

The OAS User's Manual

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Version 1.1 and later

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➤ ***Chapter One***

Introduction

Introduction

OAS has been designed as an easy to use, straightforward music scheduling tool. The intent was to build a software system that would permit a user to quickly produce daily schedules. The design of OAS minimizes the confusion and scheduling problems that often result from many other schedulers' exotic or rarely used features. As a result, OAS requires a minimum amount of configuration and setup time.

OAS Overview

As music is scheduled, a simple front-to-back “loose card system” model is used. That is, when a song is selected to be scheduled, it is moved to the bottom of that category. This ensures that only the “most rested” songs are available for scheduling.

Scheduling history is maintained for one day. The last scheduled playlist is checked prior to scheduling the next playlist. Hour separation is checked and maintained in a song's individual history. For example, a song that last played one week ago at 10 a.m. is flagged for a violation if it is eligible for scheduling again in the 10 a.m. hour one week later.

The program has the capability of maintaining a music library of up to 32,767 titles. Each group of 1,000 titles uses approximately 51,200 bytes of disk space for data files and an additional 16,300 bytes for index files.

There are 24 categories available, numbered 00 through 23. Category 00 is reserved for “hold” songs (songs that will not be scheduled). The limit for songs in any one category is 9,999. Although you can customize the names of each category, the scheduling pass order is preset so that lower numbered categories are scheduled prior to those of higher numbered categories.

Up to 48 clocks can be created in OAS. These are numbered 01 through 48. You may supply a free form text description for each clock. There is one clock assignment grid that permits the allocation of clocks for scheduling. There are 168 allocation slots, corresponding to each hour of each day of a week.

Each clock permits up to 100 events to be scheduled per hour. Up to 200 individual breaknotes, or non-music scheduled events, (numbered from 1 through 200, inclusive) may be created, which can then be placed into the clocks.

Minimum Computer Requirements

The computer that you choose to use with OAS should meet the following specifications:

- A 100% IBM-compatible computer with at least 640 kb of base RAM (Random Access Memory), with 512 kb of free RAM for running programs
- Microsoft MS-DOS or IBM PC-DOS version 5.0 or greater.
- VGA video adapter and VGA display
- 40 MB or larger fixed-disk drive (hard drive)
- An Epson-compatible printer
- At least one diskette drive capable of reading and writing to diskettes formatted at 720 kb or greater. Computers using disk compression schemes including, but not limited to, DoubleSpace, Stacker and SuperStor are not currently supported by OAS.
- At the time of installation, you must ensure that the hard disk has at least 4 MB free.

Note: It is always recommended that the computer's hard drive be at least 10% free. Thus, the 4 MB is a bare minimum for installation of OAS. The size of your music library will have a major impact on the amount of free space needed. If using a large music library, 4 MB may be insufficient. The program and support files for OAS consume approximately 1.4 MB of disk space. An installation using a music library of 800 songs uses about 1 MB of disk space for data files prior to generating a schedule. Once a schedule has been generated, then the entire disk usage, including executable and program support files, plus all data files grows to about 2.8 MB with the aforementioned 800 song library. The UDS Utilities consume an additional 1 MB of disk space. Thus a "bare bones" minimum installation with a relatively small music database uses 3.8 MB of disk space. Additional disk space may be required for temporary "swap files," files that are created and deleted automatically by the system software to hold temporary data.

- You must also ensure that CHKDSK/F has been run prior to the installation and that any problems reported by CHKDSK have been resolved before even attempting to install OAS. For more information on using CHKDSK, consult your DOS manual.
- Prior to the installation, you are totally responsible for certifying that your computer system is 100% "virus free."
- Make sure that the PATH statement in your AUTOEXEC.BAT file includes the DOS subdirectory but does *not* include the OAS directory.

Help!

On Air Digital Technical Support is available to help you in case you have questions or comments regarding the operation of your OAS music scheduling software.

Obtaining Technical Support

You may contact On Air Digital by any of the following methods:

- By voice: Call (800) 765-2930 between 8:00 a.m. and 5:00 p.m., U.S. Central time, Monday through Friday.
- By fax: Call (972) 481-9499.
- By e-mail: support@onairusa.com.

When calling for technical support, please have the following information available:

- Your name, and the station's call letters or company name.
- OAS software version (displayed at the top of the Main Menu).
- The exact text of any error messages displayed by OAS.
- The contents of your OAS computer's AUTOEXEC.BAT and CONFIG.SYS files.
- The contents of the CHKDSK/F report on your OAS computer.
- The contents of the MEM report on your OAS computer.
- The OAS computer's DOS version, brand name and number.

Reporting Problems

Although On Air Digital has made every effort to test OAS, you may find unanticipated problems. Please report bugs to On Air Digital.

A fax is preferred with the contents of your AUTOEXEC.BAT, CONFIG.SYS files, along with your DOS version number and the results of CHKDSK. The fax should fully state what steps you took before encountering the problem and the exact content of any warning or error messages shown on the screen.

Before Calling Technical Support

This is not an exhaustive listing of programs and devices that may lead to problems with the installation, operation and/or maintenance of OAS. However, it does indicate potential problems and conflicts that may arise with OAS.

Make sure that none of the following are present on your computer *before* installing OAS:

- Any disk compression scheme, hardware or software based, such as Stacker, DoubleSpace or SuperStor.
- Any terminate-and-stay-resident (TSR) program that has the capability to interrupt a currently running operation. For example, a “news service” program that interrupts an operating process when a bulletin is broadcast.

Typefaces Used in This Manual

This manual uses several different type styles to emphasize important material.

Italicized type indicates an important term or concept. Remember these—there may be a quiz later on.

MONOSPACE TYPE indicates important messages displayed on your computer's monitor screen.








K E Y C A P S **SPACE** **T Y P E** represents text that you enter from the computer keyboard, including special keys such as **ALT**, **CTRL**, **PRTSC**, **ESC**, **SPACE**, and **ENTER**.

ALT **A** and **CTRL** **B** are examples of extended function keys. These keys are entered just like shift keys on a typewriter; you press and hold the **ALT** or **CTRL** key while pressing the second key.

Note: OAS is designed primarily for application with On Air Digital's Ultimate Digital Studio. If you are not using the UDS, you may ignore references to the UDS throughout this manual.

Setting Up OAS—Overview

When initially setting up OAS, follow the steps outlined below. Each step is accompanied by the page number describing the actions that should be taken.

1. Install the OAS software.
 -  Complete installation instructions begin on page 1-8.
2. License OAS. Like an automobile, OAS must be licensed and registered before you can operate it.
 -  See step 11 of the *Installation* section, on page 1-10, for more information.
3. Configure OAS. OAS is a simple, yet flexible music scheduling package, with many options that can be tailored to your individual needs.
 -  See *Set Program Configuration Options* starting on page 6-6 for more information.
4. Add songs to the music database.
 - * If you received a database from On Air Digital, you will need to import the data to OAS.
 -  See *OAS Music Database Installation* starting on page 1-11 for more information.
 - * If you did not receive a music database from On Air Digital, you will need to manually add each song to OAS.
 -  Please see *Music Database Management Menu*, starting on page 4-2 for more information.
5. Set up your clocks. OAS needs to know which categories of songs to play in which order. If you are using OAS with UDS and digital audio commercial storage, you will also need to set up breaknotes for your commercial events.
 -  See *Clock Setup (Music and Breaknotes)* starting on page 5-3 for more information.
6. Assign clocks for scheduling. Just as OAS uses clocks to determine the rotation of songs, the Clock Assignment Grid determines which clocks are used for each hour of the day.
 -  The clock assignment grid is explained in the *Assignment/Scheduling of Clocks* section starting on page 5-13.


Daily Scheduling Activities

Once OAS has been set up and configured, schedule preparation and generation becomes routine. The steps below are offered as a general guide to the day-to-day operations of OAS.

1. Add or delete any songs, as needed.


 For more information, see *Music Database Management* starting on page 4-2.

2. ⇒ UDS Users: Update your tray maps.

 For more information, see *Revise/Review Tray Maps* in the Utilities for the UDS chapter of the UDS manual.

⇒ Non UDS Users: Go to the next step.

3. Generate the playlist.

 See *Playlist and Scheduling*, beginning on page 3-2.

4. ⇒ UDS Users: Prepare the schedule for importing to UDS. You should be familiar with the following tools in the *Utilities for the UDS*, as described in the *Utilities for the UDS* chapter of the UDS manual:

Checking the UDS playlist for errors


Merging/Combining the UDS playlist with traffic information

Checking the UDS playlist after the merge process

Transferring the UDS schedule.

⇒ Non UDS Users: Print the playlist.

5. Back up the OAS music data. Before exiting the OAS program, make a backup of the OAS music data.

 See the *Archive: Backup Scheduler Data* section starting on page 6-3 for more information.

Note: If you are not using On Air Digital's Ultimate Digital Studio, you may ignore references to the UDS throughout this manual.

OAS Software Installation

Your OAS package contains one, two or three diskettes. The music scheduling software diskette is in every startup package. If you are using OAS with the UDS, you will also receive the Utilities for the UDS diskette. In addition, you will receive a diskette with a pre-loaded music database if you are using a TM Century GoldDisc library.

OAS only		
Diskette Color	Contents	Required?
Blue	OAS Music Scheduling Software	Yes
Gray	OAS Music Database	Optional

OAS with UDS		
Diskette Color	Contents	Required?
Blue	OAS Music Scheduling Software	Yes
Green	Utilities for the UDS (Ultimate Digital Studio)	Yes
Gray	OAS Music Database	Optional

Instructions for Installation begin on the next page.

OAS Software Installation, continued

IMPORTANT! Before beginning the OAS installation, make sure you have at least 4 megabytes of free space available on your hard disk and that the computer's CONFIG.SYS contains the lines FILES = 20 (or more) and BUFFERS = 8 (or more).

1. Install the OAS Software. From any DOS prompt, change to the hard disk. Type:

C **:** **ENTER**

Note: If you are using a drive other than C: to store the OAS programs and music database, substitute that drive letter for C: in these instructions.

2. Create a subdirectory for OAS. From the C:\ prompt, type:

M **D** **SPACE** **** **O** **A** **S** **ENTER**

3. Change to the OAS subdirectory. From the C:\ prompt, type:

C **D** **SPACE** **** **O** **A** **S** **ENTER**

4. Place the blue OAS music scheduling software diskette in the diskette drive.
5. If the diskette is in the B: drive, substitute B: for A: in the instructions below.


From the C:\OAS prompt, type:

A **:** **O** **A** **S** **ENTER**

6. When the C:\OAS prompt returns, remove the blue diskette from the diskette drive.

- * If you are installing the Utilities for UDS go to step 7.
- * If you are not installing the Utilities for UDS go to step 10.

OAS Software Installation, continued

7. Place the green Utilities for the UDS diskette in the diskette drive.
8. Copy the Utilities programs from the diskette to the hard disk. From the C:\OAS prompt, type the diskette drive letter, a colon, your call letters or company name and press .

Examples:

If the green diskette is in the A: drive and your station call letters are WKQD, type

If the green diskette is in the B: drive and your company name is Tower Communications, type:

9. When the C:\OAS prompt returns, remove the green diskette from the diskette drive.
10. Program installation is now complete. Start the OAS program. Type:

11. The program will ask you for registration code number. You must obtain this code from On Air Digital before proceeding.

From the United States, call On Air Digital Technical Support at (800) 765-2930 during regular tech support hours of 8 a.m.-5 p.m. Central time, Monday through Friday, excluding U.S. holidays.

12. If you have a gray music database diskette, follow the instructions on the next page to restore the music data backup from the diskette to your hard drive.

If you *don't* have a database diskette, skip the next section and go to the *Keyboard Conventions* section starting on page 1-12.

OAS Music Database Installation

1. From the OAS Main Menu, press **[S]** to select Special System Functions.
2. From the System menu, press **[U]** to select Unarchive: Restore Scheduler Data.
3. Place the gray OAS Music Database diskette in the diskette drive.
4. Type the drive letter for the database diskette and press **[ENTER]** or **[F2]** to continue.
5. OAS will show you the date and time that this data backup was created and prompt you
Are you sure y/N?
6. Press **[Y]** to proceed with the installation process.

OAS will respond by extracting the data files from the diskette onto the hard disk. When the process is complete, OAS will display the following message:

```
Your scheduler data has been restored successfully.
```

7. Press **[SPACE]** to return to the System menu.
8. From the System menu, press **[R]** to return to the Main Menu.
9. OAS music database installation is now complete.

Keyboard Conventions

OAS attempts to use a consistent keyboard interface. There are, of course, exceptions to the conventions stated herein, but in general, the following keys perform as described below. Please note that when the **ALT** or **CTRL** keys are used, they are to be pressed simultaneously with another key as indicated. These keys do nothing when pressed by themselves.

F1 If available (as noted on the screen), pressing **F1** displays a help screen relating to the currently highlighted topic. Press **ESC** to exit help.

F2 This key is generally used as the universal “accept key.”

Press **F2** when you are satisfied with the input and you want OAS to accept that input. (On some input screens, pressing **ENTER** will also accept your input. If **ENTER** is supported, it is noted on the screen).

F3 If available (as noted on the screen), pressing **F3** will activate a “pick list” selection screen.

To highlight an item in the pick list, use the **↑** and **↓** arrow keys. You can also use the **HOME** key to go to the top of the list, the **END** key to go to the bottom of the list and the **PG UP** and **PG DN** keys to move within a pick list display page.



Pressing **ESC** will exit the pick list screen.



Pressing **ENTER** will accept the currently highlighted item.



y/N If the display is prompting for a (y/N) response, press **Y** to answer “yes” or press **N** to answer “no” to the question.




In this example, the capital “N” indicates that “no” is the default response. In most cases, a “no” response is the default, therefore, pressing the **ENTER** key is equivalent to pressing N. The y/N response is not case sensitive.








Keyboard Conventions, continued








 Press  to print the output from a “View” screen to the printer.

You will know that you are on a “View” screen by pressing . If a help screen appears showing P: Print the Entire File or P: Print the Entire Playlist, then pressing  sends a signal for the program to direct output to the printer.


  Used to print a portion of the playlist to the printer from “View Completed Schedule.”








Pressing  and  simultaneously allows you to select a range of hours to print. Type the zero-padded beginning hour of the range followed by an A for a or a P for p.m. and the zero-padded ending hour of the range followed by and A for a.m. or a P for p.m. for the range of hours you wish to print and press  to accept the entry.








For example, if you wish to print the four morning drive hours, type        in the entry window. This will print the 6 a.m., 7 a.m., 8 a.m., and 9 a.m. hours, in their entirety.




If you want to print the 10 a.m., 11 a.m., 12 p.m. and 1 p.m. hours, you would type       .

Note: If you configure item 3, “Use International (non-USA) Date and Time format?” of your Special System Functions—Set Program Configuration Options to yes, you will select the hours 00 through 23 instead of the 12 a.m. through 11 p.m. hours as described above.

 See the *Special System Functions—Set Program Configuration Options* section starting on page 6-6 for more information.

 In most cases,  signals that you want to abort the current activity. On main function menu screens, pressing  will return you to the prior menu. On the OAS Main Menu, pressing  is equivalent to selecting the “Quit” option. On screens that require a (y/N) response, the  key is the same as pressing . The  key is also used to exit from a context-sensitive help screen.



 On entry screens with multiple input fields,  (Tab) moves the cursor to the next input field and   moves the cursor to the previous input field. (In some cases, the cursor keys move in the same manner as the  and   keys.)







When viewing or editing a completed schedule,  moves to the top of the next hour and   moves to the top of the previous hour.

Keyboard Conventions, continued







The cursor positioning keys are generally used to scroll in the direction of the key.

When entering information in an input field, the  and  keys non-destructively position the cursor within that input field.



On entry screens, the  and  keys move in the same manner as the  and  keys, respectively. The UDS Schedule Editor uses the  and  keys to scroll through the displayed events.





On a “View” screen or within the UDS Schedule Editor, these keys scroll the display 23 lines according to the direction indicated on the key. Likewise, the same action of these positioning keys is supported by the OAS Clock Editor and within the Music Database Manager's “List Songs” program. In these cases, the scrolling is less than the default of 23 lines.

When viewing a context-sensitive help screen,  and  may be supported if the help text exceeds the dimensions of the help window. Other uses of the  and  keys are indicated on the screen.



On an entry screen requiring user input,  moves the cursor to the first character in the input field.  moves the cursor to the right of the last character (if any) shown in the input field.

On a “View” screen or in the UDS Schedule Editor, the OAS Clock Editor or Music Database Manager's “List Songs” program, pressing  will go to the very top of the displayed file or list.  will move to the very last item or the end of the list.



This is used to toggle between character insertion and overstrike modes on data entry screens.

The default for each individual entry input field is overstrike, as indicated by a small underscore cursor. When insert mode is selected, the cursor becomes a large blinking block and all characters to the right of the cursor are moved to the right as new characters are typed.

*Keyboard Conventions, continued***CTRL F2**

This toggles the OAS AutoWrap feature for the current entry screen. AutoWrap means that when the text exceeds the length of the field, it continues to the next field, without the need to press the **ENTER** key.

For example, if the AutoWrap feature is “on” and you press **CTRL F2**, you will toggle the AutoWrap feature “off”. Conversely, if the AutoWrap feature is “off” and you press **CTRL F2**, you will toggle the AutoWrap feature back “on”.

The current “on/off” state of AutoWrap is displayed in the bottom right corner of the screen if AutoWrap is applicable for that entry screen. This toggle permits a user to configure a default AutoWrap mode, yet be able to quickly adjust it for special entry form processing needs.

CTRL T

Removes the word to the right of the cursor in an entry field.

CTRL R

Restores the original content of the current entry field as long as that entry form has not been accepted by pressing **F2** (or in some cases, the **ENTER** key).

CTRL HOME

If the current entry form contains more than one input field, pressing **CTRL HOME** positions the cursor at the beginning of the very first input field.

CTRL END

If the current entry form contains more than one input field, pressing **CTRL END** positions the cursor at the beginning of the very last input field.

CTRL PG UP

and

CTRL PG DN

These keys are supported by the UDS Schedule Editor, UDS Utilities Check program, and OAS Playlist Generator's View Completed Schedule program only.

In all of these cases, **CTRL PG DN** will move the highlight bar (or the screen) to the next warning or error message. **CTRL PG UP** moves to the previous warning or error. If there are no warnings or errors found, then the screen remains unchanged (and, if applicable, the highlight bar does not move).

➤ ***Chapter Two***

***OAS
Main Menu***

The OAS Menus

IMPORTANT! If you are reading this for the first time and OAS is already producing schedules at your radio station or company, please make sure that a complete data backup has been made. If you wish to experiment with some of the OAS features, this approach will ensure that no data will be lost.

The remainder of this documentation explains the OAS in terms of each of the main function menus available. Each main function menu permits the user to start any of several specific OAS functions related to each other in some way. For example, the Playlist and Scheduling Menu allows you to create a new music schedule, view a schedule, change the scheduling order, etc. Each menu is characterized by a screen displaying a series of features to choose from and a Press **F1** for Help line at the top of the menu screen.

Because of this structured approach, there are by necessity some forward references to other parts of the program in this manual. We suggest you browse this entire section first to gain some familiarity with its layout. Later, a more thorough reading is recommended, perhaps with OAS running on the computer so that you can take a “hands-on” approach.

On all menus, you may start a feature by using the **↑** and **↓** arrow keys to highlight the item and then pressing **ENTER**. After highlighting an item, and before pressing **ENTER**, you can press the **F1** key to display brief online help specific to that item.

The other way to select a menu item is to press the “hot key” shown for the item. The hot key matches the first letter of the menu item's name. When pressing an item's hot key, the function will start immediately.

Each menu item is also numbered. Pressing the corresponding number key also immediately selects that item.

Starting OAS

To start OAS, follow the steps outlined below:

1. Turn on your computer and wait until you see the system prompt C:\>.
2. Change to the OAS directory (OAS) by typing `C D \ O A S ENTER`.
3. Start the program by typing `O A S ENTER`.

Note: If you are using a hard drive other than C: to store the OAS program and data files, substitute that drive letter for C: in the above instructions. For example, if your OAS files are on the D: drive, type `D : ENTER` and then type `C D \ O A S ENTER`.

OAS Main Menu

This is the initial menu that you see upon entering the program.

The program will display the Main Menu, as shown below: The top line of the screen shows the current version number and the call letters or company name to which OAS has been registered. The bottom of the screen shows the On Air Digital copyright notice.



OAS Main Menu, continued

Note: If you are using UDS or UDS II, your OAS Main Menu item number 5 will be **U** Utilities for the UDS/UDS II and item number 6 will be **Q** Quit. Directions for using the Utilities for the UDS/UDS II are found in chapter three of your UDS/UDS II manual. If you are *not* using UDS, your item number 5 will be **Q** Quit; you will not see the **U** Utilities for the UDS/UDS II item.

Notice the top line of the Main Menu window shows:

OAS Main Menu: Press F1 for Help.

The Help function allows you to easily access information on a particular topic. Use the **↑** and **↓** arrows to highlight the item, then press **F1**. A description of the function and brief instructions are displayed. When you are ready to exit help, press **ESC**.

For example, if you pressed **F1** from the Main Menu with the first function highlighted, the following help screen would be displayed:

```
-----[ Main Menu Help ]-----  
  
Playlist and Scheduling Menu  
  
Prepares a single playlist of up to a 24-hour duration.  
The schedule is automatically written to the PLAYLIST.SS  
file for the Ultimate Digital Studio.  
  
Also...the playlist creation date can be changed by either  
entering a new date or using PgUp and PgDn to step through  
a range of playlist dates.  
  
After a playlist has been created, you may View the final  
result or Analyze the results. (Analysis is available only  
if that option has been turned enabled in the OAS  
configuration).
```

When you press **ESC**, the Help screen disappears and you are returned to the Main Menu.

On the following pages, we will briefly discuss the main function menus. The following chapters will discuss each main function menu in complete detail.



1. Playlist and Scheduling Menu

```
————— Playlist Creation: Press F1 for Help —————
1.  G - Generate a One Day Playlist
2.  U - View or Print a Completed Schedule
3.  U - Unscheduled Positions Report
4.  A - Analysis (Audit Log) of Schedule
5.  C - Change Playlist Date
6.  P - PLAYLIST.SS - Regenerate File
7.  S - Save a Schedule to a Text File
8.  M - Modify or View Category Stack Order
9.  R - Return to Main Menu (or press Esc)

————— 03:36:15 PM on Monday, April 17 —————
```

This menu allows you to prepare a single playlist of up to 24 hours duration. The schedule is automatically written to the PLAYLIST.SS file for the On Air Digital Ultimate Digital Studio.

