# RAMS

# AND

# OCCLAN

# OPERATION

# Contents

# 1 GENERAL

## 1.1 Introduction

RAMS and OCCLAN are acronyms for Remote Audio Monitoring System and OCCLAN is a Channel Occupancy Evaluation facility.

IRMA is an earlier version of RAMS and both acronyms may be interchanged.

Their operation is described on p1 of their respective Aerosystems International manuals.

However, the manuals are short on detail on how to

set up RAMS for monitoring
configure the computer
create files
retrieve and convert data

so this guide was produced to give assistance in accessing the RAMS system by districts who do not have the manuals Ideally, this guide should be read in conjunction with the RAMS and OCCLAN manuals which contain further detail.

While preparing this guide it was noted that some of the synthesised voice commands are not as described in the supplied manuals. The differences have been taken into account in the preparation of this guide

1.2 Throughout this guide screen prompts and messages are shown in italics. e.g. *press PAGE DOWN*

## 2 System requirements

2.1 An IBM type PC. Any model XT or above with 640k RAM and a hard disk will suffice;

2.2 A communications programme such as PROCOMM; (for remote computer control)

2.3 A 1200 baud modem; (for remote computer control)

2.4 A telephone line to the RAMS system.

2.5 A RAMS system.

## 3 System configuration

3.1 The following directories/sub-directories need to be created on C: drive -

C:\COMMS

Procomm should be copied to this directory.

3.2 C:\OCCLAN

The OCCLAN programme should be copied into this directory.

3.3 C:\OCCLAN\RAMS

This sub-directory will store the data downloaded from the RAMS system. When downloading ASCII files via PROCOMM, this is the directory/path you specify.

3.4 C:\OCCLAN\DATA

This sub-directory will contain the data obtained from converting the ASCII data downloaded into the RAMS sub-directory.

3.5 C:\OCCLAN\FREQS

This sub-directory will store frequency lists. Files stored in this sub-directory must have the .LST extension. See the later section on creating list files.

3.6 If you are using a DOS menu or a WINDOWS menu, independent menu options must be set up to access PROCOMM and OCCLAN.

## Control of RAMS via telephone

4 This facility allows control of RAMS via a DTMF telephone.

4.1 Dial the telephone number of the RAMS facility.

4.2 RAMS will respond with "HELLO".

4.3 You must enter "*" on the keypad within 5 seconds of RAMS responding or RAMS will default to computer control mode.

4.4 After entering "*" RAMS will respond with:

"ENTER ACCESS CODE"

4.5 You must now enter the code **4 7 6 2**. As each digit is entered RAMS will echo the character. Make sure you hear the echo before proceeding to the next digit.

4.6 When the access code has been correctly received RAMS will respond with:

"IDLE MODE, ENTER CONTROL OPTION"

4.7 The control options available are obtained by pressing '*'. RAMS will respond with the following list:

"CONTROL OPTIONS ARE"

"1. RECEIVER"
"2. TAPE RECORDER"
"3. TRANSCEIVER"
"* TO REPEAT MENU"
"# TO TERMINATE SESSION"
" ENTER CONTROL OPTION"

4.8 **1. Receiver control sub-menu**

Press '1', the message response is

"ENTER RECEIVER COMMAND"

Then proceed with the receiver control sub-menu...

4.9 2. Tape control sub-menu

Press '2', the message response is

"ENTER TAPE COMMAND"

Then proceed with the tape control sub-menu...

