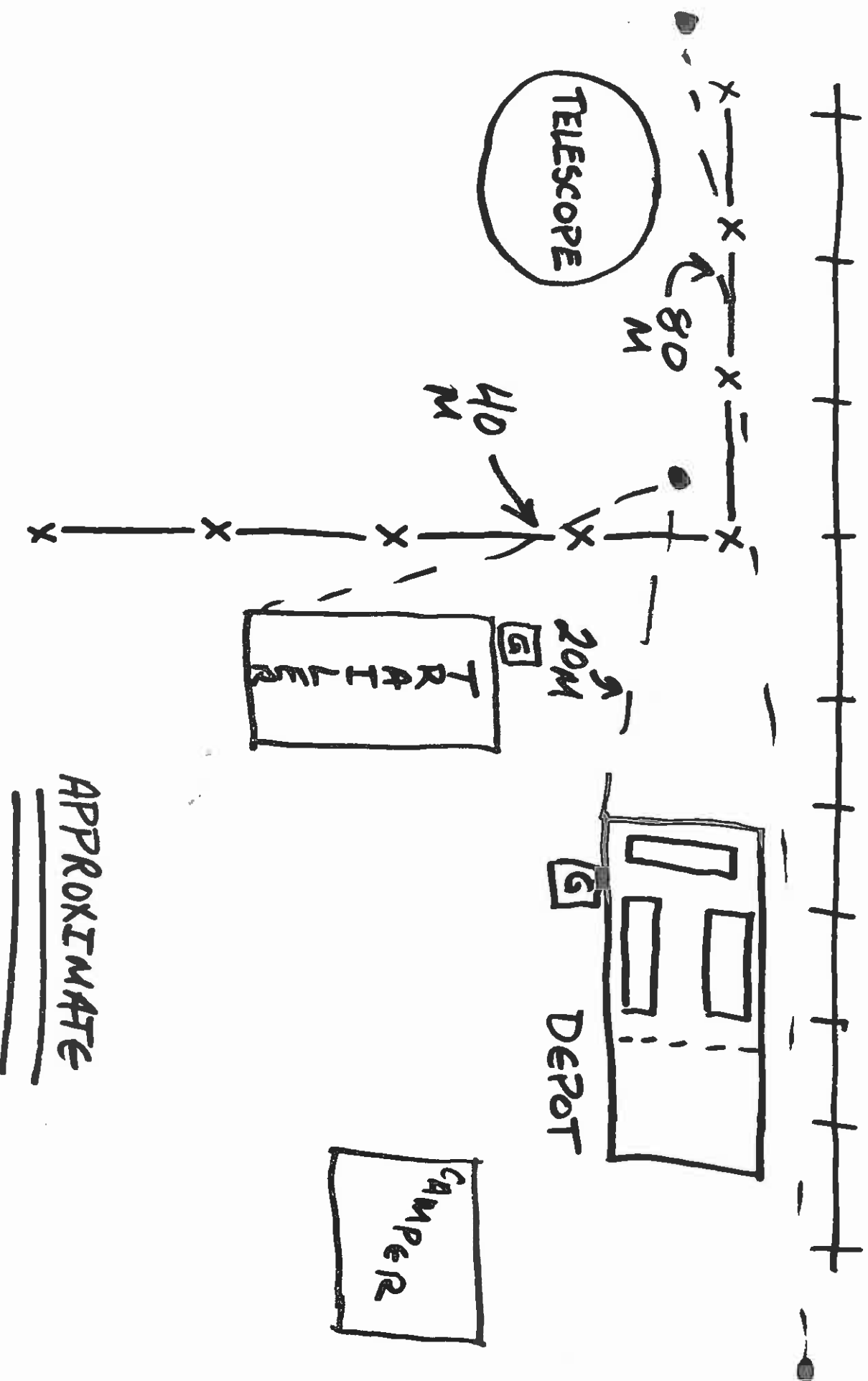
#### FIELD DAY LOGGER (TRS-80 and CP/M)

```

10 REM FIELD DAY LOGGER (TRS-80 VERSION)
20 REM BY KC6A AND N6NB
30 REM (C) 1983 BY HAYDEN BOOK CO., INC.
35 CLEAR 1000
40 BL$=CHR$(7):REM NEEDED; DON'T DELETE
50 HI$="":LO$="":REM NEEDED FOR OTHER COMPUTERS
60 CLS:REM CLEAR SCREEN
70 FA$="DUPELOGA":FB$="DUPELOGB":FC$="CONSTLGL"
80 ZA=0:AA$ASC("A")-1:A0=ASC("A")-ASC("0")+26
90 TL$="BAND      QSO'S X Q-PTS = POINTS"
100 T2$="      -----"
110 GOSUB 2000
120 PRINT:AS="":INPUT "NEW CONTEST (N) OR RESUME (R) ";AS
122 CLS
123 INPUT "WANT TO USE THE REAL TIME CLOCK TO LOG TIME";RCS
124 IF RCS="Y" THEN PRINT "BE SURE CLOCK IS SET CORRECTLY."
130 IF AS="N" THEN 190
140 IF AS<>"R" THEN PRINT BL$:GOTO 110
150 GOSUB 2230:REM READ IN FILE
160 IF HC$="Y" THEN GOSUB 1090
170 SS=26*NL+1:GOTO 440
180 REM NEW CONTEST
190 PRINT:INPUT "WANT HARD COPY WHILE LOGGING (Y/N) ";HCS
200 AA$="":IF HCS="Y" THEN INPUT "TURN ON PRINTER. <CR> WHEN READY ";AA$:GOSUB 1090
210 Y$="FIELD DAY"
220 PRINT:INPUT "HOW MANY SEPARATE LOG SHEETS DO YOU NEED ";NL:PRINT
230 IF NL<1 THEN PRINT BL$:GOTO 220
240 DIM LN$(NL),QP$(NL),TC$(NL)
250 M1=INT((FRE(0)-2000-800*NL)/6)
260 IF NL*26>=M1 THEN PRINT "TOO MANY";BL$:ERASE LN$,QP$,TC$:GOTO 220
270 DIM C1%(M1),C2%(M1),P%(M1)
275 KK$=""
280 FOR J=1 TO NL
290 PRINT:PRINT "WHAT BAND IS LOG SHEET #";J
300 PRINT "ENTER THE BAND FOLLOWED BY 'PH' FOR PHONE OR 'CW' FOR CW"

```

# FIELD DAY SITE



APPROXIMATE