Note: You may change the first option to “Generate a Multiple Day Playlist”, which would allow you to schedule up to seven days at one time. However, if you are using UDS with a digital audio hard drive, you must schedule a single one-day playlist. If you do want to change this option to “Generate a Multiple Day Playlist”, refer to the *Special System Functions—Set Program Configuration Options* section, starting on page 6-6.

In addition, the playlist schedule date can be changed by selecting option 5, “Change Playlist Date,” and either entering a new date, or using  and  to step through a range of playlist dates.

After a playlist has been created, you may view the final result or analyze the results from this menu.

Playlist and Scheduling Menu, continued

Selecting “Playlist and Scheduling Menu” also permits you to view or modify the current scheduling *stack order*. Observing the stack order lets you see how the songs are about to be selected by the scheduler from each category.

Note: The Analysis (Audit Log) of Schedule feature is only available if that option has been enabled in the OAS configuration; see *Special System Functions—Set Program Configuration Options* on page 6-6 for more information.

Note: Item number 6, PLAYLIST.SS - Regenerate File, will not be available unless you have installed the Utilities for UDS or UDS II.

 Chapter three discusses the Playlist and Scheduling Menu in detail.

2. Music Database Management Menu

```
Music Database Management: Press F1 for Help
1.  A - Add a Song to the Database
2.  F - Find a Song (Revise or Delete)
3.  L - List Songs for Selectable Tagging
4.  S - Show Music Database Statistics
5.  I - Inventory: Print Music Library
6.  D - Data Transfer: Append to Database
7.  U - Uppercase all Titles and Artists
8.  R - Return to Main Menu (or press Esc)

02:12:54 PM on Monday, April 03
```

This function helps you maintain the data in your music library. Songs are added, changed or deleted from this menu. Both the Add a Song and the Find a Song modes operate on only a single song at a time. However, you may change the category or the UDS index setting on more than one song by selecting the List Songs feature. The List Songs feature also allows you to delete many songs at one time by using the tag feature.

You may also view the database statistics, such as number of songs in each category from the Music Database Management menu, and append songs to the database via the Data Transfer utility.

This is the area of OAS where you also have access to the “Inventory” feature, permitting you to view or print the contents of your music database.

Remember, by using the arrow keys to highlight a menu item and pressing , you can view the help information for that item.

 Chapter four discusses the Music Database Management Menu in detail.

3. Format Management (Clocks/Liners)

```
Format Management: Press F1 for Help
1. C - Clock Setup (Music and Breaknotes)
2. A - Assignment/Scheduling of Clocks
3. B - Breaknote Data Management
4. M - Music Category Management
5. R - Return to Main Menu (or press Esc)

02:19:05 PM on Monday, April 03
```

This section of OAS permits you to construct the format clocks used during scheduling, for music and *breaknote elements*. Breaknote elements are scheduled non-music events. They can be simple text messages or UDS command codes. The clocks you create are then selected for scheduling via the Assignment/Scheduling of Clocks feature.

 Chapter five discusses the Format Management (Clocks/Liners) Menu in detail.

4. Special System Functions

```
Special System Functions: Press F1 for Help
1.  A - Archive: Backup Scheduler Data
2.  U - Unarchive: Restore Scheduler Data
3.  S - Set Program Configuration Options
4.  D - Data File and Index Maintenance
5.  C - Clear All Playlist History
6.  P - Password and Security Setup
7.  L - License and Program Registration
8.  R - Return to Main Menu

05:02:34 PM on Monday, April 03
```


From the Special System Functions menu you have the ability to backup and restore your OAS data. In the event of a program or system crash, hard drive failure or other unforeseen circumstances, having a backup or “archive” of your OAS data will allow you to get back up and running much faster. Having a current backup is *so important* that we prompt you to make a backup each time you exit the OAS program.

From this menu, you can also restore or “unarchive” data from a previous backup.

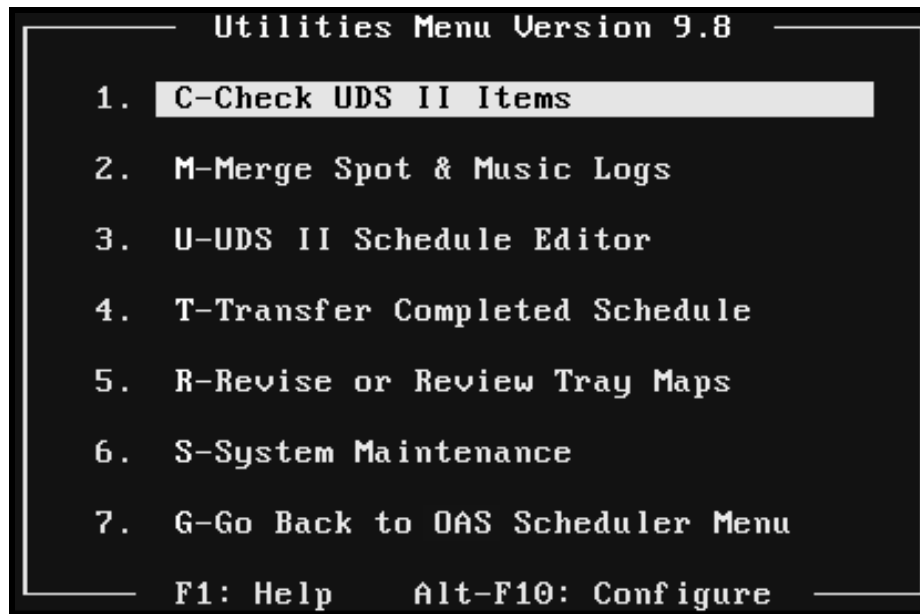
You may customize OAS to your specific needs by selecting Set Program Configuration Options. This submenu allows you to change the way the program operates in several ways. For example, from Set Program Configuration you can turn program sounds on or off, select whether data is displayed using uppercase letters only and choose a date and time format.



Data file maintenance utilities such as Data File and Index Maintenance and Clear All Playlist History are to be used only if your program shows signs of problems. These functions should only be used after you have read the section “Data File and Index Maintenance” starting on page 6-12.

Security-conscious users will appreciate the Password and Security function under the Special System Functions Menu. It allows you to set up a password system to restrict access to all or certain portions of OAS.

 Chapter six discusses the Special System Functions menu in detail.

5. Utilities for the UDS



Note: If you are not using UDS or UDS II, you will not see this item on your OAS Main Menu. Instead, item number 5 will be the  Quit function. Directions for using the  Quit function are described on the next page.

This item selects Utilities for the UDS or UDS II. As stated earlier in this manual, OAS has been specifically designed to operate with the Ultimate Digital Studio (or Ultimate Digital Studio II) from On Air Digital.

The UDS Schedule file PLAYLIST.SS is created automatically each time a schedule is generated. Utilities for the UDS permit you to check, merge, edit and transfer the completed schedule. Certain special files required for UDS startup are also produced using the Utilities.

The Utilities for the UDS are explained in detail in Chapter three of the *UDS/UDS II User's Manual*.

6. **Q** Quit

Note: If you are not using UDS, this item will be item number 5 on your OAS Main Menu.

Choosing this item exits OAS and returns you to the operating system prompt. Follow the steps outlined below to exit OAS.

1. Press **Q**. You will be prompted:

Quit? Are you sure? (y/N)

2. Press **Y** to leave the program. (Any other key will keep you in OAS.)

You will be prompted to make a backup:

Do you want to make a backup now?

3. Insert your diskette into the diskette drive.

We recommend using seven backup diskettes—one for each day of the week—and that you label them “Monday”, “Tuesday”, etc.

3. Press *any key except* **N** to make a backup. (Pressing **N** means you specifically choose *not* to make a backup.)

We recommend you *always* take a moment to complete the backup procedure each time you exit OAS.

IMPORTANT! Always have a formatted diskette handy so that you can make a backup. The backup function will erase all existing files on your diskette. Note that large music libraries may require you to use more than one diskette to make a complete backup. If this is the case, the system will prompt you when it is time to insert additional diskettes.

➤ ***Chapter Three***

Playlist and Scheduling Menu

Playlist and Scheduling Menu

Note: If you have not yet performed the setup procedures described in the *Setting Up OAS* on page 1-6, please turn to that section now.

This menu allows you to create, view or print a playlist, change the order in which songs are scheduled and view any unscheduled positions after a playlist has been created. To open the Playlist and Scheduling Menu, type **P** from the OAS Main Menu. The Playlist Creation screen appears, as shown below:

```
Playlist Creation: Press F1 for Help
1. G - Generate a One Day Playlist
2. U - View or Print a Completed Schedule
3. U - Unscheduled Positions Report
4. A - Analysis (Audit Log) of Schedule
5. C - Change Playlist Date
6. P - PLAYLIST.SS - Regenerate File
7. S - Save a Schedule to a Text File
8. M - Modify or View Category Stack Order
9. R - Return to Main Menu (or press Esc)
03:36:15 PM on Monday, April 17
```

Note: The first option, “Generate a One Day Playlist”, can be configured to “Generate a Multiple Day Playlist” by using the *Special System Functions—Set Configuration Options* feature discussed on page 6-6.

Note: Option number 6, PLAYLIST.SS - Regenerate File, will only appear if you are using UDS or UDS II.

To get online help for any item on this menu, highlight the item by using the **↑** or **↓** arrow keys and then press **F1**. Press **ESC** to exit help and return to the Playlist and Scheduling Menu.

Each of the items on the Playlist and Scheduling Menu is described in detail on the following pages.

1. **G** Generate a One Day (or Multiple Day) Playlist

After you have properly built your music database, assigned categories to each song and set up your clocks, choosing this item will create a playlist or music schedule for up to a 24-hour period. This is the part of OAS that you will use every day. For this reason, it is conveniently placed as the first item on this menu.

Note: You may set this option to “Generate a *Multiple Day Playlist*”. By doing so, you can schedule up to seven days at one time. Refer to the *Special System Functions—Set Configuration Options* section starting on page 6-6 to change this option to “Generate a *Multiple Day Playlist*”.

IMPORTANT! If you are using OAS with UDS, always generate a *one day* playlist.

To use this feature, follow the directions outlined below:

1. From the Playlist and Scheduling Menu, use the **↑** and **↓** arrow keys to highlight Generate a One (or Multiple) Day Playlist. With this feature highlighted, you may now press **F1** for online help for this feature. To select the Generate a One (or Multiple) Day Playlist feature, press **ENTER**.

(If you prefer, you may select this feature by typing one of the hot keys, which in this case would be a **1** or a **G**.)

- * If you are using the Generate a One Day Playlist configuration, you will be prompted:

Create that schedule? (y/N)

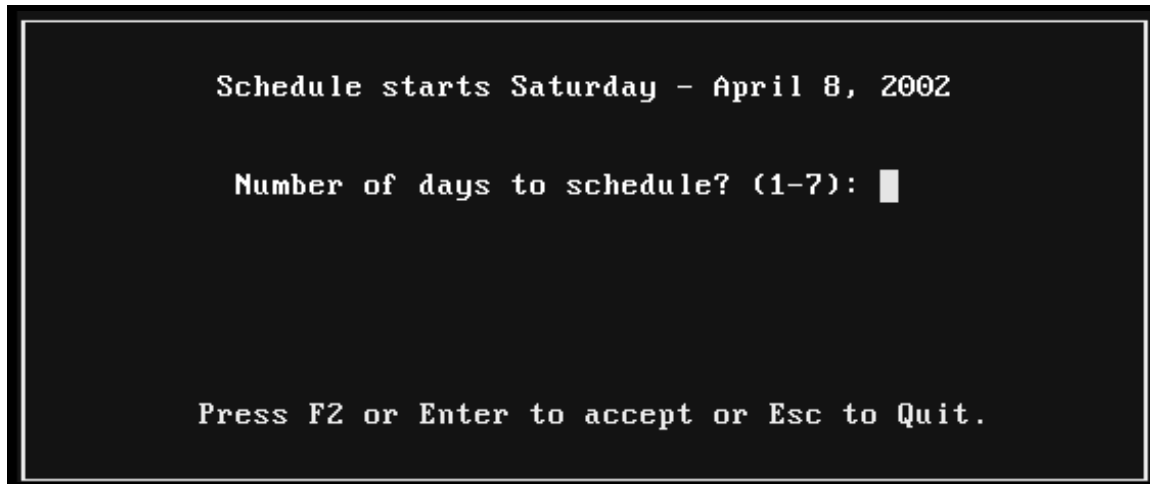
Type **Y** to generate the one day playlist and go to step 2.

IMPORTANT! If you are using UDS, create a playlist for *one day only*.

Note: Once you have made at least one schedule with OAS, you have the ability to change the playlist date. For more information on the steps necessary to change the playlist date, read the instructions to *Change Playlist Date* starting on page 3-16.

- * If you are using the Generate a Multiple Day Playlist configuration, OAS will display the start date for which it thinks you want to generate a playlist and prompt you to enter the number of days, between one and seven, to schedule. See the example on the next page.

Generate a One Day (or Multiple Day) Playlist, continued



Note: Once you have made at least one schedule with OAS, you have the ability to change the playlist date. For more information on the steps necessary to change the playlist date, read the *Change Playlist Date* section starting on page 3-16.

Enter the number of days you want included in your playlist and press or .

IMPORTANT! If you are using UDS, create a playlist for *one day only*.

2. OAS displays the starting date and the number of days you want schedule.

Note: Once you have made at least one schedule with OAS, you have the ability to change the playlist date. For more information on the steps necessary to change the playlist date, read the *Change Playlist Date* section starting on page 3-16.

You will be asked to confirm:

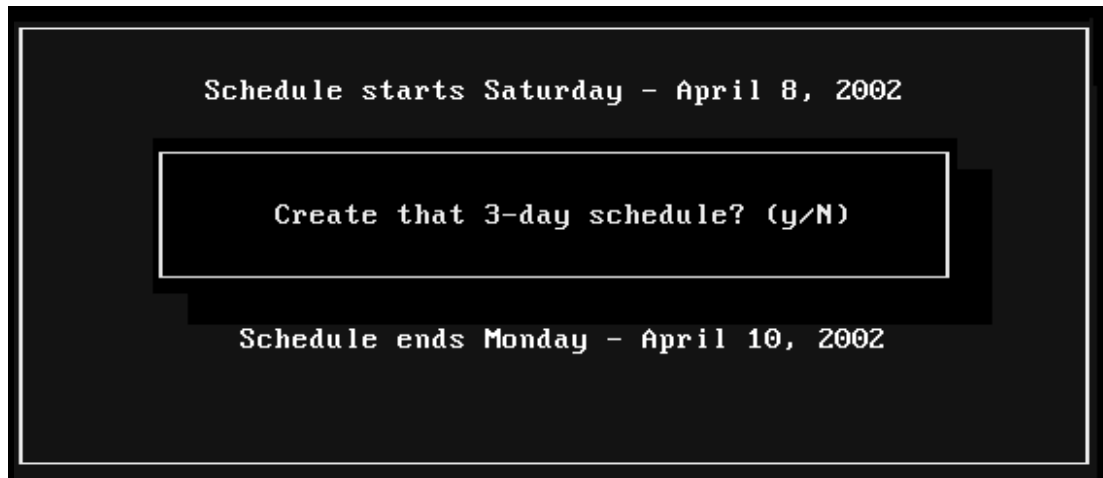
- * If you are using the Generate a One Day Playlist configuration, you will be prompted:

Create that schedule? (y/N)

Type to confirm. The scheduling process begins. If you press any key other than , scheduling will not proceed and you will be returned to the Playlist and Scheduling main menu. After pressing , go to step 3.

Generate a One Day (or Multiple Day) Playlist, continued

- * If you are using the Generate a Multiple Day Playlist configuration, you will be prompted as shown in the example below.




Confirm by pressing . The scheduling process begins.

If you press any key other than , scheduling will not proceed and you will be returned to the Playlist and Scheduling main menu.

3. There are several phases of the OAS scheduling process, which are explained below.

Note: If you have enabled the configuration item `Perform a backup to hard drive just before scheduling?` you will see a display on the screen showing that the hard disk backup is being made. This permits you to restore the state of OAS to its condition just before you created the schedule, in the event of a system crash or power outage during the scheduling process.

The bottom of the screen shows a horizontal bar graph to indicate the backup progress. The system is backing up the very important music database file. In case of a system crash, if you have installed the Utilities for the UDS/UDS II, this file can be restored by using the `PLAYLIST.SS - Regenerate File` feature, so that your music library will not be corrupted.

 For more information about enabling the `Perform a backup to hard drive just before scheduling?` option, please see the *Special System Functions—Set Program Configuration Options* section starting on page 6-6.

Generate a One Day (or Multiple Day) Playlist, continued

- * You will see the message, `Processing:` followed by the record number.

OAS sets the scheduling order for this session of scheduling. A horizontal bar graph shows the progress of processing.

- * You will see the message, `Now preparing category scheduling order:` followed by a category number.

This scheduling phase is the actual testing and scheduling of songs. OAS “lays down” the songs in a single pass through each category. Categories are scheduled in numerical order, i.e. 01, 02, 03, etc.

- * You will see the message, `Storing category stack order:` followed by the number of music positions that have been filled by that category

The screen shows the category number that is currently being scheduled along with the actual number of music positions that have been filled by that category. If there are any unscheduled positions during this phase of schedule generation, then the count of those unscheduled positions is displayed in red.

- * During the entire playlist creation process, a memory and time status line is displayed at the bottom of the screen. This shows the amount of free memory available for the scheduler (and it should never drop below 100,000 bytes) along with the elapsed time since the start of the scheduling process. The timer does not start running until the categories themselves are being scheduled, so do not be concerned if the timer shows 0 seconds elapsed during the preliminary steps of backing-up data and setting the category stack order; this is normal.

4. Once scheduling is completed, you will be prompted:

`Schedule Complete! Press any key...`

5. Press any key, as indicated, and you will receive a Schedule Summary.

The Schedule Summary shows the playlist date, the total number of music positions that were scheduled, and a total count of unscheduled music positions, if any.

You are then prompted to `Press any key to return to previous menu...`

6. Press any key, and you will be returned to the Playlist Creation Menu.

2. **V** View or Print Completed Schedule

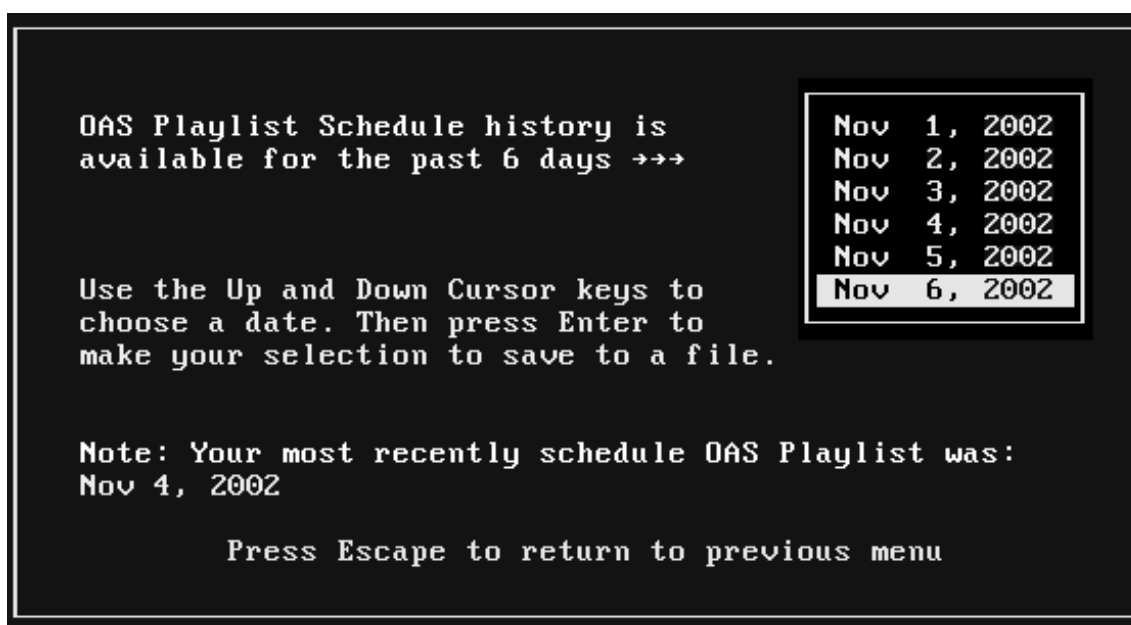
Once a schedule has been created, you may select this item to look at the playlist.

To use this feature, follow the directions outlined below.

1. From the Playlist and Scheduling Menu, use the **↑** and **↓** arrow keys to highlight the View or Print Completed Schedule feature. With this feature highlighted, you may now press **F1** for online help for this feature. To select the View or Print Completed Schedule feature, press **ENTER**.

(If you prefer, you may select this feature by typing one of the hot keys, which in this case would be a **2** or a **V**.)

The system display is similar to the one shown below:



2. Following the instructions on the screen, use the **↑** and **↓** arrows to highlight the day you wish to view or print and press **ENTER**.

Note: You can view a schedule for a single day only.

View or Print Completed Schedule, continued

3. The selected schedule will be displayed, as shown below:

Start Time	Event Number	Type			
OAS Scheduler					
= = = Schedule for 12:00 AM Hour of Friday - April 7, 2002 = = =					
- - - Clock ID 01: JD MIX NON DRIVE - - -					
12:00:00A	01	(B-008)	~10 ^09 {1211}	WPLJ LEGAL ID	0:10
12:00:10A	02	(M-01)	927-14	Doing It All For My Lewis, Huey & The Ne	3:23/17
12:03:33A	03	(M-02)	931-14	Two Hearts Collins, Phil	3:13/26
12:06:46A	04	(M-03)	514-13	All She Wants To Do Henley, Don	4:22/37
12:11:08A	05	(M-01)	914-17	Only The Lonely Motels	2:57/08
12:14:05A	06	(B-031)	^82 :10:00	UPDATE TO NEXT EVENT	0:00
12:14:05A	07	(B-003)	^99 :00 :15	BASIC CLOCK 1ST SPOT BREAK	1:30
12:15:35A	08	(M-03)	937-03	Cool Change Little River Band	3:25/25
12:19:00A	09	(M-01)	928-06	Stand Back Nicks, Stevie	4:15/21
12:23:15A	10	(M-02)	939-02	Sara Smile Hall & Oates	2:56/14
12:26:11A	11	(M-03)	932-17	Take It To The Limit Eagles	3:41/15
12:29:52A	12	(B-039)	^82 :20:00	UPDATE TO NEXT EVENT	0:00
12:29:52A	13	(B-002)	^99 :16 :30	BASIC CLOCK 2ND SPOT BREAK	0:00
12:29:52A	14	(B-012)	~10 ^09 {1207}	WPLJ MEDIUM/FAST	0:10
12:30:02A	15	(M-02)	913-01	Every Little Thing S Police	3:51/12
12:33:53A	16	(M-03)	946-19	What You Won't Do Fo Go West	3:54/24
12:37:47A	17	(M-01)	933-09	Suddenly Ocean, Billy	3:45/08
12:41:32A	18	(B-010)	~10 ^09 {1212}	WPLJ SLOW JINGLE	0:10
12:41:42A	19	(M-02)	573-04	Nowhere Man Beatles	2:40/00
For complete information on special key functions, press F1					

The top part of the display shows the date and the hour of the schedule that you are viewing. Right below the date and hour is the Clock ID and the clock name.