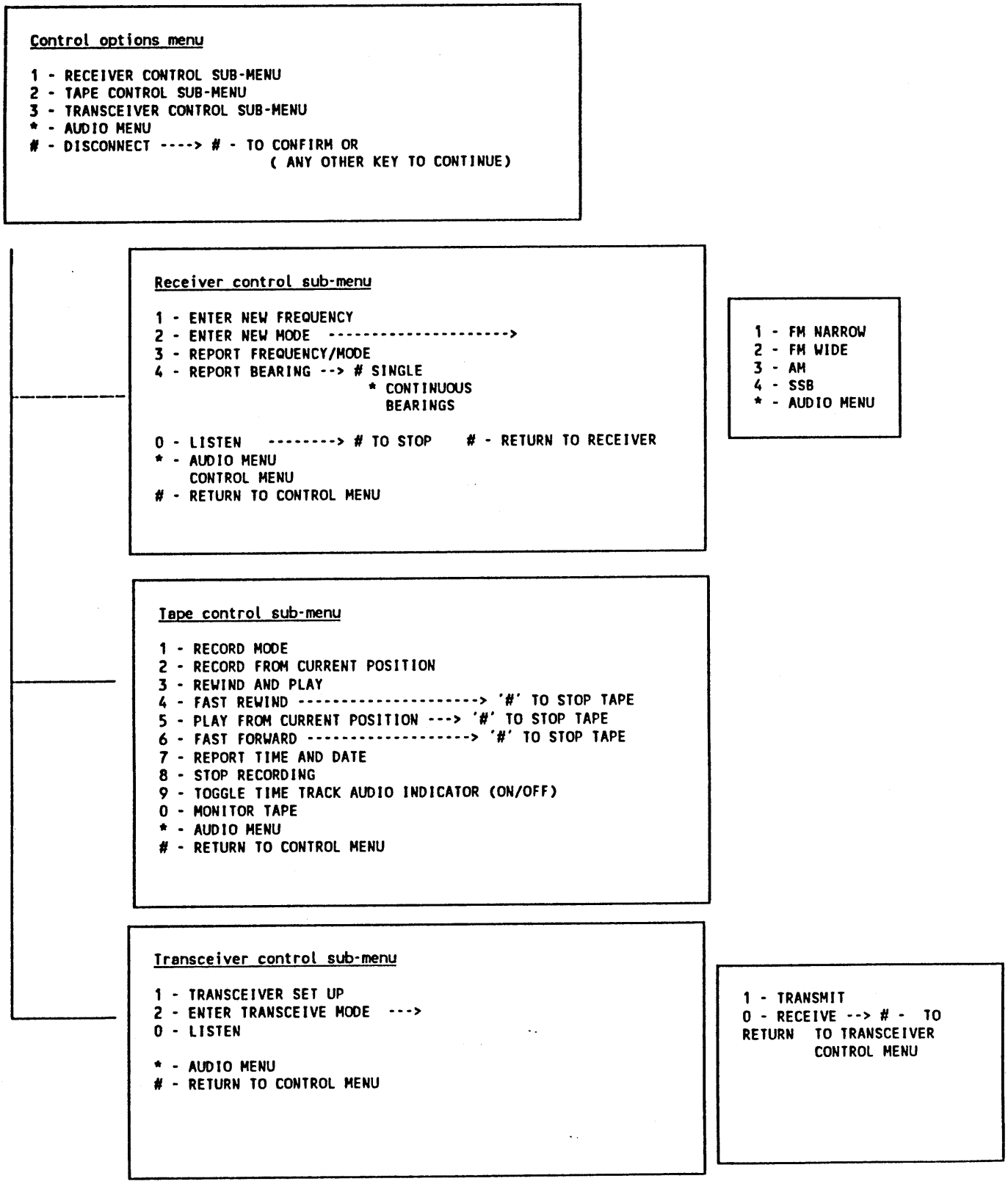
4.10 3. Transceiver control sub-menu

Press '3', the message response is

"ENTER TRANSCEIVER COMMAND"

Then proceed with the transceiver control sub-menu...

# DTMF Control Options - Flow Chart



## 5 Control of RAMS by computer

(See p2 para 2 of RAMS manual)

5.1 Enter PROCOMM and use *ALT-D, ENTER,* to dial the RAMS system.

5.2 When PROCOMM has successfully dialled RAMS the *LAST CALL:* will have *CONNECT 1200* flashing.
After a few seconds the message *PROCOMM PLUS ONLINE TO RAMS* will appear at the top of the screen.
When communication has been established a banner with the message:

**********

WELCOME TO RAMS V1.0 date/time

**********

will appear.

5.3 Then *PRESS RETURN TO CONTINUE:* (press return)

5.4 Then *ENTER PASSWORD:* TODAY (return)

(The password is TODAY and must be entered in UPPER CASE only)

5.5 The ******** *RAMS SYSTEM COMMAND MENU*******  with options 1 - 10, and messages:

*The system is in IDLE mode* and

*Enter command (? for the menu)* will appear.

5.6 Enter the command you require

## 6 To download scanning data from RAMS

(See p7 of RAMS manual)
Monitoring data may be downloaded either during a recording session or on completion. If it is done during a recording session then data to the present is downloaded but the monitoring session continues uninterrupted. Either way the downloading of information is the same.

6.1 Enter PROCOMM and dial the RAMS system (ALT-D) as in Section 5 above.

6.2 Choose *4* from the *COMMAND MENU*. The system will prompt you to prepare for the tranfer

6.3 Press *PAGE Down* to get the *DOWNLOAD PROTOCOLS* window. Choose *4* as the data will be downloaded as an *ASCII* file.

6.4 The *ASCII DOWNLOAD* window will appear with the message

*enter filename.*

Here you will enter the complete path and filename where the data is to be downloaded. e.g.

C:\OCCLAN\RAMS\DATA01

6.5 The raw data will be stored in the RAMS sub-directory with the filename DATA01.

6.6 Press ENTER and downloading will begin.

6.7 When downloading is completed you must press ESCAPE. If no further action is wanted then you may end your communications session by pressing ALT-H.

6.6 **IMPORTANT**

**YOU MUST EXIT FROM RAMS EITHER BY QUITTING PROCOMM (ALT-X) OR BY HANGING UP (ALT-H). IF ONE OF THESE IS NOT USED THEN THE RAMS SYSTEM MAY 'HANG-ON' AND A VISIT TO THE MONITORING SITE WILL BE NECESSARY TO MANUALLY RESET THE SYSTEM.**

## 7 Converting downloaded data to *IRMA/ICScan II* format.

The OCCLAN utility converts the ASCII data collected, to a format used by this programme. The file example used in Section 5 will continue to be used here.
Data collected may be added to an existing file or a new file/location created.