Note: The Clock ID and clock name are assigned in the Clock Assignment Grid. The Clock Assignment Grid is explained in the *Assignment/Scheduling of Clocks* section starting on page 5-13.

The left column of the View or Print Completed Schedule display shows the starting time for each event in the hour. The next column shows the event number in the clock that you created. The next column indicates the type of event. Items with type “B” are breaknotes and the number following the dash is the breaknote assignment number. Items that start with an “M” are music elements and the number following the dash corresponds to the category number.

View or Print Completed Schedule, continued


The rest of the line shows the actual contents of the event. Breaknotes are always shown in green on black and display the text that you have entered for that breaknote item number. Music events are shown in white on black and each line shows the CD and track number, followed by the title and artist.

The last few columns of the line show the runtime of the event in yellow on black. If an event is a music element, then the intro time for the song is shown after a slash in gray on black.

4. While viewing a schedule, you may press **ENTER** or **CTRL PG DN** to move the screen display to the next unscheduled position in the log, relative to the current position. If you press one of these and the screen display remains stationary, then you have no more unscheduled positions. Press **CTRL ENTER** or **CTRL PG UP** to move to the previous unscheduled position, if any.

Pressing the **Tab** key moves to the top of the next hour and **SHIFT Tab** moves to the top of the previous hour.

Pressing **F1** while viewing a playlist displays a help screen which explains available keyboard controls and printing instructions.

 For more information about movement via the cursor and positioning keys (**PG UP**, **PG DN**, **HOME** and **END**) see *Keyboard Conventions* on page 1-12.

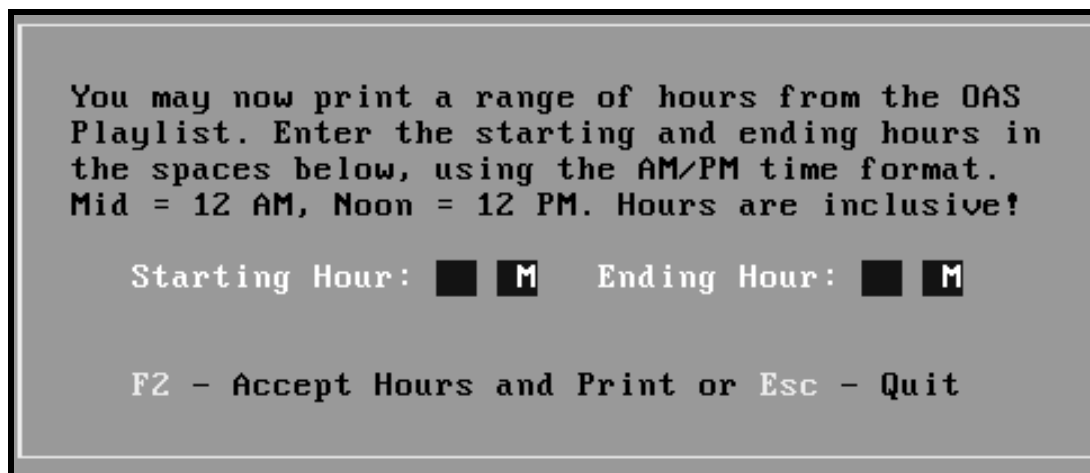
5. You may print all or a part of the schedule if you wish.

When you print a schedule, each hour will begin on a new page. Hours with a large number of events will “spill over” to a second or third page as necessary. Nevertheless, each new hour will still start on a new page.

* To print the entire schedule, press **P**.

View or Print Completed Schedule, continued


- * To print a portion of the schedule, press **ALT P**. You will be asked to type in a range of hours, as shown below:



Enter the zero-padded number for the starting hour followed by and A or P for a.m. or p.m., then enter the zero-padded number for the ending hour followed by and A or P for a.m. or p.m. For example, if you wanted to print the range of hours from 6 a.m. to 2:59 p.m. you would enter:

0 6 A 0 2 P

Note: If you configured item 3, “Use International (non-USA) Date and Time format?” of your Special System Functions—Set Program Configuration Options to yes, you would enter the hours 00 through 23 instead of the 12 a.m. through 11 p.m. hours shown above.

 See the Special System Functions—Set Program Configuration Options section starting on page 6-6 for more information.






Press **F2** to accept the range of hours you have entered and to start printing.

6. You may press **ESC** to return to the Playlist Creation Menu.

3. **Unscheduled Positions Report**

The Unscheduled Positions Report screen displays a brief summary of any song positions that were unable to be scheduled due to any of the conditions discussed in the *Scheduling Theory* section of this manual (Appendix A). Usually, the report will simply state that all positions were scheduled successfully.

To use this feature, follow the directions outlined below.

1. From the Playlist and Scheduling Menu, use the  and  arrow keys to highlight the Unscheduled Positions Report feature and press . (If you prefer, you may select this feature by typing one of the hot keys, which in this case would be a  or a .)

The report appears as shown below:

```

Unscheduled Report for Sunday - 23 April 2002

--> 001). Category 14 not scheduled in 16 at Event 33
      Previous song was from Category 13 Machine 1
      Next song is from Category 12 Machine 1

--> 002). Category 14 not scheduled in 18 at Event 13
      Previous song was from Category 13 Machine 1
      Next song is from Category 12 Machine 1

--> 003). Category 14 not scheduled in 19 at Event 26
      Previous song was from Category 13 Machine 1
      Next song is from Category 12 Machine 1


For complete information on special key functions, press F1

```

Usually you will not have any unscheduled positions, and you will see the following message:

```
-- All positions were scheduled --
```

However, in the example above, there were three unscheduled positions. If you do receive a report containing any unscheduled positions, make sure you have not configured OAS to be too restrictive.

 Refer to the *Special System Functions—Set Program Configuration Options* section starting on page 6-6 for more details.







2. Press  to return to the Playlist and Scheduling Menu.

4. Analysis (Audit Log) of Schedule

If you have configured your OAS to create a Schedule Analysis Report audit log, this option will show you very detailed (and very long) report tracking the scheduling process. If you have not enabled Audit Log in your OAS configuration, you will receive an error message stating Analysis unavailable: Audit log is NOT enabled in configuration.

 See the *Special System Functions—Set Program Configuration Options* section starting page 6-6 for information on enabling/disabling audit log generation.

To use this feature, follow the directions outlined below.

1. From the Playlist and Scheduling Menu, use the  and  arrow keys to highlight the Analysis (Audit Log) of Schedule feature. With this feature highlighted, you may now press  for online help for this feature. To select the Analysis (Audit Log) of Schedule feature, press  or use one of the hot keys,  or .

Note: Audit logs aren't available with multiple-day scheduling. See *Special System Functions—Set Program Configuration Options* starting on page 6-6 if you want to generate one-day schedules.

It is not uncommon for an analysis report to exceed 100 pages of text, so you will only want to use this feature if you are having a problem with positions being unscheduled or if you are trying to learn more about how the scheduling process works. If you just want to learn more about the scheduling process, see *OAS Scheduling Theory* in Appendix A.

The Audit Log appears, as shown below:

```
Schedule Analysis for Wednesday - April 17, 2002

>> Artist conflict (-20) Category 01/Depth 1 12:00 AM: Event 2
    913-13: The Long Run                      Eagles
** Scheduled Category 01/Depth 2 in 12:00 AM hour: Event 2 (Clock 01)
    935-17: September                          Earth, Wind & Fire
** Scheduled Category 01/Depth 1 in 12:00 AM hour: Event 5 (Clock 01)
    913-13: The Long Run                      Eagles
** Scheduled Category 01/Depth 1 in 12:00 AM hour: Event 9 (Clock 01)
    939-16: Groovy Kind Of Love                Collins, Phil
>> Artist conflict (-19) Category 01/Depth 1 12:00 AM: Event 17
    914-04: Nightshift                          Commodores
** Scheduled Category 01/Depth 2 in 12:00 AM hour: Event 17 (Clock 01)
    932-08: Love To See You Tonight            England Dan & John Ford Coley
** Scheduled Category 01/Depth 1 in 12:00 AM hour: Event 21 (Clock 01)
    914-04: Nightshift                          Commodores
** Scheduled Category 01/Depth 1 in 12:00 AM hour: Event 25 (Clock 01)
    922-02: 1-2-3                              Estefan, Gloria
** Scheduled Category 01/Depth 1 in 12:00 AM hour: Event 28 (Clock 01)
    908-04: Little Lies                        Fleetwood Mac
** Scheduled Category 01/Depth 1 in 12:00 AM hour: Event 35 (Clock 01)
    932-02: Rhythm Of The Rain                 Fogelberg, Dan
    For complete information on special key functions, press F1
```

Analysis (Audit Log) of Schedule, continued

2. A description of the report follows:

The length of the analysis audit report is dependent upon a number of factors, including the category search depth, the size of the music database and the number of events in the scheduling clocks.

As each category is scheduled, the audit log analysis report shows the depth of the current song the program is considering for scheduling plus any violations for that song.

The report follows category scheduling order. As you view the analysis, the top part of the report is devoted to information on the lowest-numbered categories. The bottom part of the report deals with higher-numbered categories. This is the method by which OAS schedules and it is reflected in the output of the audit.

Each summary in the Analysis consists of two (or more) lines. Displayed on the screen, the first line (always in a color other than white) is the Scheduling Status Summary. The next line (always in white) is the Song Detail, showing the CD track number, song title and artist.

** When a song has been successfully scheduled, the Scheduling Status Summary is shown in green, preceded by two asterisks.

The display shows the category, the depth of the category from which the song was selected, the hour and the event number in the clock. The Clock ID is also shown so that you will be able to tell which clock was used to schedule the song.


>> If a song in contention for scheduling fails any of the tests, then the Scheduling Status Summary for that song is shown in yellow, preceded by the >> symbol.

The nature of the test failure is shown, such as "Artist Conflict (-16)" meaning that the same artist was scheduled 16 music positions back from the current position. The Category ID number and current stack depth is displayed along with the hour and event number. If a song shows a testing violation, it is then bypassed for that event in the hour (and kept at the top of the scheduling stack). Another attempt to schedule the song will be made on the next pass through the stack. OAS then moves to the next song in the category stack, and attempts to schedule it.

Analysis (Audit Log) of Schedule, continued

- ++ If a song is forced to be scheduled (it failed one of the tests), that song is shown in magenta along with the ++ notation at the beginning of the Scheduling Status Summary line.

A song is forced into the schedule when the search depth limit (as set in OAS configuration) is reached, and no violation-free songs are available in the stack. OAS then re-scans the stack and performs an analysis of the violation value for all songs from the top of the stack to the one at the maximum category search depth. It then selects the song with the lowest accumulated violation value. The forced song summary is preceded by a listing of violation values that were assigned for every song from the top of the stack to the maximum category search depth. This is shown in gray and details the category, depth and the actual violation value assigned.

 For more information about OAS configuration, please see the *Special System Functions—Set Program Configuration Options* section starting on page 6-6.

 For more information about how OAS selects songs, please see the *OAS Scheduling Theory* section in *Appendix A*.

- !! A song position that ends up being unscheduled is shown in red accompanied by the !! notation at the beginning of Scheduling Status Summary.

An unscheduled position occurs when the maximum category search depth is reached and no song has been found that has a violation less than the built-in unbreakable value of 32,767. The only real world conditions that lead to unscheduled positions in OAS involve CD player conflicts, such as songs assigned to source zero, or back-to-back play from the same CD player. Please refer to the *Utilities for UDS* section of the *UDS/UDS II User's Manual* for an explanation of how to assign CDs to CD players.

Analysis (Audit Log) of Schedule, continued

3. You may print all or a portion of the audit log if you wish.

When you print the audit log, each hour will begin on a new page. Hours with a large number of events will “spill over” to a second or third page as necessary. Nevertheless, the next hour will still start on a new page.

- * To print the entire audit log, press **P**.
- * To print a portion of the audit log, press **ALT P**. You will be asked to type in a range of hours, as shown below:

```

You may now print a range of hours from the OAS
Playlist. Enter the starting and ending hours in
the spaces below, using the AM/PM time format.
Mid = 12 AM, Noon = 12 PM. Hours are inclusive!


Starting Hour:  █ █ M   Ending Hour:  █ █ M

F2 - Accept Hours and Print or Esc - Quit
  
```

Enter the zero-padded number for the starting hour followed by and A or P for a.m. or p.m., then enter the zero-padded number for the ending hour followed by and A or P for a.m. or p.m. For example, if you wanted to print the range of hours from 6 a.m. to 2:59 p.m. you would enter:

06 A 02 P

Note: If you configured item 3, “Use International (non-USA) Date and Time format?” of your Special System Functions—Set Program Configuration Options to yes, use the range of hours 00 through 23 instead of the 12 a.m. through 11 p.m. hours shown above.

 See the Special System Functions—Set Program Configuration Options section starting on page 6-6 for more information.

Press **F2** to accept the range of hours you have entered and to start printing.

4. Press **ESC** to return to the Playlist Creation Menu.

5. **C** Change Playlist Date

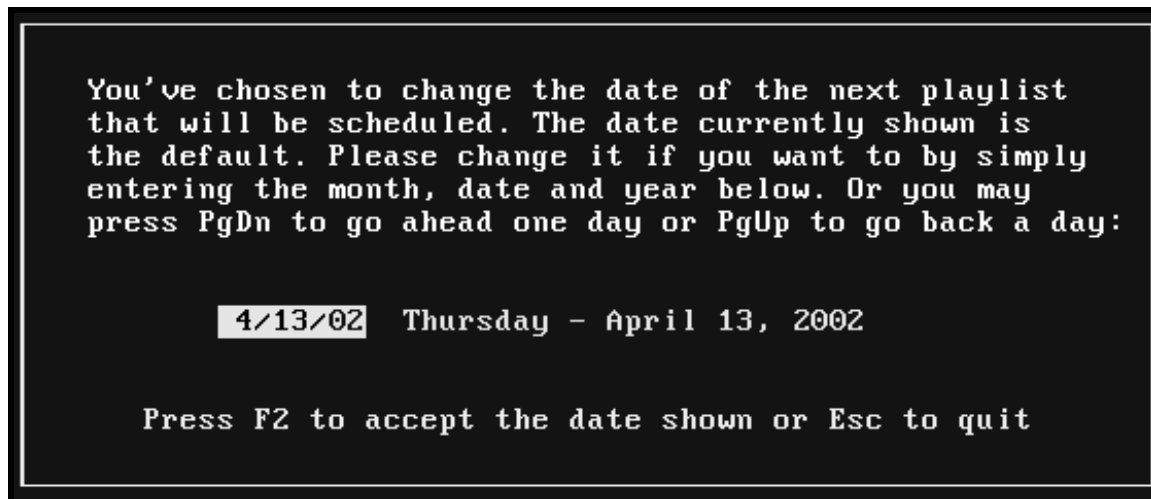
OAS advances the playlist date automatically each time you schedule. If you need to reset the playlist date, choose this option to manually change the date. All you have to do to change the playlist date is either type in the desired date for the next schedule to generate, or use the **PG UP** and **PG DN** keys to step through dates.

To use this feature, follow the directions outlined below.

1. From the Playlist and Scheduling Menu, use the **↑** and **↓** arrow keys to highlight the Change Playlist Date feature. With this feature highlighted, you may now press **F1** for online help for this feature. To select the Change Playlist Date feature, press **ENTER**.

(If you prefer, you may select this feature by typing one of the hot keys, which in this case would be a **5** or a **C**.)

You will be prompted to change the date for the new schedule you are going to create, as shown below:



2. Simply follow the directions on the screen.

If you type in the date, use the format MM/DD/YY where MM is the zero-padded number for the month, DD is the zero-padded number for the date and YY is the zero-padded number for the year.

PG UP sets the playlist date back one day, just as turning to the previous page on a wall calendar goes to the previous day. **PG DN** moves the playlist date forward one day.

Change Playlist Date, continued

3. Once you have selected the desired date, you must press **F2** to accept that date as the next date for playlist generation. Press **ESC** if you have decided not to change the date.

Note: Once a new playlist date is selected, the incrementing of dates will continue, starting with the new date. This feature can also be used to “reschedule” a playlist for any given date.

- * If you did change the date (and saved the change by pressing **F2**), you may see another screen, depending upon your configuration.


If you have configured OAS so that you have enabled, Perform a backup to hard drive just before scheduling?, then each time you change the playlist date, you will see the following message:

```
Restore the Scheduling Backup
that was made on the hard disk?
It was created: date and time
```

Y - Yes, Restore N - No Restoration.

Pressing **Y** will restore the state of OAS to its condition just prior to the most recent scheduling session. Category stack orders will be properly reset and the music database (and associated index files) will be restored to the pre-scheduling state. This option is made available so that you can “unschedule” a playlist.

If you do select **Y** at this prompt and you have made changes to your music library since you last scheduled, all of those changes will be lost!

 For configuration information see the *Special System Functions—Set Program Configuration Options* section starting on page 6-6.

4. Press **ESC** to return to the Playlist and Scheduling Menu.







6. PLAYLIST.SS - Regenerate File

Note: The PLAYLIST.SS - Regenerate File feature appears *only* if you are using OAS with UDS or UDS II.



This item will restore the schedule file, PLAYLIST.SS, in the form that it was first created by the OAS playlist generator. The schedule will not show any changes that you may have made with the UDS Schedule Editor.

The PLAYLIST.SS - Regenerate File feature allows you to restore the most recently-created schedule to its original form, prior to editing or merging with information from your traffic and billing system.

To use this feature, follow the directions outlined below.

1. From the Playlist and Scheduling Menu, use the  and  arrow keys to highlight the PLAYLIST.SS - Regenerate File feature. With this feature highlighted, you may now press  for online help for this feature. To select the PLAYLIST.SS - Regenerate File feature, press  or use one of the hot keys,  or .

WARNING: Select this option only if you need to recover the original, unmerged schedule because it will overwrite the current music schedule file (PLAYLIST.SS) in the OAS subdirectory!

2. OAS will prompt you to make sure you wish to regenerate the PLAYLIST.SS file for the date shown on the screen display. Press  to regenerate the schedule. Pressing any key other than  cancels the operation.

This option does not alter the scheduling stack order—nor does it affect your music database or format items in any way. Its only function is to “undo” any changes made to the schedule after its generation. This feature might be helpful if, for example, you have just merged the music schedule with the traffic department's commercial log and then, some time later, the traffic department gives you a revised copy of the spot log—requiring a re-merge. You would then select this menu item and proceed to again merge the log. The Utilities for the UDS permit a UDS Schedule to be merged only once—hence the occasional need to restore a PLAYLIST.SS file to its original pre-merged state.

3. You will receive a message similar to the one below:

UDS Playlist for 04/21 Regenerated! Press any key.

4. Following the instructions on the screen, press any key and you will be returned to the Playlist Creation Menu.

7. **S** Save a Schedule to a Text File

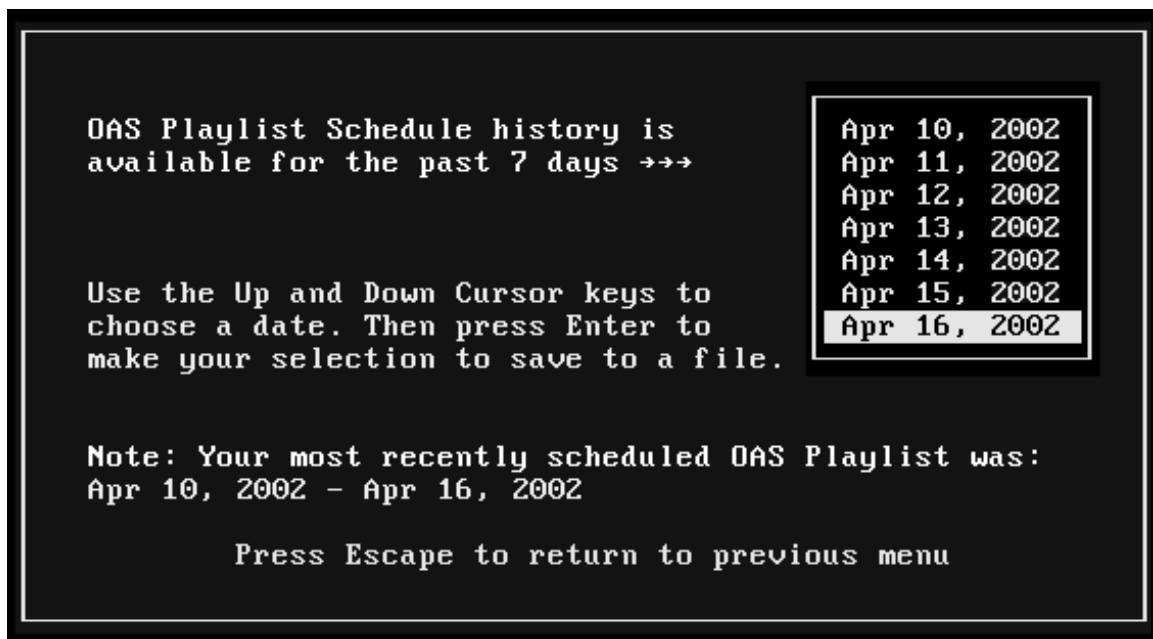
Note: If you are not using UDS, this feature will be item number 6 on your Playlist and Scheduling Menu.

This option permits you to keep copies of the seven most-recently generated schedules in the form of standard ASCII text files, readable by almost any computer user anywhere.

To use this feature, follow the directions outlined below.

1. From the Playlist and Scheduling Menu, use the **↑** and **↓** arrow keys to highlight the Save a Schedule to a Text File feature. With this feature highlighted, you may now press **F1** for online help for this feature. To select the Save a Schedule to a Text File feature, press **ENTER**. If you prefer, you may use one of the hot keys to select this feature.

A pick list containing the last seven dates on which schedule information is available is displayed, as shown below:



2. Use the **↑** and **↓** arrow keys to highlight the date you want to save to a file, then press **ENTER**.

The formatting of the text file that will be created is exactly the same as shown in the “View Completed Schedule” display. As mentioned previously, OAS only maintains playlist history for the last seven generated schedules. There is no way to retrieve a schedule generated earlier.

Save a Schedule to a Text File, continued

3. You will be prompted to enter a filename for each schedule you select to save to a file. You may enter any valid DOS filename, including drive and directory. If a filename is specified without a drive or directory name, then that file is written to the current working directory, usually C:\OAS.

This option has been designed to help users who must prepare logs for music licensing organizations such as ASCAP, BMI and SESAC. Also note that you may save only the seven most-recently generated schedules to a file! Use a different filename for each day's schedule and code them so you will be able to determine easily what information each contains. For example, you could save schedules for the week of April 10, 2002 with the names:

bmi41002.txt

bmi41102.txt

bmi41202.txt

etc.

4. After you type in a name for the file, press **F2** or **ENTER** to accept or press **ESC** to quit.
5. You will receive the following message:

Copy Complete! Press any key

6. Press any key and return to the Playlist Creation Menu.

8. **M** Modify or View Category Stack Order

Note: If you are not using UDS, this feature will be item number 7 on your Playlist and Scheduling Menu.

This option lets you see and change the current scheduling “stack order” for a category. This is the order in which the songs will be considered for scheduling.

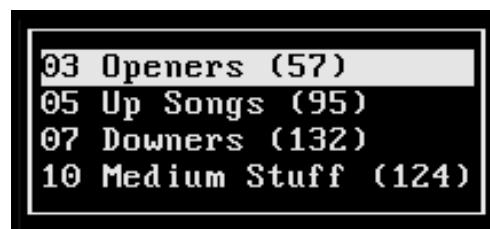
To use this feature, follow the directions outlined below.

1. From the Playlist and Scheduling Menu, use the **↑** and **↓** arrow keys to highlight the Modify or View Category Stack Order feature. With this feature highlighted, you may now press **H** for online help for this feature. To select the Modify or View Category Stack Order feature, press **ENTER**. If you prefer, you may use one of the hot keys to select this feature.
2. You will then be prompted for a category number.






3. Before you can either view or modify (shuffle, restack) a category, you must enter the category number. The category number must be 01 through 23. Remember, category 00 is for songs that are on hold; you cannot view or change the stack order for category 00 since it will not be scheduled.

You may type in the zero-padded two-digit category number and press **ENTER**, or press **F3** for a category pick list like the one shown below:






Modify or View Category Stack Order, continued


Use the  and  arrow to select your category choice and press .

Immediately after you type in the two-digit category number (or selected from the pick list), you will see the name of the category (if you have given it a name) along with a number in parentheses, showing the total number of songs in that category. You cannot view or modify a category that contains no music.

4. You now have three options. You may view, shuffle, or restack.

* **If you want to view the scheduling stack order**, press  after typing the category number. In a few moments, you will see a listing of songs for that category, accompanied by a number showing that song's location in the category scheduling stack. This is the order in which OAS will attempt to schedule the songs in that category.

You can use the ,  and arrow keys to move to different parts of the report. You may also print the report.

Press  for more information on the keyboard and print options available.

```

Viewing File: CAT_ORD.RPT
=====
Current Category Scheduling Stack Order
Category 10: Medium Stuff
=====
1: 934-02 Keeping The Faith Joel, Billy
2: 937-15 Don't Ask Me Why Joel, Billy
3: 918-14 Sad Songs (Say So Much) John, Elton
4: 930-12 You Gotta Love Someone John, Elton
5: 904-04 Vision Of Love Carey, Mariah
6: 904-17 Take Me Home Collins, Phil
7: 944-07 The Last Song John, Elton
8: 953-07 Without You Carey, Mariah
9: 934-06 Broken Arrow Stewart, Rod
10: 921-06 We've Got Tonite Seger, Bob & The Silver Bullet
11: 945-07 Simple Life John, Elton
12: 923-03 Hotel California Eagles
13: 936-16 Glory Of Love (Theme from "The Cetera, Peter
14: 939-01 Brilliant Disguise Springsteen, Bruce
15: 920-06 Impulsive Wilson Phillips
16: 934-18 Cuts Like A Knife Adams, Bryan
17: 950-03 I Just Had To Hear Your Voice Adams, Oleta
For complete information on special key functions, press F1

```

Modify or View Category Stack Order, continued

- * **If you want to modify a category's scheduling order by shuffling** the category, press the **F2** key after you specify the category number. OAS will respond with the message, Shuffle Category XX? (Y/N), where XX is the category number to be shuffled. Press **Y** to continue or press any other key to cancel the operation. In a few moments, OAS will respond with the message Category XX Shuffled OK. Press any key to continue.

The category you have just modified remains in the input field. Press **ENTER** again to display the shuffled category.

A category should be shuffled only if you note problems because of a “stacking” of certain artists, or if you see that there is a bunching of songs allocated to the same CD player in a UDS system. Naturally, only categories with music in them can be viewed or shuffled. OAS does not *show* the machines number, however.

Note: If you have just installed OAS and are getting ready to schedule for the very first time, it is a good idea to shuffle each of your categories. Often the database supplied with OAS is pre-sorted in alphabetical order by artist. Shuffling each of your categories will keep your first day's playlist from being heavy with artists whose names begin with letters near the front of the alphabet.

- * **If you want to modify a category's scheduling order by restacking** the category, press **ALT F2** after you specify the category number. OAS will respond with the message, Restack Category XX? (Y/N), where XX is the category number to be shuffled. Press **Y** to continue or press any other key to cancel the operation. In a few moments, OAS will respond with the message Category XX Restacked OK. Press any key to continue.


The category you have just modified remains in the input field. Press **ENTER** again to display the restacked category.

Restacking sets the category to sequential order according to the CD identifier and the cut number. For instance, H100-01 will be placed ahead of J100-01. Restacking can be used to restore an out-of-sync syndicated CD program. A category should be restacked *only* if you note problems because of a “stacking” of certain artists, or if you see that there is a bunching of songs allocated to the same machine or CD in a UDS system. Naturally, only categories containing music can be restacked.

5. Press **ESC** when you are ready to return to the Playlist and Scheduling Menu.

9. Return to Main Menu

Note: If you are not using UDS, this feature will be item number 8 on your Playlist and Scheduling Menu.

Choosing this item (or pressing ) returns you to the OAS Main Menu.

➤ ***Chapter Four***
Music Database Management
Menu

Music Database Management Menu

This menu contains all the functions needed to manage your music library (or database) such as adding, deleting or changing songs. To select this menu, enter **[2]** or **[M]** from the OAS Main Menu. Or use the arrow keys to highlight the item and press **[ENTER]**. The Music Database Management Menu appears as shown below:

```
Music Database Management: Press F1 for Help
1.  A - Add a Song to the Database
2.  F - Find a Song (Revise or Delete)
3.  L - List Songs for Selectable Tagging
4.  S - Show Music Database Statistics
5.  I - Inventory: Print Music Library
6.  D - Data Transfer: Append to Database
7.  U - Uppercase all Titles and Artists
8.  R - Return to Main Menu (or press Esc)

02:12:54 PM on Monday, April 03
```

Each item on this menu is described in detail on the following pages.

1. **A** Add a Song to the Database

Choosing this item permits you to add new songs to your music library.

To use this feature, follow the directions outlined below.

- From the Music Database Management Menu, use the **↑** and **↓** arrow keys to highlight the Add a Song to the Database feature. With this feature highlighted, you may now press **F1** for online help for this feature. To select the Add a Song to the Database feature, press **ENTER**. If you prefer, you may select this feature by typing one of the hot keys, in this case a **I** or an **A**.

The Add a New Song window appears, as shown below:

```

Current Mode: Add a New Song

Disc ID:  [ ] Track: [ ] Category: [ ]
Title:    [ ]
Artist:   [ ]
Runtime:  [ ]:[ ] Intro: [ ] Ending: [ ] Month: [ ] Year: 19 [ ]
Gender:   [ ] Intensity: [ ] Sound Code: [ ] Artist Group Codes: [ ] [ ]
UDS Index: Y UDS Cue Into: [ ] Machine: [ ] Slot: [ ]

Press F2 to Accept Added Song or Esc to Quit

(Ctrl-F2) Autowrap Mode: On

```

- When adding a new song to the OAS music database, you *must* provide information for Disc ID, Track, Category, Title and Artist. See the listing below for specific instructions on the type of information to enter for each field.

The following discusses each entry field in the Add a Song to the Database window:

Disc ID: Enter a unique number or letter combination that you have assigned to the disc you are adding to the library. This can be any combination of five letters or numbers that is not assigned to any other CD.

OAS stores music in the library using a method that requires each combination of Disc ID and Track to be unique. It is impossible to enter two songs with the ID of 1000-01. If you attempt to do so, you will be warned that duplicate identifiers are not acceptable.

Add a Song to the Database, continued

Track: Enter the track number of the song you are adding, from 01 through 99.

Category: This item must be a number from 00 through 23. By design, any song placed in category 00 is effectively “on hold”, meaning that it is not available for scheduling. Categories are scheduled by default in ascending numerical order. Place your hardest-to-schedule or most-important songs in category 01. For example, you would want to put syndicated programs in a lower-numbered category. Place the slower-rotation songs and large categories in higher-numbered categories, up to 23. There is no way to change the pass order of categories! Be sure to avoid potential problems like putting very few songs in category 23, thus making it tough to schedule after all of the previous categories have been plotted.

You may press **F3** while the highlight is on the Category field to display a pick list of categories. The **F3** pick list displays the category numbers, the category names (if you have assigned any), and the number of songs that are currently in each category.

Title: Enter the title of the song you are adding here.

Artist: Enter the name of the artist here.

Note: Please be very careful and very consistent with your spelling, particularly with artist names. The full text of these entries is used to generate a unique “key value” that is used to provide scheduling separation for artists and songs with the same name. While capitalization is not important, spelling is crucial to OAS.

When entering a duet, or other artist name that includes the “&”, “[” or “/” characters, such as “Kenny Rogers & Sheena Easton” or “Kenny Rogers [with Kim Carnes],” all characters after and including the “&”, “[” or “/” will be ignored for purposes of protection, or key generation. For this reason, use the word “and” if you want to force protection based on the entire name. Otherwise, be sure to enter the primary artist first, as the secondary artist will not affect the sort order when using the special characters.

The same applies to entering song titles, except the character “&” is not ignored. The characters “[” and “/” are ignored for song titles. For example, “STAND [LP VERSION]” and “STAND [CLUB MIX]” will generate the same key values so that these two “different” songs can't be scheduled too close together.

After you save your entry with the **F2** keypress, both the Title and Artist Index key values will be displayed on the screen in blue at the end of their respective input fields. If you have configured your system to force uppercase on title and artist entries, you will note that all typing will be converted to uppercase characters, regardless of the keyboard shift state.

Add a Song to the Database, continued

If you have entered Disc ID, Track, Category, Title, and Artist, you have entered only the bare minimum information required by OAS to accept your entry.

The remainder of the song input screen is explained below. You can make your own determination about what you choose to enter in the rest of the fields and what fields you may wish to ignore or skip over, but runtime, intro and ending are important!

Runtime: The duration of the song expressed in minutes and seconds. The first part of this colon-separated input field is the minute, the second pair of digits correspond to the seconds. If you choose to not enter a runtime, the value defaults to 00:00.

Note: Runtime information *must* be provided for commercial or “store-bought” CDs for proper UDS operation.

Intro: The song's ramp, post or intro time is entered here as a value between 00 and 59 seconds, inclusive. If you choose not to enter an intro time at all, the value defaults to 00. This value is also used to initialize the UDS intro countdown clock.

Ending: Any single letter can be placed here and it will be converted to uppercase. Use easy to remember mnemonics such as C for Cold, F for Fade and A for Applause. Whatever scheme you wish to adopt, just be consistent.

WARNING: Using an ending of “T” tells the UDS to add a ten-second “live tag” to the end of the song. This will result in ten seconds of silence after this song so your announcer can read the tag.

Month: If you opt to use this field, you may place any numeric value in here ranging from 1 through 12—corresponding to the month the song was released, the month you added the song, or the month the song peaked on the charts. The value you enter is just for your information and has no impact on scheduling. If you try to enter an invalid number, such as 13, OAS will warn you about it.

Year: This field works the same way as the month field and allows any value from 00 through 99. Note that 19 precedes the year value by default. As of this release of the software, we presume that all songs you are planning to play have been released within the current century.


Add a Song to the Database, continued

Gender: Any single letter may be entered here. Try to stick with easy to recall code letters that correspond to the gender, such as F for Female, D for Duet, I for Instrumental and so forth. OAS does attempt to avoid long sweeps of songs by the same gender.

However, do not feel that you have to code every song in the library with a gender. In fact, most should be left blank. Code only those genders that you wish to have protected. If you fail to follow this advice, you may end up constricting the scheduling process to the point that your completed playlists are not what you would like.

Intensity: Any numeric value from 1 through 5 is acceptable. OAS provides built-in intensity protection to guard against “train wrecks” in music sweeps. The definition of intensity is totally up to you. It might be a good idea to look upon intensity as a way to code a song's overall “feel”, incorporating all of these characteristics: tempo, energy level, mood, harshness, wimpyness, etc. Generally, those songs that are really dreary should be assigned a 1 to avoid back-to-back play (and to avoid going from an intensity level of 5 into 1).

Please try *not* to over-code your library, either. In reality, most songs are going to fall near the center of the intensity range. Songs with a midrange value of 3 (as well as songs with a blank intensity field) are not even considered for intensity testing, because they generally blend well with any song.

 Please refer to the *OAS Scheduling Theory* section in Appendix A for more information on how OAS uses the intensity codes to assign violation values during schedule testing.

Sound Code: This field allows any one letter. The meaning of the letter is entirely up to you, but try to stick with those that are mnemonic, such as T for Traditional, N for Novelty, and O for Obscure. As with most other coding criteria, this field can and should be left blank for the majority of the songs in your library.

During scheduling, OAS will attempt to avoid playing two songs with the same sound code back-to-back. So code any songs with the same code that you would prefer never to play back-to-back.

Please refer to the *OAS Scheduling Theory* section in Appendix A for more information on how OAS uses the intensity codes to assign violation values during schedule testing.

Add a Song to the Database, continued

Artist Group Codes: Note that up to two codes may be entered per song. The artist group code is designed to handle special situations involving group members and duets. Normally, OAS uses the Artist Index key (explained earlier) to provide protection against playing the same artist within your defined music separation period. If any character is entered in either of the artist group code fields, OAS will apply the Group Code Separation parameter to that song.

For example, “Kenny Rogers” may yield an Artist Index key of 200; “Kenny Rogers and Sheena Easton” may yield an Artist Index key of 311; “Kenny Rogers and Kim Carnes” may yield an Artist Index key of 42; “Kenny Rogers and the First Edition” may yield an Artist Index key of 171. All of these songs featuring Kenny Rogers as an artist are shown with different key values. Keep in mind, however, that “Kenny Rogers/Sheena Easton” and “Kenny Rogers & Kim Carnes” (note the “&” and “/”) will yield the same Artist Index Key, as described above.

If not for Artist Group codes, nothing would prevent OAS from scheduling all of these “different” artists in a row. By assigning all songs by the various permutations of “Kenny Rogers” an Artist Group code of R, you are telling OAS that these different artists are, in fact, the same. You may assign any alphabetic character to the Artist Group Code field.

Note: Case sensitivity is preserved so that 52 code letters (26 upper case and 26 lower case) are available for you. (This lets you use, for instance, B for Beatles and b for Beach Boys).

Note: There are *two* artist group code fields. In most cases, you will only need to use one. An exception might be found in the “Kenny Rogers” example whereby you might wish to assign an R code to all songs that have “Kenny Rogers” content and an E code to all songs with “Sheena Easton” featured as an artist.

UDS Index: This defaults to Y (Yes) under the presumption that most of your UDS music library is provided on broadcast syndicator-provided discs, such as TM Century's *HitDiscs* and/or *GoldDiscs*. These songs have an index code built in at the end of each song to trigger a segue on the UDS.




If you are entering any songs from CDs that do not have an index, such as CDs obtained from record companies or from a retail source, or if you wish the song to segue by runtime, please set this to N (No) for those songs.


Add a Song to the Database, continued

UDS Cue Into: This field applies only to UDS customers using Sony CD changers. If you wish to have UDS “cue into” a song to bypass its intro, you may enter a value of up to 59.9 seconds. You must remember to deduct this value from both the Runtime and Intro fields. You might want to do this if a song has an unusually long intro, for example, or if there is no natural break between cuts on the CD, as is the case with many live performances. You can often choose a more appropriate entry point to a such a song than did the record company.

Machine and Slot: These two fields normally never need to have any information entered by you from this screen. The machine corresponds to the source number of your CD player and the slot is the location within that machine. When you save your tray maps via the Utilities for the UDS, the information about that CD's location is automatically written to your OAS database for you.

It is important to note that when you add a new song, you must first add it to the OAS music library and then add it to the tray maps. If you reverse the order, the automatic update of machine and slot information to your library cannot occur.

Note: As mentioned earlier in this manual, the song entry screen uses the current AutoWrap mode to determine how the highlight bar will react once an entry form is filled. If AutoWrap is “on”, then the filling of an entry field will make the cursor automatically proceed, or “wrap”, to the next field. The current AutoWrap on/off status is shown in the bottom right corner of the screen. See the example on page 4-3. You may toggle the current AutoWrap state by pressing  . If AutoWrap is “off”, you must always press  to advance to the next field.

3. After the data has been entered on the song entry screen (and you have carefully checked the information you have input), press  to save it.

Note: If any of the required items (Disc ID, Track, Category, Title or Artist) are left blank, your entry will not be accepted. Instead, a warning message will be displayed.

The total number of songs that you now have in the music library is displayed, as well as the current count of songs for that category.

The screen remains on the song you have just entered and the Artist and Title Index key values are displayed for your reference. There is also a record number that is shown next to the category field. This number is displayed primarily for the benefit of troubleshooting a corrupted database by On Air Digital support personnel.

Add a Song to the Database, continued

When a new song is added to OAS, a special file called NEWADDS.DB is also written in the OAS directory of the hard disk. The information in this file is transferred to the UDS when you import a schedule, so that the UDS database will be updated with the new songs you have added.

If you want to continue adding additional songs, press **PG DN** after saving a song that you have entered. This will display a new song input screen with empty fields and you may enter additional songs according to the details described in this section.

If after saving song information with **F2** and pressing **PG DN** you wish to review or change a song, use the Find a Song feature, explained on the next page, to review or revise your current music library database.

2. **F** Find a Song (Revise or Delete)

Use this option if you wish to revise, delete or view a song in your music library. You cannot enter a new song from this area.

To use this feature, follow the directions outlined below.

1. From the Music Database Management Menu, use the **↑** and **↓** arrow keys to highlight the Find a Song (Revise or Delete) feature. With this feature highlighted, you may now press **F1** for online help for this feature. To select the Find a Song (Revise or Delete) feature, press **ENTER**. If you prefer, you may select this feature by typing one of the hot keys, in this case a **2** or an **F**.

The Find/Revise a Song window appears, as shown below:

```

Current Mode: Find/Revise a Song

Disc ID:  [ ] Track: [ ] Category: [ ]
Title:    [ ]
Artist:   [ ]

Press Enter or F2 to Begin Search or Escape to Quit

(Ctrl-F2) Autowrap Mode: On

```

2. The database is sorted by Disc ID and/or Track, Category, Title, and Artist. Enter all or a portion of any one of these criteria and then press **ENTER** or **F2**. The song that most closely matches the information you provided will be shown.
3. You may then press **PG UP** to browse prior entries or press **PG DN** to browse later entries. The list will be in sorted order according to the “fuzzy” search criteria you have selected. The search mode that you have selected is displayed on the screen.

For instance, if you wish to find songs by “Boyz 2 Men” and you are not sure if you should type **B** **O** **Y** **Z** **SPACE** **2** or **B** **O** **Y** **S** **SPACE** **T** **O**, you can just type **B** **O** **Y** and the first artist that comes closest to matching that spelling will be found.


Find a Song (Revise or Delete), continued

IMPORTANT! The “fuzzy” search method used by OAS does not depend upon capitalization. Also, if your music library is set up as last name first, then a search for “Neil D” will not result in finding “Diamond, Neil.” In this instance, you can enter “Diam” and come up with matching entries by “Diamond, Neil.”

- * If you choose to search using Disc ID or Track, please note that letters and numbers (combined with the number of characters in the Disc ID) may have a less than intuitive sort order as you search. Here is an example of a sorting order for CDs:

```
1
A
100
CX1
1000
9999
AAAA
```

In the example above, shorter entries appear first. When two expressions have the same number of characters, the expression that starts with a number will come before one that starts with an alphabetic character (“1” before “A”, “100” before “CX1”), etc.

- * If you change Disc ID, Track, Title, Artist, Runtime, Intro, Ending, UDS Index or UDS Cue Into, then the change will be written to the NEWADDS.DB file. When the next playlist is imported to the UDS, that change will be applied to the UDS database. Please note that changing a song's category does not cause a change to be sent to the UDS database.
4. While you are looking at the song entry screen in the Find a Song mode, you may change the information in any of the entry fields by moving the highlight bar to that field and revising the currently displayed data.
 5. Once you are satisfied with your revisions, press **F2** to save your changes. OAS is smart enough to alert you if you have made any changes to a song entry and have failed to press **F2** to save it. You will see a warning window if you have made a change and then press either **PG DN** or **PG UP** to move to another song in the sorted sequence of songs before saving the song.
 6. You may delete a song in the Find a Song window by pressing the **F7** key. You must confirm your intentions by typing a **Y** when you see the Are you sure? (Y/N) prompt. Pressing any other key will cancel the deletion and the song will remain in the database. There is no way within OAS to recover deleted songs. Once they are gone...they are gone. That is one more reason to always make frequent backups. It is strongly suggested that you create a backup before you start changing songs.
-  For more information about the entry fields on the song entry screen, refer to the *Add a Song to the Database* section, step 2, starting on page 4-3.

3. **[L]** List Songs for Selectable Tagging

Unlike the Find a Song feature which displays matched entries one at a time. The List Songs for Selectable Tagging feature displays multiple matching entries in short form, listed in order according to your search criteria.

To use this feature, follow the directions outlined below.

1. From the Music Database Management Menu, use the **[↑]** and **[↓]** arrow keys to highlight the List Songs for Selectable Tagging feature. With this feature highlighted, you may now press **[F1]** for online help for this feature. To select the List Songs for Selectable Tagging feature, press **[ENTER]**. If you prefer, you may select this feature by typing one of the hot keys, in this case a **[3]** or an **[L]**.