7.1 Choose *OCCLAN* from your initial screem.

7.2 Choose *2-Utilities* from the *OCCLAN MAIN MENU*.

7.3 Choose *2-Convert* from the *Utilities* menu.

7.4 You will then be prompted to *ENTER PASSWORD*.

The current password is TOMORROW (UPPER CASE must be used) but may be changed within the *OPTIONS* menu.

7.5 Choose *2-IRMA/ICScan II* from the *CONVERT* menu.

7.6 The message *Enter path/file name to IRMA/ISCan II data:* will appear together with a list of *site names* and *occupancy data files*.

7.7 If the data is to be added to an existing file then a list of current sites will be given for you to choose one. *(A,B,C...etc)*

7.8 If a new file is to be created then enter *? for a new site* and you will be prompted for a *file name for a new data file* and then a *site name of a new data file*.

7.9 The message *Converting IRMA/ISCan II data files...* will appear and on completion;

*Conversion completed, press any key to continue.*

7.10 Return to the *OCCLAN MAIN MENU* by pressing 0.

7.11 The converted data files are now in the C:\OCCLAN\DATA sub-directory and can now be used to display *Occupany data*.

## 8 Setting up PROCOMM

8.1 Choose PROCOMM from the menu/icon.

8.2 The first screen has the word *INITIALIZING* flashing.

8.3 Press any key to enter *TERMINAL MODE*.

8.4 Once in *TERMINAL MODE* you will need to ensure the programme settings for the modem are correct. This is usually done once only on set up, but may be revised at any time.

8.5 Press ALT-P to get the *CURRENT SETTINGS:* menu.

Check that the *CURRENT SETTINGS* are:

1200,N,8,1,COM{1 or 2}(see below)

The COMport is the serial port to which your modem is connected and is usually COM1 or COM2.
If any setting differs from what it should be it may be changed now.

| | | | |
|---|---|---|---|
| To change the | *BAUD RATE* setting | press 2 | (1200) |
| To change | *PARITY* | press N | (N) |
| To change | *DATA BITS* | press ALT 8 | (8) |
| To change | *STOP BITS* | press ALT 1 | (1) |
| To change | *PORT* | press the F(function) key corresponding to the serial port to which the modem is connected. Usually COM1 or COM2. | |

8.6 PROCOMM is now configured for both RAMS and OCCLAN.

8.7 Press ALT-D to get the *DIALING DIRECTORY* screen.
The cursor will default to entry 1.

8.8 Choose R
The *REVISE ENTRY 1* window will appear.

8.9 Enter the *NAME* and *NUMBER* of your monitoring site.

8.10 Check your MODEM documentation for PARITY, DATA BITS and STOP BITS. RAMS requires the protocol as in the example entry window below:

```
     NAME: RAMS      (Your RAMS location)
   NUMBER: 4545716   (Your RAMS access number)
     BAUD: 1200
   PARITY: NONE
DATA BITS: 8
STOP BITS: 1
   DUPLEX: FULL
   SCRIPT:
 PROTOCOL: ASCII
 TERMINAL: ANSI
```

Further entries may be made for different monitoring locations or bulletin boards etc as required.

8.11 PROCOMM is now ready to dial RAMS.

## 9 Creating LIST (.LST) files

9.1 List files contain frequency lists which contain the same frequencies as those frequencies you enter into the RAMS system for a scanning session. They are created with a simple word processor and cannot be uploaded into the RAMS system. They are used only in conjunction with OCCLAN when analysing a monitoring session. i.e. to extract data relating to that particular frequency.

9.2 Up to 20 frequencies may be entered into the RAMS receiver memories via computer control or telephone control and a scanning session started.
When a scanning session is terminated and data downloaded, the frequencies scanned are downloaded with the occupancy data.

9.3 The frequency LIST file allows rapid selection of all data relating to frequencies scanned in a particular session.

9.4 The simplest way to create a frequency LIST file is to use your DOS editor.

At the C:\ prompt type *'Edit'*
Type in each frequency you entered into the receiver memory for the scanning session e.g.

```
26.5
89.4
101.875
450.9875
.... etc
```

- each frequency must be on a separate line
- all frequencies used in the session must be included

Name the file using the .LST extension e.g.

XYZCO.LST

and save it to your C:\OCCLAN\FREQS directory.

9.5 This file LIST may now be used when prompted to

*'Enter frequency or frequency list file name'*

in the OCCLAN *1-DISPLAY OCCUPANCY DATA* menu

9.6 s3.5 describes the sub-directory where frequency list files are stored. This path must be entered in the OCCLAN *OPTIONS MENU* as

*3- The default directory for the list files is C:\OCCLAN\FREQS*

Save the default setting by selecting

*6 - Save default settings*

Then press 0 to get back to the *MAIN MENU*.