The List Songs for Selectable Tagging window appears, as shown below:

WARNING: This part of OAS allows massive changes to your music library. Because of the power of this program, it is strongly suggested that you backup your data using the Special System Functions—Archive feature explained on page 6-3 before making changes. You will not otherwise be able to undo these changes later.

```

Current Mode: List Songs for Selectable Tagging

Disc ID:  [ ] Track: [ ] Category: [ ]
Title:    [ ]
Artist:   [ ]

Press Enter or F2 to Begin Search or Escape to Quit

(Ctrl-F2) Autowrap Mode: On

```

2. Enter the search criteria, as explained in the *Find a Song* section, then press **[ENTER]** or **[F2]**.

The *Find a Song* section starts on page 4-10.

List Songs for Selectable Tagging, continued

- You will then see a pop-up screen asking you the maximum number of matches to find. You may enter a number here, or leave it blank to find all matches. You also have the option to sort the matched songs in either ascending or descending order. The default is ascending order and any keypress other than **R** will sort the songs in this order.



- The listing of the sorted songs uses an approach so that all matched entries greater than or equal to the search criteria (if using an ascending sort) will be displayed. This means that if you search by artist for “America”, then all songs in the library with artist names indexing “higher” than America will be found, including “Zevon, Warren”—but not “.38 Special” since the period precedes the letter “A” in the collating sequence.

If you select the reverse sort method, the listing of sorted songs will match entries *less* than or equal to the search criteria, and display them in *descending* order. For example, if you search for “McEntire, Reba”, you will find “Jackson, Alan” in the list but not “Williams, Hank Jr.”

- Once the list appears, (see figure on next page) you may navigate through the list by using the cursor and positioning keys. The top part of the window displays the keys which can be used to move around in the list.

List Songs for Selectable Tagging, continued

6. There are two ways to change songs in the List Songs mode:
- 1) One way to change songs is to first tag them by pressing `[SPACE]` on the currently highlighted song to tag it or press `[ALT] [T]` to tag all songs. `[SPACE]` is a toggle and pressing it a second time will “un-tag” a previously tagged song. `[ALT] [U]` will un-tag all tagged songs. Tagged songs are identified by red arrows on the screen display.

In the example below, we typed `[SPACE]` seven times, to tag the first seven songs.

```

List Songs for Selectable Tagging: Searching by Artist
-----
↑ - Up one Song ↓ - Down one Song PgUp - Prior Screen PgDn - Next Screen
<Enter> - Change Current Song's Category F2 - Change Tagged Esc - Quit
<Space> - Toggles Tag Alt-T - Tags ALL Songs Alt-U - Untags ALL Songs

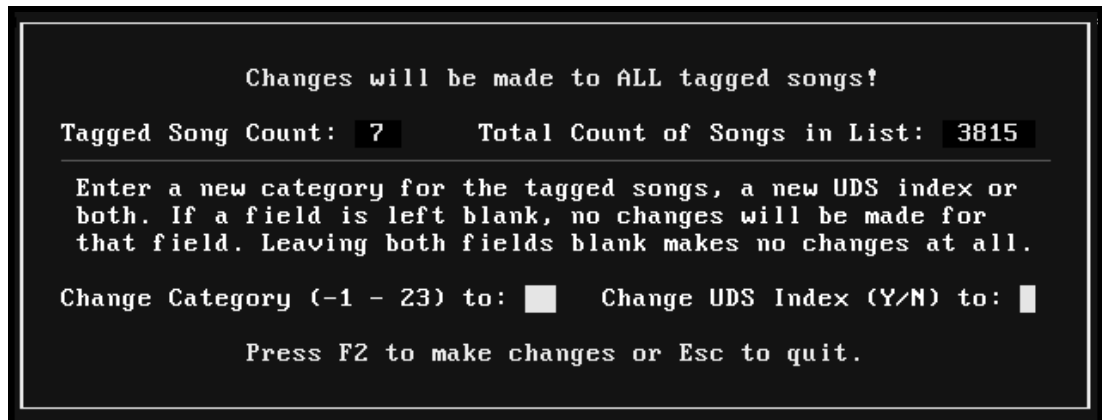
→ 934-08 →01 →Can Do Magic →America →Y
→ 123-15 →03 →Thin Man →America →Y
→ 572-09 →02 →A Horse With No Name Is Hard →America →Y
→ 7502-16 →01 →Lonely People →America →Y
→ 566-08 →02 →Sister Golden Hair →America →Y
→ 7022-01 →01 →Tin Man →America →Y
→ 8001-18 →01 →You Can Do Magic →America →Y
428-04 13 →A Horse With No Name →America →Y
7021-14 00 I Need You →America →Y
429-16 13 Sister Golden Hair →America →Y
7501-07 00 Sister Golden Hair →America →Y
7503-18 00 Sister Golden Hair →America →Y
431-05 13 Ventura Highway →America →Y
7002-21 00 Ventura Highway [Single Versi →America →Y
7002-07 00 Ventura Highway [CD Version] →America →Y
(Ctrl-F2) Autowrap Mode: On

```

Note: The current state of AutoWrap affects how the highlight bar will behave in the “List Songs” portion of the program. If AutoWrap is “on” (as shown in the bottom right corner of the screen), then pressing `[SPACE]` to tag a song will cause the highlight bar to automatically move to the next song, just below the one you have just tagged. If AutoWrap is toggled “off”, the highlight bar remains on the song you have just tagged and you can use the `[↑]` and `[↓]` keys to move to the previous or next listed song. As indicated on the screen, the AutoWrap on/off status may be toggled on or off by pressing `[CTRL] [F2]`.

List Songs for Selectable Tagging, continued

Once you have tagged songs for changing, press **F2**. A window appears that permits you to enter a new category and/or a new UDS index.



- * If you wish to delete the tagged songs, enter the category number of **F1**.

If you are planning to delete songs, you must respond with a **Y** keypress to the Are you sure? (y/N) query. This is a OAS safety net designed to keep you from inadvertently wiping out huge chunks of your music library. Remember, there is no method within OAS to undelete songs.

- * If you know the new category number and/or new UDS index for the tagged songs, you may type in the two-digit category number and press **F2**. All tagged songs will then be modified to reflect the changes.
- * If you are not sure about the category numbers you are using, you may press **F3** to select a category from a pick list. Use the **↑** and **↓** arrows to highlight your selection and press **ENTER**. Once you are satisfied with your entry, press **F2** to accept the changes. All tagged songs will then be modified to reflect the changes.

List Songs for Selectable Tagging, continued

- 2) The other way to make changes to songs while in List Songs mode is to press **ENTER**. This opens up an entry field for the category of the currently highlighted song.

You may either directly enter the two-digit category number or press **F3** to select the new category for the song from a pick list. The pick list shows the category number, the name that has been assigned to the category and the number of songs currently in that category. Pressing **ESC** before specifying a category number will cancel the category input field and allow the cursor keys and positioning keys to navigate through the list.

Note: While making category changes using this approach, the AutoWrap state impacts highlight bar movement. If it is toggled “on”, then the completion of a category number in the category input field will cause the highlight bar to highlight the next song just below the one you have changed. If AutoWrap is “off”, the highlight bar remains fixed on the song you have just changed and you must press **↓** to move down to the next song

7. Press **ESC** to exit and return to the Music Database Management Menu.

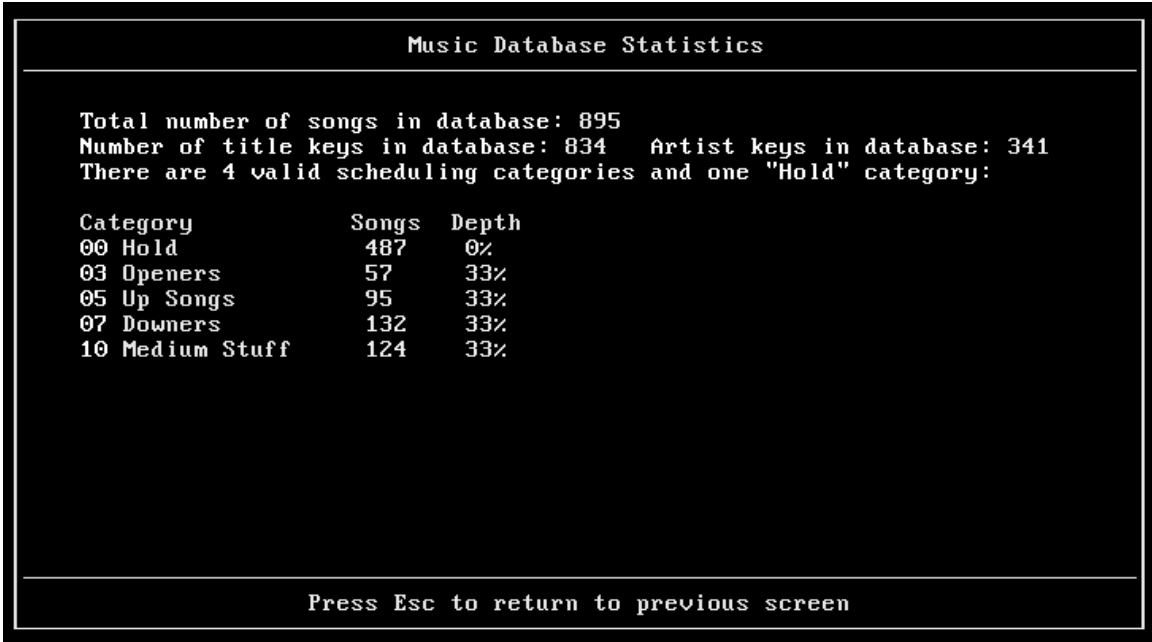
4. **S** Show Music Database Statistics

This feature displays important statistical information about the OAS music library.

To use this feature, follow the directions outlined below.

1. From the Music Database Management Menu, use the **↑** and **↓** arrow keys to highlight the Show Music Database Statistics feature. With this feature highlighted, you may now press **F1** for online help for this feature. To select the Show Music Database Statistics feature, press **ENTER**. If you prefer, you may select this feature by typing one of the hot keys, in this case a **4** or an **S**.

The Show Music Database Statistics window appears as shown below:





Category	Songs	Depth
00 Hold	487	0%
03 Openers	57	33%
05 Up Songs	95	33%
07 Downers	132	33%
10 Medium Stuff	124	33%

From the Show Music Database Statistics window you can see how many songs are in the entire music library as well as the distribution of the songs throughout the categories. Regardless of the name you might assign to it, category 00 is reserved for non-scheduled songs only. All songs on hold should be placed here.

Show Music Database Statistics, continued

The configurable category search depth percentage is also displayed on this screen. Please note that the category search depth percentage applies to all scheduling categories. A valid scheduling category is one that is numbered from 01 through 23.

The number of title keys and number of artist keys shown on the screen lets you know how many unique titles and artists you have in the database. As an extreme example, a music library that consists of songs only by “Extreme” and “Crosby, Bing” would have two artist keys—even if there were 1,000 songs by these two artists in the library. On the other hand, a music library that consists of every possible version of “Louie Louie” performed by artists as diverse as “The Kingsmen” to “The Rice University Marching Band” would show only one title key but numerous artist keys.

2. If you wish to print this screen, press the  key.
3. Press  to return to the Music Database Management Menu.

5. **I** Inventory: Print Music Library

The Inventory: Print Music Library feature permits you to print, send to a file, view selected categories or view your entire music library. You can also create a CD Utilization Report showing which CDs are in use by selected categories.

To use this feature, follow the directions outlined below.

1. From the Music Database Management Menu, use the **↑** and **↓** arrow keys to highlight the Inventory: Print Music Library feature. With this feature highlighted, you may now press **F1** for online help for this feature. To select the Inventory: Print Music Library feature, press **ENTER**. If you prefer, you may select this feature by typing one of the hot keys, in this case the number **5** or the letter **I**.

The Music Inventory window appears, as shown below:

```

Music Inventory: Select Option Below:
1.  A - Artist Name Sort
2.  C - Category Sort
3.  D - Disc Identifier Sort
4.  T - Title Sort
5.  L - Length (Song Runtime) Sort
6.  U - Disc Utilization Report
7.  R - Return to Prior Menu (or press Esc)

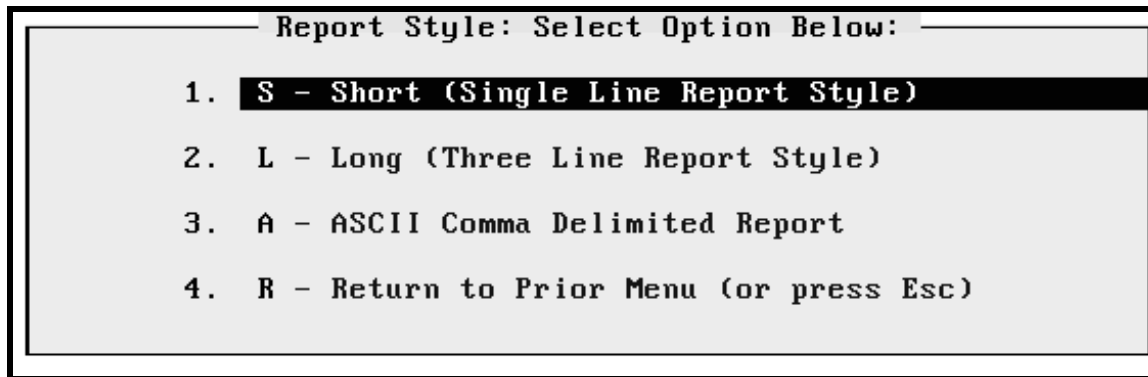
02:15:51 PM on Monday, April 03

```

2. Use the **↑** and **↓** arrows to highlight the option of your choice and press **ENTER**.
- * You may choose to sort your inventory by Artist, Category, Disc ID, Title or Length. Use the **↑** and **↓** arrows to highlight the sort mode that you want from the menu and press **ENTER**.
 - * Or you may choose the Disc Utilization Report by pressing **U**. If you select this option, proceed to step 4.


Inventory: Print Music Library, continued

3. You will be asked to select the Report Style. Your options are shown below:



- * The default selection of the Short report style shows just the basics, including Disc ID, Track, Title, Artist, Runtime, and the Category Number.
- * The Long style shows every bit of information available on the song entry screen, plus the date and time of the song's last scheduled play.
- * Select the ASCII Comma Delimited Report option to send the list to an ASCII text file of your choosing.

4. OAS will ask you to select the Category Mode.

- * If you select the default of `All Categories`, then the inventory report will list every song in your music library, including the songs in Category 00, the default hold category.
- * If you select `Specify Categories`, an entry screen appears, as shown on the next page, where you may select up to 24 categories to be in the report. You may either enter the category numbers directly by typing them into the input fields or you may use the  pick list to select the categories for the report.

Inventory: Print Music Library, continued

Enter a list of category numbers that you want included in the Inventory Report. You may press F3 for a picklist showing your categories by name and the number of songs in each category.

1: <input style="width: 40px;" type="text"/>	7: <input style="width: 40px;" type="text"/>	13: <input style="width: 40px;" type="text"/>	19: <input style="width: 40px;" type="text"/>
2: <input style="width: 40px;" type="text"/>	8: <input style="width: 40px;" type="text"/>	14: <input style="width: 40px;" type="text"/>	20: <input style="width: 40px;" type="text"/>
3: <input style="width: 40px;" type="text"/>	9: <input style="width: 40px;" type="text"/>	15: <input style="width: 40px;" type="text"/>	21: <input style="width: 40px;" type="text"/>
4: <input style="width: 40px;" type="text"/>	10: <input style="width: 40px;" type="text"/>	16: <input style="width: 40px;" type="text"/>	22: <input style="width: 40px;" type="text"/>
5: <input style="width: 40px;" type="text"/>	11: <input style="width: 40px;" type="text"/>	17: <input style="width: 40px;" type="text"/>	23: <input style="width: 40px;" type="text"/>
6: <input style="width: 40px;" type="text"/>	12: <input style="width: 40px;" type="text"/>	18: <input style="width: 40px;" type="text"/>	24: <input style="width: 40px;" type="text"/>

Press F2 to Accept or Escape to Quit

OAS “remembers” the categories you select for the report from one session to the next. So, if you have selected songs only in categories 01, 02, 03 and 04, you need not re-enter that category list each time you choose the Inventory option.

5. Once you have made your selection, OAS scans your music database and sorts the list. After the sorted list has been compiled, you will be asked to select the output type from the Select Option Below menu screen:

View and/or Print the Report
or Copy the Report to a Text File

- * If you have selected View and/or Print, you will then see the songs in the viewer. The cursor keys and positioning keys are supported for you to browse the inventory report. From this point you can select a range of songs, or select the entire list, for printing. Press the **F1** key for information about how to mark just a portion of the report for printing.
- * If instead you have selected Copy the Report to a Text File, the report will be sent to a text file with a name of your choosing. You may specify full drive and directory path if desired. If you specify a filename only, the text file will be placed in the current working directory, usually C:\OAS.

All reports present information in ascending order; that is, when sorted by artist, America will precede Boston, and when sorted by length, a 2:00 song will come before a 3:00 song.

6. Press **ESC** to return to the Music Database Management Menu.

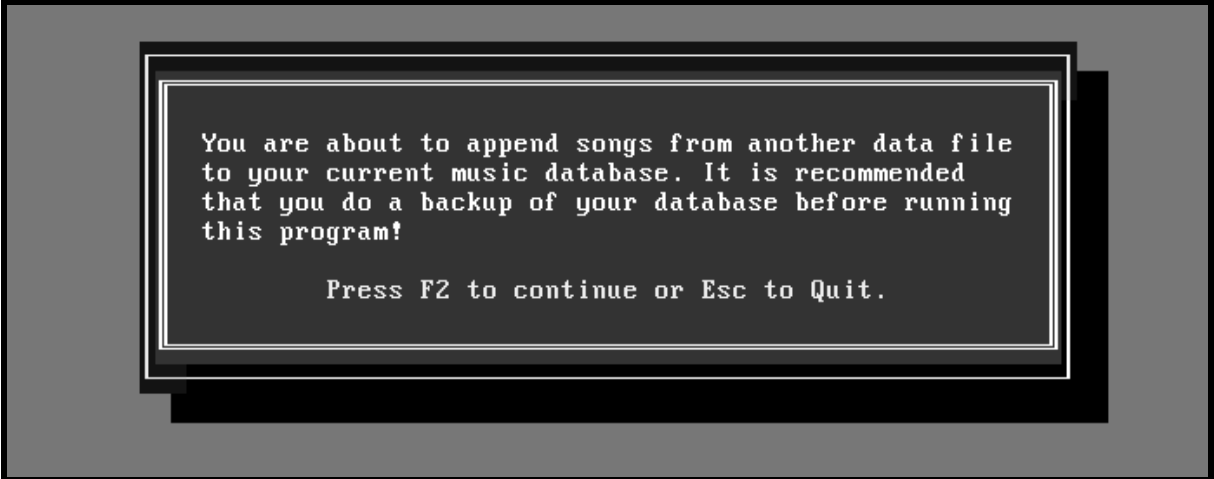
6. Data Transfer: Append to Database

WARNING! This feature should only be run after you have fully backed up your OAS data files by using the Special Systems Function—Archive feature. Directions for using the *Special System Functions—Archive* feature begin on page 6-3.

Note: Please contact On Air Digital before using this feature! This allows you to add songs *en masse* to your current music library. You will need a special S__MUSIC.DT file for the appending process. This file will come to you from On Air Digital.

There are concerns involving the Ultimate Digital Studio (most notably the need to reinitialize UDS with a newly generated SSMUSIC.DB) that must be taken into consideration when adding songs to the current OAS music database. Therefore we ask that you contact us before attempting to use this option. Our technical support specialist will give you all needed instructions when you call.

If you run this menu item without the assistance of On Air Digital, it is possible to corrupt your database. Once you have become familiar with this item, under the guidance of On Air Digital, you will be able to run it on your own if you carefully follow the instructions shown on the screens.



```
You are about to append songs from another data file  
to your current music database. It is recommended  
that you do a backup of your database before running  
this program!
```

```
Press F2 to continue or Esc to Quit.
```

7. **U** Uppercase all Titles and Artists

WARNING! This feature should only be run after you have fully backed up your OAS data files by using the Special Systems Function—Archive feature. Directions for using the *Special System Functions—Archive* feature begin on page 6-3.

Choose this option to convert all title and artist entries to uppercase. Please note that only the music database titles and artists are changed. Other entry fields permitting mixed case (such as breaknotes) remain with the default mixed case.

To select the Uppercase all Titles and Artists feature, use the **↑** and **↓** arrows to highlight it and press **ENTER**. Or you can use the hot keys **Z** or **U** to select the function. Selecting this option forces the system to do a complete re-indexing of all files. This may be a lengthy process, so make sure you really want to convert your music library before choosing this function. After the rebuild is finished, it is a very good idea to shuffle your larger categories since the scheduling stack order is affected by this option.

This is primarily intended as a one-time-only option for users who prefer to have only uppercase music data entries. It may be used in conjunction with the Data Transfer: Append to Database feature to ensure that mixed-case appended songs are converted to the uppercase format.

8. **R** Return to Main Menu

Choosing this menu item (or pressing **ESC**) returns you to the OAS Main Menu.

To choose this function, highlight it using the appropriate arrow keys and then press **ENTER**. Or you can press one of the hot keys, **B** or **R**, to return to the Main Menu.

➤ ***Chapter Five***

***Format Management
(Clocks/Liners)
Menu***

Format Management (Clocks/Liners) Menu

The Format Management (Clocks/Liners) function allows you to set up and schedule your clocks, create breaknotes (non-music events) and name your music categories.

To select the Format Management (Clocks/Liners) menu, enter **[2]** or **[M]** from the OAS Main Menu. Or use the **[↑]** and **[↓]** arrow keys to highlight the item and press **[ENTER]**. The Format Management (Clocks/Liners) menu appears as shown below:

```
----- Format Management: Press F1 for Help -----
1.  C - Clock Setup (Music and Breaknotes)
2.  A - Assignment/Scheduling of Clocks
3.  B - Breaknote Data Management
4.  M - Music Category Management
5.  R - Return to Main Menu (or press Esc)

----- 02:19:05 PM on Monday, April 03 -----
```

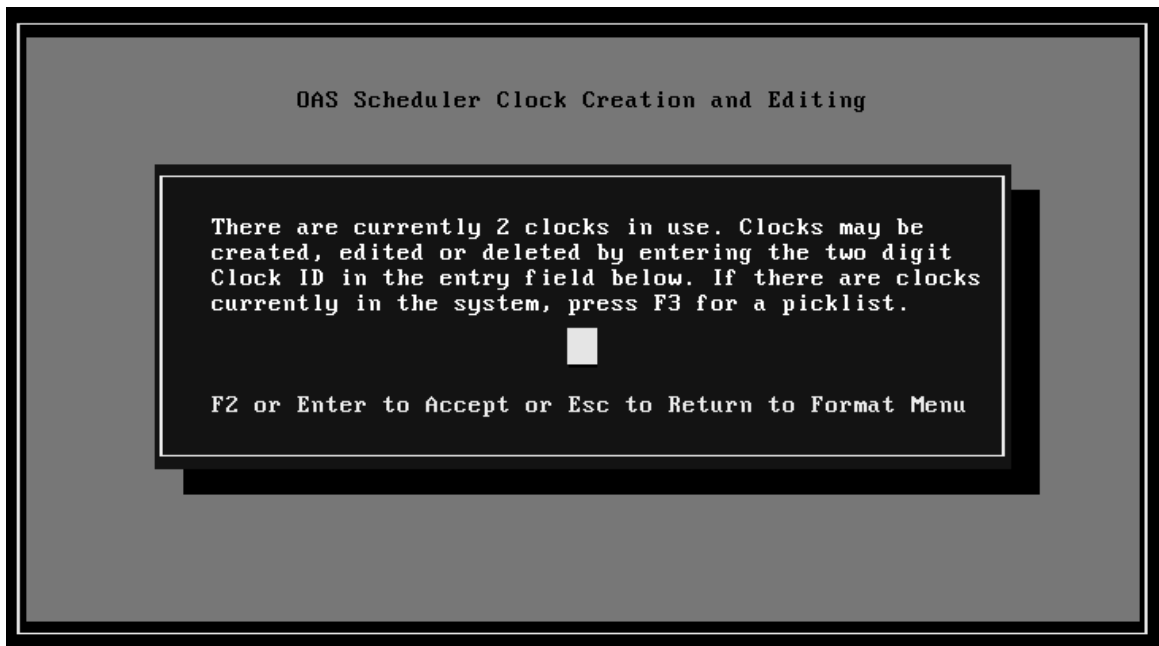
Each of the items listed above are described in detail on the following pages.

1. **C** Clock Setup (Music and Breaknotes)

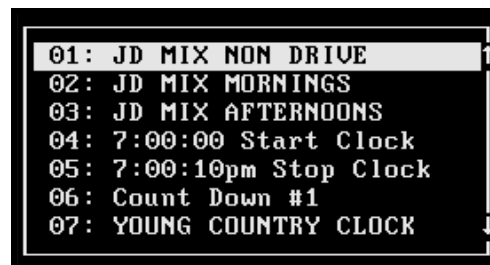
You may create, edit or delete format clocks by choosing this option. If you are starting OAS for the first time, you must create at least one clock before attempting to create your first schedule. To use this feature, follow the directions outlined below.

- From the Format Management (Clocks/Liners) menu, use the **↑** and **↓** arrow keys to highlight the Clock Setup (Music and Breaknotes) feature. With this feature highlighted, you may now press **F1** for online help for this feature. To select the Clock Setup (Music and Breaknotes) feature, press **ENTER**. If you prefer, you may select this feature by typing one of the hot keys, in this case a **1** or **C**.

The Clock Setup window appears, as shown below:



- Select a clock. Valid Clock IDs are numbered 01 through 48.
 - * If there are already clocks created, you may press **F3** to select from a pick list of available clocks. Use the **↑** and **↓** arrows to select the clock you want to edit or view. Then press **ENTER** to place that clock ID in the entry field.



Clock Setup (Music and Breaknotes), continued

- * If there are not any clocks in your system, you must enter a two-digit clock identifier in the entry field. Then press either **F2** or **ENTER** to accept the entry.
3. Once you have selected a clock, the Clock Editor screen appears, as shown below:

↑ - Up one position		↓ - Down one position		Enter: Edit the current item	
Esc: Quit editing the clock		Alt-C: Copy this clock		Alt-D: Deletes clock	
Ins: Inserts new item		Del: Deletes item at cursor		Alt-P: Print clock	
M: Music		B: Breaknote		D: Disable Machine Protection	
F1: Help Screen					
Clock ID: 07		Clock Name: YOUNG COUNTRY CLOCK			
01	B - 008	10	~10 ^09	{1211}	WPLJ LEGAL ID
02	M - 06				COUNTRY 245
03	M - 07				COUNTRY 249
04	M - 08				COUNTRY 265
05	M - 06				COUNTRY 245
06	M - 08				COUNTRY 265
07	B - 031	0	^82	:10:00	UPDATE TO NEXT EVENT
08	B - 071	0	^99	:00 :15	SPOT BREAK #1
09	B - 070	10	~10 ^09	{6001}	YOUNG COUNTRY JINGLES
10	M - 07				COUNTRY 249
11	M - 08				COUNTRY 265
12	M - 06				COUNTRY 245
13	M - 07				COUNTRY 249
#	M/B	Num	Len	Description	Category Count

The top part of the screen explains what keyboard commands are supported. The usual cursor navigation keys such as **↑** and **↓** will move from event to event in the clock editor. The positioning keys (**PG UP**, **PG DN**, **HOME** and **END**) behave as you would expect them to, similar to their behavior in most editors or word processors.

- PG UP** & **PG DN** Move forward and backward through the clock in 13-event blocks
- HOME** Moves to the first item in the clock
- END** Moves to the last item in the clock


Clock Setup (Music and Breaknotes), continued

Upon entering the Clock Editor, the highlight bar is on the first event in that clock's listing of events. The events are numbered from 1 through 100. Pressing the **↑** key while on the first event will place the highlight bar at the beginning of the Clock Name entry field. You may type in any text you wish in this field to describe the nature of the clock. Typical Clock Names might be: "Morning Drive Clock," "Weekend Night Clock," or "Countdown Show Clock." Be clear and concise with your naming conventions because the **F3** pick list and the completed playlist will show the clock by the name you enter here.

The bottom of the Clock Editor screen shows a "key" to the entry fields in blue letters on a cyan background:

- #** The item's event number (1 through 200)
- M/B/D** The item's type: **M** for Music , **B** for Breaknotes, or **D** to disable machine protection.
- Num** The item's number.
For music items, this is the category number, 01 through 23.
For breaknotes, this is the breaknote number, 01 through 200.
- Len** The length, in seconds, of the breaknote.
- Description** For music items, this is the category name. For breaknote items, this is the text of the breaknote.
- Category Count** Used only for music items, this shows the number of songs in the category you have assigned to this event.

Note: If you have configured OAS so that Enter moves down to next line when editing clocks is enabled, you will notice that the cursor moves down to the next event automatically after you press **ENTER** to accept your input or after you have filled the entry field. If this feature is *not* enabled, the cursor remains on the currently highlighted item and it is up to you to press **↓** to move to the next event in the clock editor.

 See the *Special System Functions—Set Program Configuration Options* section starting on page 6-6 for more information.

You may use the **INS** key to create a new position in the clock just before the event that is currently highlighted. All following events are then moved down one position.

Pressing **ENTER** on the currently highlighted event allows you to change that event.


Pressing the **DEL** key will immediately remove the event item currently highlighted.


Clock Setup (Music and Breaknotes), continued


4. You now have five options. You can create or edit a music event, you can create or edit a breaknote or you can disable machine protection. You can also choose to copy or delete a clock.

IMPORTANT! The clock ends at the first blank event entry. A blank event is an event that does not contain any music, breaknote or “Disable Machine Protection” instructions. Consequently, it is important to make sure that your clock is designed with no gaps between events.


Note: If you have Enter moves down to next line when editing clocks turned on in the system configuration, the highlight bar will move to the next position in the clock. If not, the highlight bar will stay on the current event and you can use the arrow keys to move to the next event.

 See *Special System Functions—Set Program Configuration Options* starting on page 6-6 for more information about system configuration.

- * **If you want to create or edit a music event**, press  at the position in the hour you want the event to occur. The highlight bar moves over to the **Num** column. From this column, you have two choices:

- 1) Directly type in a category ID number (01 through 23).
- 2) Press the  key to choose a category from the pick list.

Use the  and  arrows to highlight your selection and press .

To change the contents of a clock position, highlight the event number you wish to change and press . You may then enter corrected information for that position.

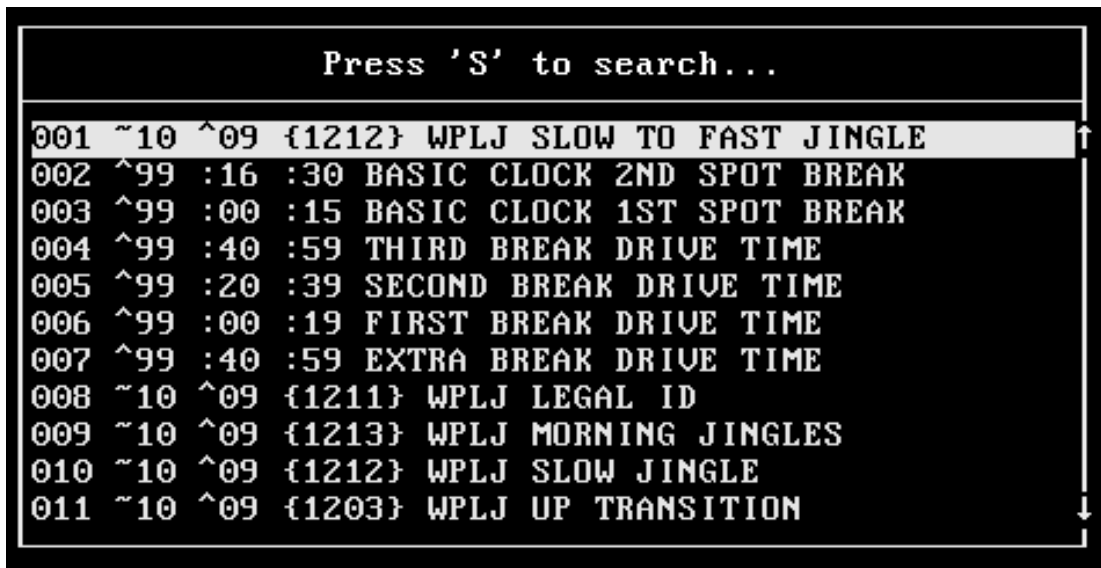
Clock Setup (Music and Breaknotes), continued

* **If you want to create or edit a breaknote event**, follow the instructions outlined below:

1. Press **B** at the position in the hour at which you want the breaknote event to occur.

The highlight bar moves to the **Num** column. Breaknotes allow you to enter text into your schedule. There are three different ways to enter your breaknote number.


- 1) If you know the breaknote number you want to insert, you may type in that number followed by **ENTER**. (If you type in a 3-digit number, you do not need to type **ENTER**.) If you have inserted your breaknote number, go to step 2 on page 5-9.
- 2) If you want to select from a pick list of existing breaknotes, press the **F3** key. A breaknote pick list will appear, as shown in the example below:



There are two ways to make your selection from the pick list.

- a) You may use the **↑** and **↓** arrows to highlight your selection and press **ENTER**.

Note: If no breaknotes have been created, there will not be any to select from the **F3** pick list.

 Refer to the *Breaknote Data Management* section starting on page 5-15 for more information on the breaknote pick list.

If you have made your selection, go to step 2 on page 5-9.

Clock Setup (Music and Breaknotes), continued

- b) You may use the Search/Again method by typing **[S]** as indicated by the “Press ‘S’ to search...” message at the top of the pick list. You will then be prompted to type in the text you are looking for and press **[ENTER]**.

```

Search: [ ]
001 ~10 ^09 {1212} WPLJ SLOW TO FAST JINGLE
002 ^99 :16 :30 BASIC CLOCK 2ND SPOT BREAK
003 ^99 :00 :15 BASIC CLOCK 1ST SPOT BREAK
004 ^99 :40 :59 THIRD BREAK DRIVE TIME
005 ^99 :20 :39 SECOND BREAK DRIVE TIME
006 ^99 :00 :19 FIRST BREAK DRIVE TIME
007 ^99 :40 :59 EXTRA BREAK DRIVE TIME
008 ~10 ^09 {1211} WPLJ LEGAL ID
009 ~10 ^09 {1213} WPLJ MORNING JINGLES
010 ~10 ^09 {1212} WPLJ SLOW JINGLE
011 ~10 ^09 {1203} WPLJ UP TRANSITION

```

If a match is found, it will appear highlighted at the top of the pick list. If this is the breaknote you want, press **[ENTER]** and go to step 2 on page 5-11.

If there is more than one match, you will be prompted to press **[A]** to search again. The next match will then appear highlighted at the top of the pick list. If this is the breaknote you want, press **[ENTER]** and go to step 2 on page 5-11.


You are prompted to press **[A]** to search again until there aren't any more matches, at which time you will receive the message, “No match, press any key...” As indicated, press any key.

You will be returned to the top of the pick list with the option to press **[S]** to search again. Press **[ENTER]** when the breaknote item you want is highlighted.

Then continue on to step 2 on page 5-11.

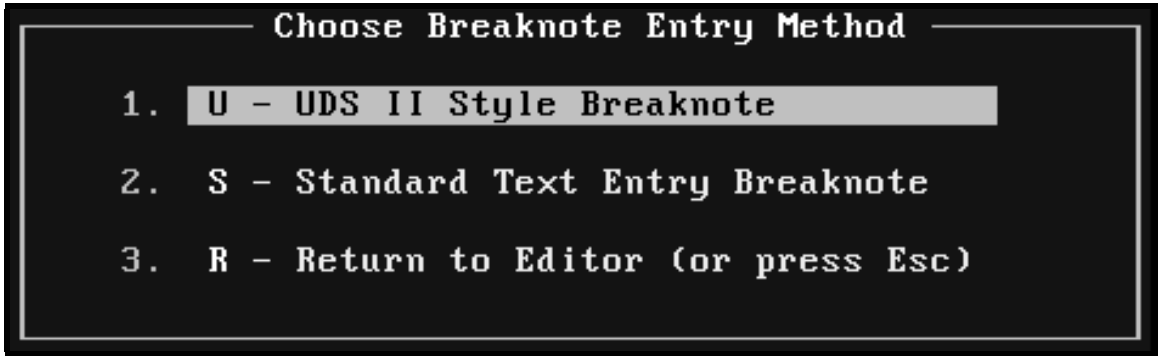
- 3) If you want to create a new breaknote rather than use one that already exists, enter **[0]** (zero) in the Num column and press **[ENTER]** or just press **[ENTER]** or **[Tab]** to skip to the next input field.

OAS will then generate the next unused number for that new breaknote. The text for a breaknote number is used for all breaknotes sharing that number, however, you may specify a different duration for each instance of the breaknote. This means that you use the same “spot-catcher” breaknote for both morning drive and overnights, but you can schedule a different estimated duration for the length of each spot break.

 Refer to the *Breaknote Data Management* section starting on page 5-15 for more information.

Clock Setup (Music and Breaknotes), continued

2. Regardless of which method you use to enter the breaknote number, *if you are using OAS with UDS*, a pop-up window will appear, as shown below. If you are not using UDS, go to step 3 on page 5-11.



Choose the breaknote entry method as requested.




- * If you select UDS II Style Breaknote by pressing **U**, you will see another pop-up:






Using the tab or **ENTER** key to move from field to field, type in the requested information in each field and press **F2** to accept your entry.

- “Spot-catchers” and other special UDS breaknotes and source numbers are explained in detail in chapter three of the *Ultimate Digital Studio User’s Manual*.


Clock Setup (Music and Breaknotes), continued




- * If you select Standard Text Entry Breaknote by pressing , the cursor will appear in the Clock Editor in the **Len** column. Type in the length of your breaknote, in seconds, and press . (If you type in a 3-digit number, you do not need to press .)

If this is a new breaknote number, press  (or press  (Tab)) to move to the next field and type in a description for this breaknote number. Any time in the future that you use this breaknote number, this same text will automatically be inserted in the description area.

If this is an existing breaknote number, the breaknote text automatically appears in the description field after you type in the breaknote number. You may edit the text, enter a length in seconds, or just press .

Note: If you change the text of an existing breaknote, then the text for all instances of that breaknote number will be changed on all clocks. This is a powerful feature, but should be used with care. It is best to think of breaknotes in terms of the number assigned to a particular breaknote.

 Refer to the *Breaknote Data Management* section starting on page 5-15 for more information on your breaknote numbers.

- * If you select to Return to the Editor, you may press  or , as indicated.
-  For more information about using breaknotes with the Ultimate Digital Studio, see chapter three of the *Ultimate Digital Studio User's Manual*.

Clock Setup (Music and Breaknotes), continued


3. Regardless of which method you used to enter the breaknote number, the cursor will appear in the **Len** column. Breaknotes permit you to enter a duration (in seconds) in the **Len** column.

Type in the length, in seconds, for this particular instance of this breaknote number and press **ENTER**. (If you typed in 3 digits, you do not need to type **ENTER**.)

The cursor will move to the description field.

- * If this is a new breaknote number, type in the description.
- * If this is an existing breaknote number, the description, as shown in the pick list, has already been inserted in the description column for you.

Note: If you change the text of an existing breaknote, then the text for all instances of that breaknote number will be changed on all clocks. This is a powerful feature, but should be used with care. It is best to think of breaknotes in terms of the number assigned to a particular breaknote.

 Refer to the *Breaknote Data Management* section starting on page 5-15 for more information on the breaknote pick list.

- * **If you want to Disable Machine Protection** so you can play two songs back to back from the same machine, press **D** to insert “Disable Machine Protection” between the events where you want OAS to overlook the back to back play from the same CD and/or CD player. This feature may be useful when airing syndicated shows on the UDS. Be sure to assign each syndicated show segment a different “artist” and “title”.
- * **If you want to copy the current clock to another clock**, press **ALT C**.

After you press **ALT C**, you be prompted to fill in the two-digit clock number for the destination clock that will receive the copy.

If you enter a number corresponding to a clock that already exists, the prompt `Copy to existing clock xx (Y/N)?`, where `xx` is the destination clock number you entered, appears letting you know that you are about to copy to an existing clock. In order to overwrite the existing clock, you must press **Y**. Any other key cancels the copy process.

This feature is useful when you need two or more clocks that are similar, but require different breaknote or music events in certain positions. You can copy an existing clock and make the needed changes to the copy, leaving the original intact. Insert the copy at the appropriate locations on the Assignment/Scheduling of Clocks screen (see next section).

Clock Setup (Music and Breaknotes), continued

- * **If you want to delete a clock**, pressing **[ALT] [D]** will delete the current clock that you are viewing in the Clock Editor. If you do choose to delete a clock, OAS requires you to confirm the deletion by pressing the **[Y]** key. Any other keypress cancels the deletion of the clock.

If you delete a clock, be sure to remove it from the Clock Assignment Grid (described in the next section). Deleted clocks do not contain any events. If you create a schedule using a deleted clock in the Assignment Grid, it is equivalent to scheduling with clock 00 (see next section).

5. To exit the Clock Editor, press **[ESC]**.

- * If you have not made any changes to the clock, then you will be returned to the input screen permitting you to specify the clock number to create, edit or delete. You may press **[ESC]** from this screen to return to the Format Management Menu.

- * If you have made changes to the clock, pressing **[ESC]** will not immediately return you to the prior screen. Instead you will see a pop-up window at the top of your screen indicating that the clock has changed. You then have three options at this point:

- [F2]** : Save whatever changes you have made to the clock.
- [F10]** : Discard all changes made to the clock during this session.
- [SPACE]** : Remain in the Clock Editor and continue to modify the clock.

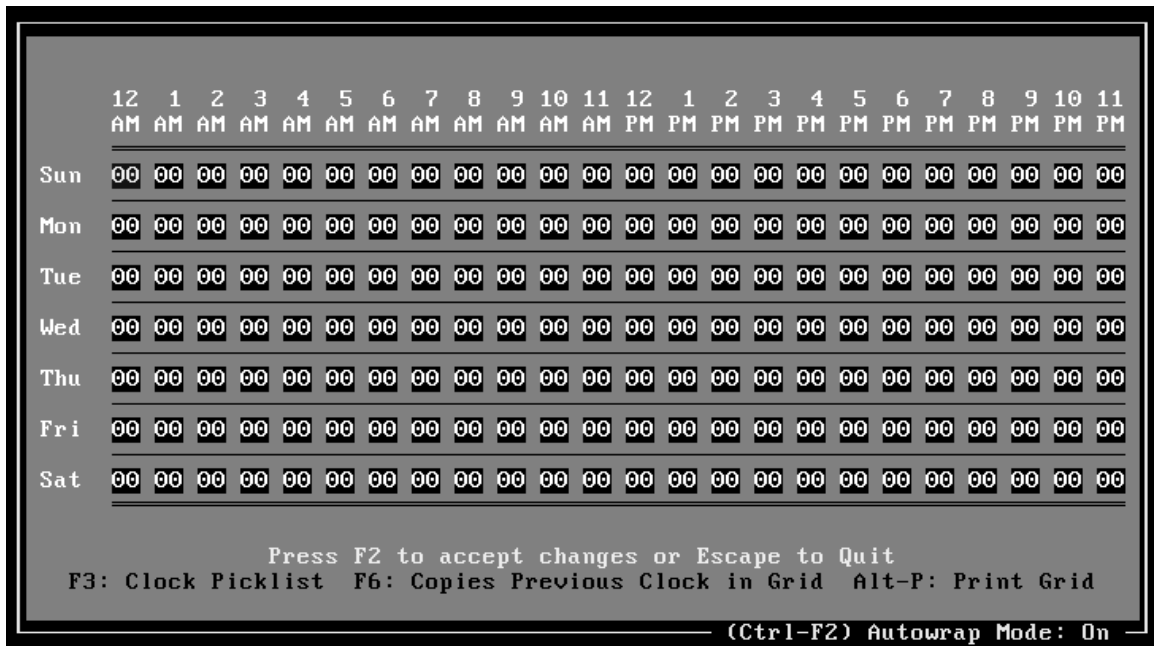
2. **A** Assignment/Scheduling of Clocks

In order for scheduling to take place in the Playlist Creation menu, clocks must not only be created, but the clocks must then be allocated for the day and hour they are to be used. You schedule clocks with this option. To use this feature, follow the directions outlined below.

1. From the Format Management Menu, use the **↑** and **↓** arrow keys to highlight Assignment/Scheduling of Clocks. With this feature highlighted, you may now press **F1** for online help for this feature. To select the option, press **ENTER**.

If you prefer, you may select this feature by typing one of the hot keys, in this case a **2** or an **A**.

The Assignment/Scheduling of Clocks window appears, as shown below:



Note: If you configured item 3, “Use International (non-USA) Date and Time format?” of your Special System Functions—Set Program Configuration Options to yes, the top row of your Assignment/Scheduling of Clocks window will display the hours 00 through 23 instead of the 12 a.m. through 11 p.m. hours shown above.

 See the *Special System Functions—Set Program Configuration Options* section starting on page 6-6 for more information.

Assignment/Scheduling of Clocks, continued

When OAS is started for the very first time, by default, the grid contains only ID 00 clocks. However, a schedule cannot be prepared for a day with only ID 00 clocks assigned. Clock ID 00 is reserved as the “empty” clock and may be used for hours for which you do not want any music scheduled, such as nighttime hours for a daytime-only station or a talk show.

If you have already assigned clocks, your current Clock Assignment Grid will appear. You may edit the clock if you wish.

The cursor appears in the slot corresponding to the first hour on Sunday.

You may navigate through the Clock Assignment Grid by using the arrow keys. Pressing **HOME** moves the cursor to the first hour on the current line and pressing **END** positions the cursor on the last hour of the current line.

2. For each hour of each day, enter the number of the clock you want used for that hour.

You may either enter the clock number directly or you may press **F3** to choose from a pick list of active clocks. If you want to copy the clock shown in the previous input field just to the left of the cursor position, press the **F6** key.

Note: If AutoWrap is “on”, continued pressing of the **F3** key is an easy way to fill the grid with a clock. The AutoWrap status is indicated in the bottom right corner of the window, and can be toggled on or off by pressing **CTRL F2**.

Note: You cannot schedule a clock that has not yet been created. If you plan to make a new clock, first enter the Clock Setup option (as described in the previous section) and then make use of the Clock Editor to assign events to that clock. Once you have created a clock you may allocate it in the Clock Assignment Grid.

If you try to enter the number of a clock that has not been yet created, OAS will tell you so and require that you enter a different clock number.

3. Once you have filled in each and every hour in the Clock Assignment Grid, press **F2** to accept your clock allocation entries.

If you accidentally press **ESC** and have made changes to the grid, you will be asked, Discard changes made to grid? (Y/N). Any keypress other than **Y** keeps you on the grid. If you press **ESC** and the Clock Assignment Grid has either been previously saved via an **F2** keypress or it has not been changed, you will immediately be returned to the Format Management Menu.

3. **B** Breaknote Data Management

The Breaknote Data Management feature allows you to add, change and delete breaknote text to your list of breaknotes. The Breaknote Data Management feature allows you to assign text to 100 breaknote numbers (001-100). The text you assign here will be the text that appears on your **F3** breaknote pick list when you are creating your clocks. (See the *Clock Setup (Music and Breaknotes)* section starting on page 5-3.) The text you assign to your breaknote numbers here is also the same text that will appear in your schedule. In addition, you may use the Breaknote Data Management feature to print a list of all breaknotes and get a list of unused breaknote numbers.

To use this feature, follow the directions outlined below.

1. From the Format Management Menu, use the **↑** and **↓** arrow keys to highlight Breaknote Data Management. With this feature highlighted, you may now press **F1** for online help for this feature. To select the option, press **ENTER**.

If you prefer, you may select this feature by typing one of the hot keys, in this case, a **B** or a **B**.

The Breaknote Data Management window appears, as shown below:

```

OAS Scheduler Breaknote Data Management / Editor
-----
↑ - Up one position  ↓ - Down one position  Enter: Edit the current item
Del: Deletes the text of highlighted breaknote  Alt-P: Print breaknotes
Esc: Cancel current edit changes on highlighted item or quit editing
-----
001 ~10 ^09 {3008} KLUE Legal I.D.
002 ~10 ^09 {3001:3007} KLUE Jingle
003 ~10 ^09 {2012:2013} Tejano 108 Legal I.D.
004 ~10 ^09 {2001:2011} Tejano 108 Jingle
005 ~10 ^09 {2007} KPLZ/SEATTLE'S NUMBER ONE!!
006 ~10 ^09 {2001} KPLZ / SHORT SHOTGUN
007 ~10 ^09 {6012} KSCS Legal I.D.
008 ~10 ^09 {6001:6008} KSCS Jingle #1
009 ~10 ^09 {6011:6013} KSCS Jingle #2
010 ~30 ^9 {7003} VINCE GILL PSA
011 ~10 ^09 {2003} KPLZ TRANSITION
012 ~10 ^09 {2002} KPLZ/TRIPLE THE MUSIC
013 ~10 ^09 {2003} KPLZ FAST/MEDIUM
014
015
    
```

The standard scrolling keys are supported, as indicated at the top of the window.


Breaknote Data Management, continued

The Breaknote Data Management feature allows you to assign text to 100 different breaknote numbers. Notice the lines are numbered 001-100. In the example on the previous page, breaknote number 001 is assigned the following text:

```
~10 ^09 {3008} KLVE Legal I.D.
```




This is a UDS style breaknote which commands the UDS to do the following:



“For a duration of 10 seconds, from source number 09, play cart number 3008, which is the KLVE Legal I.D.”

 For a listing and explanation of UDS breaknote codes and source numbers, please read chapter three of the *Ultimate Digital Studio User's Manual*.


If you are not using UDS, you may want to assign simple text such as, “Legal I.D.”.

Regardless of whether you are using UDS or not, each time you insert the breaknote number 001, the text you assign here, will be the text that appears on your breaknote pick list, in your clocks, and on your schedule.


2. Use the  and  arrows to move the highlight to the line on which you want to create or edit breaknote text and press .

If you want to erase or delete the current line of text, press  then press . The text of the highlighted breaknote will be erased, leaving you a blank line to enter new text.

3. Type in the new text for the breaknote.

The text you enter here will be shown on the  breaknote pick list. It is also the text that will show up on your schedule for that particular breaknote number.

The text for a breaknote number is used for all breaknotes sharing that number, however, you may specify a unique duration for each instance of the breaknote. Therefore, if you change the text of an existing breaknote, then the text for all instances of that breaknote number will be changed on all clocks.

 Again, for a listing and explanation of UDS breaknote codes and source numbers, please read chapter three of the *Ultimate Digital Studio User's Manual*.

Breaknote Data Management, continued


4. If you want to print a list of your breaknotes, press **ALT P**.
5. Pressing **ESC** cancels the current edit changes or quits editing. You will be prompted:

Your breaknotes have been changed!

F2 - keeps all changes made.

F10 - discards ALL changes made to the breaknotes.

Any other key - continue editing.

- * To accept your changes, press **F2**.
 - * To discard all changes made to the breaknotes, press **F10**.
 - * Press any key other than **F2** or **F10** to continue editing.
6. Press **ESC** again to return to the Breaknote Data Management Menu.
-  For more information about using breaknotes with the Ultimate Digital Studio, see chapter three of the *Ultimate Digital Studio User's Manual*.

4. **M** Music Category Management

Using this feature, you may assign names to the 24 OAS music categories. The name assigned to a category does not affect operation in any way, but it does help you remember what types of songs are in each category, particularly if you select names that are descriptive for the characteristics of that category, such as “Hot Current,” “Oldies,” “Bizarre” or “Sleepy.” To use this feature, follow the directions outlined below.

1. From the Format Management Menu, use the arrow keys to highlight Music Category Management. Press **F1** for online help for this function. To select the option, press **ENTER** or use one of the hot keys, **4** or **M**. the Music Category Management window appears, as shown below:









Enter Category Names below (13 valid categories available for scheduling):

Category Name	Songs	Depth	Category Name	Songs	Depth
00 Hold	1729	0%	12	0	0%
01 Current	207	33%	13	0	0%
02 Recurrnet	187	33%	14	0	0%
03 Golden Oldie	177	33%	15	0	0%
04 Upbeat Oldie	80	33%	16	0	0%
05 Slow Oldie	0	0%	17	0	0%
06 Novelty	245	33%	18	0	0%
07 Joe's Stash	249	33%	19	0	0%
08 Mornings ONLY	265	33%	20	0	0%
09 Country	0	0%	21	0	0%
10 Classical	0	0%	22	0	0%
11 Christmas	0	0%	23	0	0%



Press F2 to accept changes or Escape to Quit
Alt-P: Print Music Category Information

This screen shows the category number, the name of each category, the number of songs in each of the categories, as well as the search depth percentage for all categories containing at least one song (except for category 00, which is reserved for songs on hold). The top line of the screen also informs you about the number of valid categories available for scheduling.

Music Category Management, continued

2. The  and  keys move the highlight bar to each category's "Name" input field. It is the only field for each category that you can change on this screen. Once you have reached the bottom of the first column (Category 11), pressing  will move the highlight bar up to the top of the next column, (Category 12). The  (Tab) and  (Shift-Tab) keys function the same as the  and  keys. In addition, after you have input the name for a category, you may press the  key to move to the next category.

It is not absolutely necessary to assign category names, but you should take advantage of this useful feature. Typical category names might be "Hot Currents," "Recurrents," "Power Gold," or "Lunar." The text description that you choose is totally at your discretion and may include mixed-case characters and spaces. There is no need to name categories that you do not plan on using.

3. After you have typed in descriptive names for your categories, press  to accept those names. You may then press  to leave this phase of the program and return back to the Format Management Menu.

5. Return to Main Menu

Choosing this menu item (or pressing ) returns you to the OAS Main Menu.

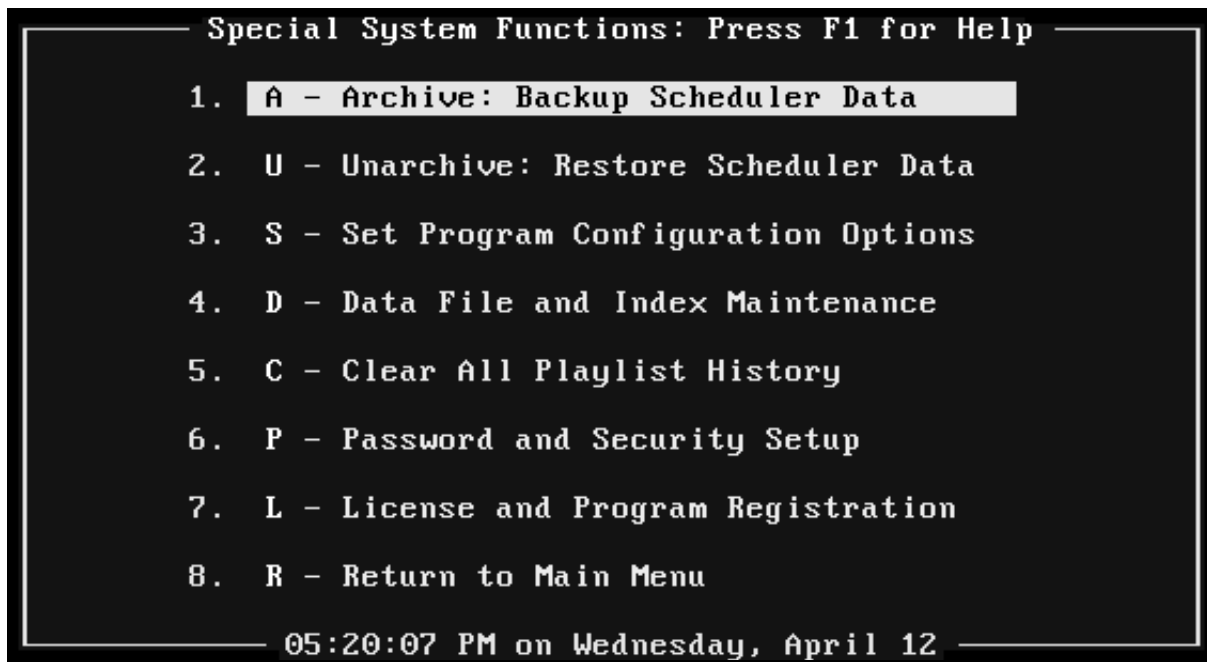
➤ ***Chapter Six***

Special System Functions Menu

Special System Functions Menu

This menu contains special functions that allow you to backup or restore system data, set program options and passwords, and perform data file repair and maintenance.

From the OAS Main Menu, highlight Special System Functions and press **ENTER**, or use the hot keys, which in this case is the number **5** or the letter **S**. The Special Systems Functions Menu appears, as shown below:



Each of the features on this menu are fully explained on the following pages.

1. **A** Archive: Backup Scheduler Data

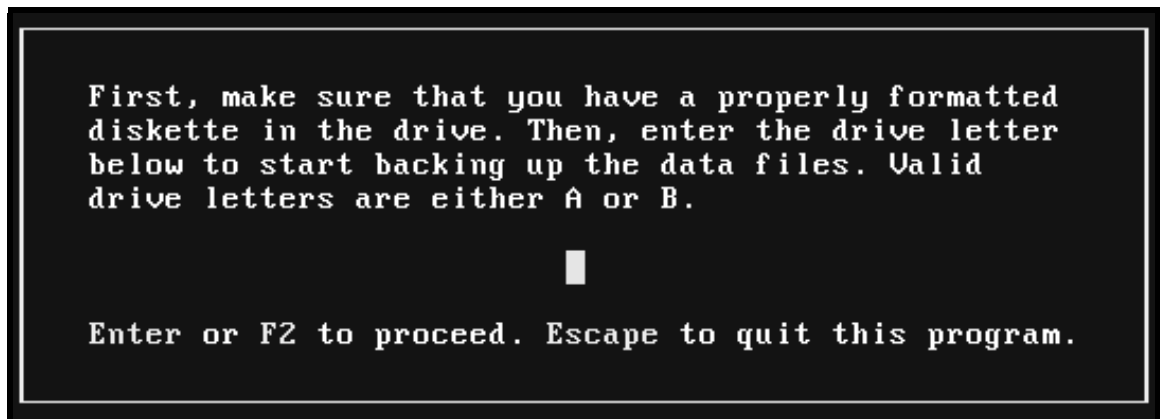
The Archive: Backup Scheduler Data feature creates a backup of your OAS data files. Please note that the actual program files are not backed up; these files are readily available on your OAS program diskette.

To use this feature, follow the directions outlined below.

1. From the Special System Functions menu, use the **↑** and **↓** arrow keys to highlight Archive: Backup Scheduler Data. With this feature highlighted, you may now press **F1** for online help for this feature. To select the Archive: Backup Scheduler Data feature, press **ENTER**.

If you prefer, you may select this feature by typing one of the hot keys, in this case the number **1** or the letter **A**.

The Archive: Backup Scheduler Data window appears, as shown below:



2. Make sure you have a properly formatted diskette available prior to choosing this item and that you have placed it into the appropriate diskette drive. The backup utility will save your data to a diskette in either drive A: or B:. The backup procedure itself is quite simple.
3. Following the on-screen prompts, type an **A** for the A: drive or **B** for the B: drive. Do not type the colon, just the letter.

Archive: Backup Scheduler Data, continued

4. Press either F2 or ENTER to accept your input. You will be prompted to confirm:

Are you sure? (y/N)

5. Press the Y key to continue the backup process. The backup procedure deletes all files on the target diskette before it copies the archive file.

The file name for the archive file is SKD_BACK.LZH. Data compression techniques are used to ensure that the backup will fit on most diskettes for an average-size music database (about 1600 songs). If your database is too large to back up onto one diskette, the system will prompt you to insert additional diskettes until the backup has been completed. On Air Digital encourages the use of 1.44 MB (3.5-inch, high-density) diskettes for archiving.

6. When the Archive process is complete (as indicated on the screen), press SPACE to return to the Special System Functions Menu.

Incidentally, SKD_BACK.LZH is also stored on your hard drive in the \OAS directory as an additional “safety net” in case your diskette is lost or destroyed.

We also recommend a set of five (or seven) backup diskettes, labeled with each day of the week. The backup diskettes should be replaced every six months.

Each time you quit OAS from the Main Menu, you're asked if you'd like to make a backup. If you answer with anything but N, the backup procedure is run by default. Although this may seem like an annoyance, you'll find that keeping a fresh backup is in your interest. Also, you'll generally find that if you are having problems and call On Air Digital Technical Support, the first question you'll be asked is: “Do you have a current backup?” Please backup every day!

2. **U** Unarchive: Restore Scheduler Data

In order to use the Unarchive: Restore Scheduler Data feature, you must have already made a backup diskette. Choosing Unarchive: Restore Scheduler Data will overwrite all current data files for OAS and replace them with the data files from the backup diskette.

IMPORTANT! Restore should be used only if the current data is so corrupted that it can't be repaired and if you have made a backup recently. Please be sure to back up every day so that in the event of problems, you can restore OAS with current data.

To use this feature, follow the directions outlined below.

1. From the Special System Functions Menu, use the **↑** and **↓** arrow keys to highlight Unarchive: Restore Scheduler Data. You may now press **F1** if you want online help for this feature. To select this feature, press **ENTER** or use one of the hot keys, **2** or **U**.

The Unarchive: Restore Scheduler Data window appears, as shown below:






2. Following the instructions on the screen, type the drive letter corresponding to the diskette drive; type either **A** for A: or **B** for B:. Do not type the colon.
3. Once the program has searched the diskette and found the archive file, SKD_BACK.LZH, the date and time of the backup are displayed. You will be prompted:







Are you sure? (y/N)

4. Press **Y** to start the process of restoring your data backup, or press **ESC** to cancel the process.
5. When OAS indicates that the restore was successful, press **SPACE** to return to the Special System Functions Menu.

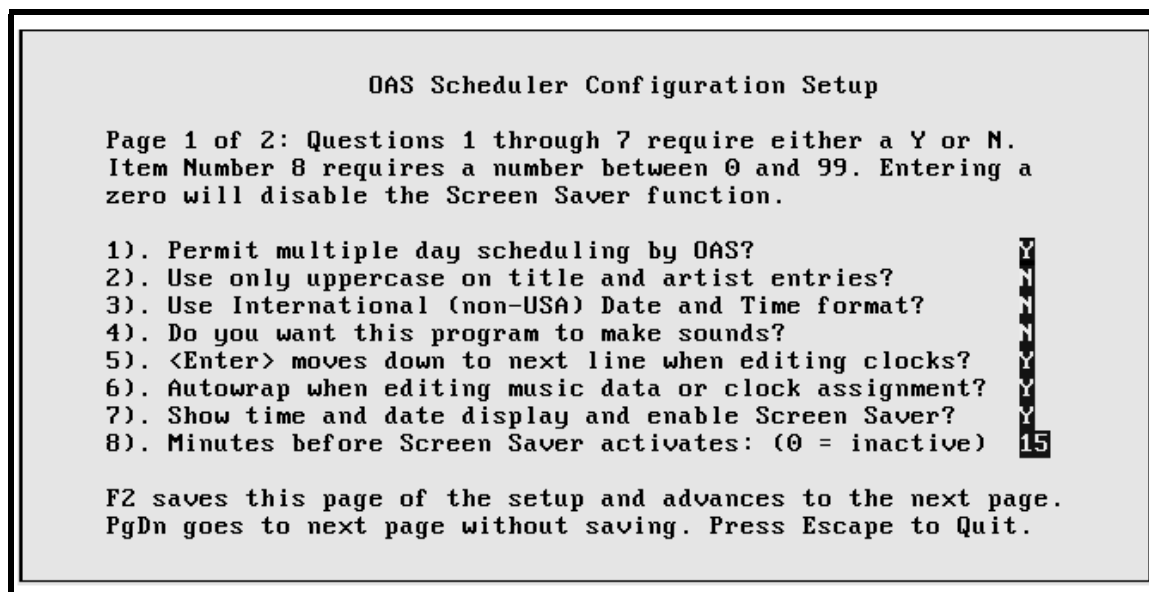
3. Set Program Configuration Options




The operation of OAS can be customized to your liking from this screen. Using this feature you can set the date and time display and enable items such as sounds, AutoWrap and the Screen Saver. You can also enable a schedule audit log and set basic scheduling rules, including title, artist group and gender separation. In addition, you can set the category search depth. The Set Program Configuration Options feature uses a two-page screen. You can select the page you want by pressing either  or  (as shown in the on-screen instructions). You may make changes as needed, or you can view your current settings and then press  to leave everything unchanged.

To use this feature, follow the directions outlined below.

1. From the Special System Functions Menu, use the  and  arrow keys to highlight Set Program Configuration Options. You may now press  if you want online help for this feature. To select this feature, press  or use one of the hot keys,  or .

The first page of the Set Program Configuration Options window appears, as shown below:



2. Follow the directions on the screen.
 - * Press  to save this page of the setup and advance to the next page.
 - * Press  to go to the next page without saving.
 - * Press  to quit.

The second page of Program Configuration options is shown on the next page.

Set Program Configuration Options, continued

OAS Scheduler Configuration Setup	
Page 2 of 2: Questions 9 through 12 require either a Y or N. Answers to items 13 through 17 must be numeric, 0 disables.	
9). Create a schedule audit log? (Slows down scheduling)	N
10). Perform a backup to hard drive just before scheduling?	N
11). UDS Machine separation on during music scheduling?	N
12). Protect against scheduling songs in the same hour?	Y
13). Number of music positions for TITLE protection (0-45):	25
14). Number of music positions for ARTIST protection (0-45):	20
15). Number of music positions for GROUP protection (0-45):	20
16). Number of positions permitted for same gender (0-22):	0
17). Search depth % for all categories (1-100, 33 default):	33%
F2 saves this page and then moves back to the previous page. PgUp goes back to the prior page without saving. Press Escape to Quit.	

Following is an explanation of each item in the Set Program Configuration Options menu:

1. Permit multiple day scheduling by OAS? (N)

If set to Y (or yes), you can schedule up to seven days at a time. If you are using UDS, set this option to N (or no). UDS uses one-day scheduling only.

2. Use only uppercase on title and artist entries? (N)

If set to Yes, then all of your keystrokes are converted to uppercase as you enter artist or title information in your music database. The default is to use mixed-case. All other entry fields, such as breaknotes and music category names will still use mixed-case style. Pre-loaded databases from On Air Digital are provided in mixed-case.

To change this item to Yes, type .

3. Use International (non-USA) Date and Time format? (N)

If set to Yes, this forces time displays to a 24-hour (military style) clock instead of using a.m. and p.m. Dates are displayed using DD/MM/YY notation instead of MM/DD/YY as used in the United States.

Set Program Configuration Options, continued

4. Do you want this program to make sounds? (Y)

Setting this to No disables occasional sound effects made by the program. Error message windows, regardless of this setting, will still be accompanied by a distinguishable sound to call your attention to these important messages.

5. <Enter> moves down to next line when editing clocks? (Y)

As you insert new elements in your clock, it is convenient for the cursor to move down to the next event once you have accepted the clock item. If you set this to No, the highlight bar remains on the current line in the Clock Editor and it is up to you to press to move to the next field.

6. AutoWrap when editing music data or clock assignment? (Y)

AutoWrap is a design feature that causes the cursor to move from one input field to the next once you have completed entering data in the field. You may wish to disable this feature if you are going to, for instance, scan through a list of songs to change just a single characteristic. If AutoWrap is on, it then becomes an annoyance, because the cursor wraps to the next field after entry is complete. You may wish to leave AutoWrap enabled in this screen and use to toggle the current AutoWrap mode to off if you find that it is hampering your efficiency.

If you do turn AutoWrap off in this screen, you can enable it for the current entry session by using the toggle.

7. Show time and date display and enable Screen Saver? (Y)

By leaving this option set to Yes, the current date and time are displayed on all main function menu screens. Other screens do not show the time and date by design. In addition, a screen saver will be active only if this option is set to Yes (and if the current screen is a main function menu screen).

Setting this item to No not only turns off the date and time display, but also disables the screen saver. You cannot have the screen saver unless the time and date display is active.

8. Minutes before Screen Saver activates: (0 =inactive) (0)

You can have the benefit of the time and date display without having the screen saver. Set this option to 0 (zero) if you do not wish to use the screen saver. Otherwise, set this to any value between 1 and 99, representing the number of minutes that must pass with no keyboard activity before the screen saver activates.

Set Program Configuration Options, continued

9. Create a schedule audit log? (Slows down scheduling) (N)

This causes a very detailed report of the scheduling process to be created. This file can be viewed from the Playlist and Scheduling menu. If you are having problems with unscheduled positions, or if you are just not happy with the music flow produced by OAS, the answers can usually be found by wading through the highly detailed and lengthy audit. On slow computers with a large database, large categories and a deep search depth, you'll find that setting this item to Yes slows scheduling considerably. In addition, the audit report can use over a megabyte of disk space, since every operation during scheduling is written to disk.

10. Perform a backup to hard drive just before scheduling? (N)


If you set this option to Yes, a minimal backup is made just to the hard drive (not to a diskette) before each scheduling session. THIS DOES NOT ELIMINATE THE NEED TO MAKE A DATA BACKUP! This limited backup makes it possible for you to quickly return to the pre-scheduling state if you are unhappy with a schedule you've just generated and want to make some changes, but still maintain the current scheduling stack order.

Setting this configuration item to Yes is the same as having the ability to un-schedule the most recently-created playlist.

11. UDS machine separation on during music scheduling? (Y)

When set to the default of Yes, back-to-back machine protection is turned on as an unbreakable scheduling rule. Any song not assigned to a CD player is ineligible for scheduling if machine protection is set to Yes. The only reason this should ever be disabled is in the event you are using duplicate libraries. In this case, you must also set the UDS to "force CD player rotation."

Note: If you are planning to run special programming from CD and need to allow the same CD or machine back-to-back, the OAS Clock Editor has a provision to override machine protection at specific positions in specific clocks.

If you do set this option to N, the OAS displays a pop-up giving you the option of enabling protection from playing the same DISC back-to-back. Enter 'Y' to enable disc protection or 'N' to disable disc protection. Then press  to accept.

Set Program Configuration Options, continued

12. Protect against scheduling songs in the same hour? (Y)

Setting this item to Yes will cause OAS to test each song for last play in same hour. A violation value (explained later in this manual) is assigned to a song that has most recent play history in the hour that it is a current candidate for scheduling.

13. Number of music positions for TITLE protection (0-45): (20)

This tells OAS how many music positions to examine before and after the event being scheduled to avoid scheduling songs with the same title.

This feature keeps OAS from attempting to schedule songs with the same title too closely. If set to 0 (zero), title protection is disabled. By design, OAS “looks around” breaks to provide protection. So, a clock that has a lot of breaknotes with 14 music positions gets the same protection as a clock with 14 music positions and no breaknotes.

14. Number of music positions for ARTIST protection (0-45): (20)

This works the same as title protection except that it applies to the artist, based upon the spelling of artist name.

15. Number of music positions for GROUP protection (0-45): (20)

This works the same as both title and artist protection except that it applies to the character or characters you assign to the song for the two possible group codes.

For example, this value lets you protect the solo artist “Paul McCartney” from playing too closely to “The Beatles” and/or “Paul McCartney and Wings”.

Set Program Configuration Options, continued

16. Number of positions permitted for same gender (0-22): (0)

This option allows you to control the maximum number of songs by artists with the same gender code that may be scheduled in a row. Setting this option to zero disables all gender protection, even if you have songs in your music library coded with gender values.

Setting this option to 3 is usually a realistic starting value. Setting it to 1 may constrict the scheduling process, depending upon how you've coded your library.

For example, a country format with gender set at 1 and all songs by males having an 'M' code is unrealistic. Typically, the average country station's library is 60% biased toward male artists. If you set gender separation at 1, you've effectively cut off 60% of your library from scheduling potential! The best solution in this situation is to set it at 2 and not code any male artists. This way, duets, females, and instrumentals can be afforded adequate, yet realistic, gender protection.

17. Search depth % for all categories (1-100, 33 default):

This percentage value tells OAS how far it can search in each category as it is scheduling music. The default of 33% usually works well. If you find that OAS is generating occasional unscheduled positions, you might try setting this value slightly higher. Try to avoid setting it higher than 70% in most situations. The need for a higher search depth for proper scheduling may indicate a deeper problem in the music database or the allocation of CDs in the UDS tray maps.

Follow the directions as indicated at the bottom of the seconds page:

- * Press **F2** to save page two options.
- * Press **PG UP** to go back to the prior page without saving.
- * Or press **ESC** to quit and return to the Special System Functions Menu.

4. **D** Data File and Index Maintenance

IMPORTANT! This menu should be selected only when you are having problems with OAS.

The Data File and Index Maintenance feature allows you to rebuild index files. It also allows you to reset UDS machine and slot fields in the music database to zero.

To use this feature, follow the directions outlined below.

1. From the Special System Functions Menu, use the **↑** and **↓** arrow keys to highlight Data File and Index Maintenance. You may now press **F1** if you want online help for this feature. To select this feature, press **ENTER**.

If you prefer, you may select this feature by typing one of the hot keys, in this case, a **4** or a **D**.

The Data File Maintenance window appears, as shown below

```
----- Data File Maintenance: Press F1 for Help -----
1.  A - Artist Index Rebuild
2.  C - Category Index Rebuild
3.  T - Title Index Rebuild
4.  I - Index File System: Total Rebuild
5.  S - Set UDS Machine and Slots to Zero
6.  R - Return to Prior Menu (or press Esc)

----- 05:24:13 PM on Wednesday, April 12 -----
```

2. You now have another menu to select from. Use the **↑** and **↓** arrows to highlight your choice and press **ENTER**, or use the appropriate hot key to make your selection.

In general, you will be asked to respond to a “y/N” message before OAS carries out the requested action. Follow the directions on the screen.

Each of the items on this menu are discussed on the following pages.

Data File and Index Maintenance, continued

1. Artist Index Rebuild

This forces OAS to rebuild the internal index files used to maintain the sorted artist listing. Additionally, a numeric value is assigned to each unique artist to allow the scheduler to maintain artist separation.

The *key value* used by OAS for each artist is shown on the song entry screen. If you notice that songs by the same artist are scheduled closer to each other than you would prefer, look up those conflicting songs in the music database and note the artist key value. Often a correction of spelling will be sufficient to get the right key value. Remember that spacing and punctuation count too. As far as OAS is concerned, “R.E.O. Speedwagon” and “REO Speedwagon” are as different as “Debbie Boone” and “Public Enemy”!



For a detailed explanation of artist group key values, see *OAS Scheduling Theory* in Appendix A.

2. Category Index Rebuild

This forces OAS to rebuild the internal index files used to maintain the sorted category listing.

This index file also contains the number of songs allocated for each category. It is essential that this number be correct for scheduling to proceed properly.

3. Title Index Rebuild

This forces OAS to rebuild the internal index files used to maintain the sorted title listing. Additionally, a numeric value is assigned to each unique title to allow the scheduler to maintain title separation.

The entire text of the title field is used to generate an index key value, but the case of the characters is not significant.

Please refer to the section above dealing with “Artist Index Rebuild” for more information on how an index key value is generated, and remember spelling is very important.

Data File and Index Maintenance, continued

4. Index File System: Total Rebuild

Note: Select this menu option only when you are having problems with OAS.

If there is major corruption evident in the OAS index file system, this option should be run. To run this option, follow the steps outlined below:


- 1) Create a backup of your data, but DO NOT use the same diskette used for the most recent backup!
- 2) Quit OAS and return to the system prompt, usually C:\OAS.
- 3) Type **C H K D S K / F** **ENTER**. Refer to the MS-DOS manual for additional details if CHKDSK/F shows errors and prompts for a Y/N answer.
- 4) Finally, restart OAS and then select **Index File System: Total Rebuild**. It may take anywhere from 5 to 30 minutes depending on your computer and database size. (These times are only an estimate; the actual time may vary from this estimate depending on your system.)

IMPORTANT! If problems persist, restore a backup made prior to evidence of corruption in the database. If, after restoring the backup, you are still having problems, call On Air Digital for assistance.

5. Set UDS Machine and Slots to Zero

Note: This menu option should be selected only when you are changing all of your UDS tray map assignments.

This menu item sets machine and slot information for all songs in your database to 0 (zero). You may wish to run this utility if you decide to “re-tray” all of your CDs for the UDS. This ensures that you start with a clean slate. You should then choose the Revise or Review Tray Maps option from the Utilities for the UDS menu to update the OAS music database with new tray map information.

 The Utilities for the UDS/UDS II are discussed in chapter 3 of your *UDS/UDS II User's Manual*.

6. Return to Prior Menu

Choosing this menu item returns you to the Special System Functions Menu. Pressing **ESC** will yield the same result as choosing this item.

5. **C** Clear All Playlist History

Note: This menu option should be selected only when you are having problems with OAS!

This powerful option will erase ALL scheduling history that is maintained by OAS.

Unless instructed to do so by On Air Digital Technical Support, you should not select this option. In the event that OAS refuses to schedule, this will wipe out all the history which allows you to make a playlist.

Should you need to use this feature, follow the directions outlined below.

1. From the Special System Functions Menu, use the **↑** and **↓** arrow keys to highlight Clear All Playlist History. You may now press **F1** if you want online help for this feature. To select this feature, press **ENTER**.

If you prefer, you may select this feature by typing one of the hot keys, in this case, the number **5** or the letter **C**.

2. You will be asked to confirm:

Clear ALL playlist history? y/N

3. Press **Y** to proceed. Typing any other key exits the Clear All Playlist History feature and returns you to the Special Systems Functions Menu.

6. **P** Password and Security Setup

Many portions of OAS may be password-protected by choosing this feature.

Password protection is available for many sections of OAS. Any, all or none of these can be password protected. One password can be used for all of the items, or any combination of different passwords can be used to create “security levels.” Passwords may be anywhere from 1 to 6 alphanumeric characters in length, and capitalization is not important.

To use this feature, follow the directions outlined below.

1. From the Special System Functions Menu, use the **↑** and **↓** arrow keys to highlight Password and Security Setup. You may now press **F1** if you want online help for this feature. To select this feature, press **ENTER**.

If you prefer, you may select this feature by typing one of the hot keys, in this case, a **6** or a **P**.

The Password and Security Setup window appears, as shown below:

OAS Scheduler Password Setup: Version 9.0

Enter the passwords for the items as shown in the form below. You may disable a password by deleting it from this entry form:

Password Setup (Access to change passwords):	
System (Configuration):	
Utilities for the UDS:	
Format Management (Clocks/Categories):	
Music Database Management:	
Change Playlist Date:	
Generate a Playlist:	
OAS Main Menu (Opening Screen):	



Press F2 to accept this password setup or Escape to Quit.

Password and Security Setup, continued

The following is a list of the various items that may password protected:

- Password Setup (Access to change passwords)
- System (Configuration)
- Utilities for the UDS
- Format Management (Clocks/Categories)
- Music Database Management
- Change Playlist Date
- Generate a Playlist
- OAS Main Menu (Opening Screen)

Note: Setting the OAS Main Menu password protects the entire program!

2. Use the  and  arrows to highlight the item you want password protected.
3. Type in your password. The password may be a combination of letters and numbers, up to 6 digits or characters in length.

Entering a blank on a password field disables password protection for that item. Be sure to set a password for the Password Setup option, otherwise anyone can access and change the passwords.

4. Press  to accept the password setup.

IMPORTANT! Remember your password! Don't set up a system that is so complex that it becomes difficult to navigate through the various levels of menus.

Note: A typical password setup has the OAS Main Menu set with a password that most authorized personnel are given. Passwords known only by the supervisor are assigned to the Password Setup, System Configuration, Format Management and Change Playlist Date features.

7. License and Program Registration


Unless you are registered as DEMO, your OAS is licensed to you on a one-time basis. Thus, you may use the program for life. Typically, this screen is seen only once by the owner of the OAS software.

You will need to use this feature in the following situations:

- If you wish to upgrade to full registration from the 30-day period granted for DEMO use
- If you wish to change the name of the registered user (the name that appears on the menu screens)
- If you wish to move OAS to another computer

Contact On Air Digital by phone to register or re-register the program. You must be in front of your computer with OAS active in order to register the program.

You may call On Air Digital Technical Support at (800) 765-2930 during regular tech support hours of 8 a.m.-5 p.m. Central time, Monday through Friday, excluding U.S. holidays.

 Refer to the *Help!* section in chapter one of this manual if you need further information on contacting On Air Digital.

It is important to note that OAS is licensed for use on a single computer. If you plan to move OAS to another computer at your site, you cannot copy the files from one computer to the other. The program must be installed and registered on the other system. All of the data can be restored to the new computer by using the Archive/Unarchive function, after the software has been installed and registered in the new computer.

8. Return to Main Menu

Choosing this menu item returns you to the OAS Main Menu.

➤ ***Chapter Seven***

OAS Scheduling Theory

OAS Scheduling Theory

This section explains the theory and algorithms used by OAS to construct a music playlist or schedule. Unlike other software, OAS doesn't permit a user to “shoot himself in the foot” by setting up rules that could choke the scheduling process.

It isn't necessary to read and understand this section in order to effectively use OAS. But for those interested in gaining a better understanding of how OAS works its “magic”, or to help troubleshoot scheduling conflicts, this section will attempt to explain how scheduling is accomplished.

There's no need to assign a violation hierarchy or set scheduling policies. All you have to do is tell OAS how far apart you are willing to tolerate the same artist, group and title. Plus, you can enable gender separation and hour separation. Things like intensity and sound coding are automatically enabled by assigning these values to individual songs.

Songs are scheduled according to the ranking of the category number and are scheduled according to that hierarchy in a single pass. Thus, all songs residing in Category 01 are scheduled before any songs in Category 02. Songs in Category 00 are never eligible for scheduling.

It is best to put smaller, high turnover songs in categories such as 01, 02, 03. To prevent machine conflict, syndicated programs should also be placed in lower-numbered categories. Larger, low-turnover songs should be placed in categories such as 09, 10, 11 or higher.

The original goal of OAS was to produce a playlist for the UDS. For this reason, the program is designed so that a schedule should be produced without unscheduled positions. As a result, OAS would rather have an aesthetically imperfect schedule than one with unscheduled positions. Consequently, there are just a few conditions that will lead to an unscheduled position:

1. If UDS machine separation is enabled and any song candidate shows source zero (and thus is not assigned to any CD player), then that song is given the worst case violation value of 32,767.
2. If UDS machine separation is enabled and any song candidate shows a machine number that is the same as the first song position adjacent to the current song, before or after, then that song is given the worst case violation number of 32,767.
3. If the song candidate for scheduling shares the same index key value for both title and artist and that song is inside both the artist and title separation protections set by the user, it is assigned the worst case violation value of 32,767. This protects against playing duplicate copies of the identical song, even if the duplicates are on different CDs.

OAS Scheduling Theory, continued

4. If UDS machine separation is disabled and the adjacent song shows the same CD identifier, then that song is assigned the worst case violation value of 32,767.

In all of the above situations, that song candidate is passed over and OAS then digs into the current scheduling category for another song to test. If the user-defined category search depth is reached and all songs thus far have the worst case violation value of 32,767, then an unscheduled position will result.

In all cases, OAS attempts to schedule the “most rested” song, the song that appears at the top of the category stack order. If the “most rested” song does not pass the four tests described above, it is not considered for any other testing and OAS then moves to the next song in the stack.

Other tests are performed to attempt to schedule the best flow of music possible. Ideally, OAS tries to schedule *not only the most rested song*, but one that has no violation value associated with it.

In this sense, OAS is a dual pass scheduler for a given category. If the search depth percentage has been attained for the current category, that category is then re-scanned (in its current stack order) in an attempt to find a combination of the most rested song with the lowest violation value.

Specifically, the hierarchy of testing for characteristics other than machine separation is:

- a. Group Separation
- b. Artist Separation
- c. Title Separation
- d. Hour Separation
- e. Gender Separation
- f. Intensity Conflicts
- g. Sound Code Conflicts

OAS assigns a relatively high, but not unbreakable, violation for any song failing to meet your separation criteria for any of the above three characteristics. The formula is such that the closer, in terms of music positions, a song candidate is to the same artist, group or title key, the more violation points will be assigned.

OAS Scheduling Theory, continued

For example, a song eligible for scheduling by Garth Brooks that is currently under consideration with a prior song by Garth Brooks located 10 positions away is given more of a violation value than a song by Pam Tillis eligible for potential play, but conflicting with another song by Pam Tillis 15 positions away. The violation value is also mitigated by the current search depth by using a multiplier corresponding to the depth of the song candidate. In this example, Garth Brooks (if at 1% search depth) would be a better candidate than Pam Tillis (if at 30% search depth). There is not a fixed violation value for any of the artist, group or title conflicts that might occur during scheduling. The violation value is based upon a formula that takes into account your setting for the separations. If you want to know the absolute values produced by OAS as it schedules, view the Schedule Audit Report and look at the violation values assigned.

After dealing with the very important rules associated with artist, group and title separation, OAS next considers whether the song candidate would conflict because it played in the same hour when last scheduled. A violation value of 140 is assigned to a song's value if it has most recently played in the current scheduling hour. This value of 140 is then multiplied by another value based upon the current search depth in the category, so that a more rested song has a better chance of getting scheduled. In addition, the number of days since that song last played is weighted into the violation value. Thus a song that played 10 days ago in the 1 p.m. hour receives a lower violation value than one that played just 2 days ago in the same hour.

Next comes gender separation, where a violation value of 75 is used as a base. This value is multiplied if the number of “same gender” songs meets or exceeds the separation you have set in the OAS configuration screen.

Violations of intensity are then checked by OAS to avoid “train wrecks” and intensity clashes at the extremes:

Previous Song	This Song	Violation Value
5	1	10
5	2	8
4	1	6
1	5	5

OAS Scheduling Theory, continued

This Song	Next Song	Violation Value
1	5	3
1	1	5

Note that violation values are cumulative so that a three-song sweep of songs with an intensity of 1 is avoided. As with all other testing, the current depth of the song candidate is factored in to the total violation value.

Finally, there is the sound code testing process where a violation value of 100 is assigned to a song candidate if the song immediately preceding or following the current position has the same sound code. This value is then weighed against the current depth in the category.

➤ ***Chapter Eight***

Advanced Features and Technical Notes

OAS and Microsoft Windows[®]

OAS should be operated from the DOS command-line if possible. This ensures a “clean environment” for the program.

If you choose to run OAS from within Windows, you should set up a PIF file so that OAS will run properly.

- ◆ Be sure to allocate as much memory to OAS as your system permits and make sure that you show the starting directory to be \OAS on the proper drive.
- ◆ The command line should be shown as OAS.BAT.
- ◆ Refer to your Windows manual or check with Microsoft for more information regarding how to run DOS programs from within Windows.

OAS and the MS-DOS[®] Shell

Some users use Microsoft's MS-DOS Shell as an application launcher. If you decide to include OAS as a program item in the shell, remember the following tips:

- ◆ Show the directory as \OAS on the correct drive for your system.
- ◆ The name of the program to invoke is OAS.BAT.
- ◆ Refer to your MS-DOS manual or check with Microsoft for more information regarding settings for the MS-DOS Shell.

OAS and Novell[®] Networks

OAS is a “single tasking, single user” program. There is no support whatsoever for any multi-tasking or multi-user operation. However, OAS may be installed, and will operate without any known problems, on a Novell local area network.

Installation and operation of the product on most local area networks is the same as with a standalone personal computer. However, one and only one user can access the program and the associated data files at any one time. There is no provision for multi-user access.

OAS has been tested on Novell version 3.02 EC. If you attempt to install or operate OAS on another network system, the responsibility for problems lies solely with you. Consult your network administrator or Novell technical support for more information about LAN operation.

Recommended OAS Computer Enhancements

1. Additional XMS memory (extended memory) will enhance the operation of OAS. Portions of the program are occasionally “swapped” to the system's fastest available memory. If XMS is not available, then EMS is the second choice for swapping, followed by “virtual disk memory.” For more information, see your DOS manual.
2. Perhaps the single best enhancement that can be made to the OAS Computer is installation of a well-behaved software caching utility, such as SMARTDRV, HyperDisk, and PC-Cache. OAS is a disk-intensive program and its performance is often significantly increased when a software cache is installed.
3. The use of a color monitor is highly recommended. The program was designed with an appealing, consistent color scheme, making menu navigation easy and intuitive by the use of color. In addition, the use of a color monitor will enhance the ability of On Air Digital's Technical Support personnel to assist you since screen colors are easy to refer to during technical support phone calls. Warning and error messages use a color scheme designed to call attention to important messages.
4. A print spooler is another recommended enhancement. DOS provides a simple PRINT utility and there are others such as a DMP. The installation of a print spooler will permit you to return to work in OAS while reports are being printed.
5. Access to the Internet and the ability to send data files via e-mail is another real plus.

In order to determine why a problem happens, On Air Digital may request that the customer provide data files so that we may attempt to simulate the problem. Access to the Internet may greatly speed our ability to troubleshoot a problem, particularly one that appears to be related to data. Product updates and demos may also be received via e-mail.

Using OAS with an Epson Compatible Printer

This section is designed primarily for the software supervisor or the person who has been assigned the task of installing and/or maintaining the OAS system. The casual user may find it to be of interest if they are having problems with an ill-behaved or unusual printer. The language in this section is designed to be as clear as possible for a rather technical subject. Power users may wish to refer to the *Special Features, Filenames, and Environment Variables* section on page B-8-6 for a more terse treatment.

OAS and the UDS Utilities share a special printer handler found in the VUE.EXE program. Every time you select the View option from either OAS itself or its associated Utilities for the UDS, the output that appears on your screen is actually sent to you via another program, the VUE.EXE program. It is possible to determine quickly if you are indeed looking at something in VUE.EXE. Press **F1**; if a help screen appears showing "P: Print..." as an option, then you are in VUE.

In addition, output via the VUE.EXE program is characterized by a blue bar spanning the top and bottom of the display. The text in the blue bar at the bottom of the screen states: For complete information on special key functions, press **F1**.

Printer Flag Files

VUE.EXE detects the presence of two definition files that must be located in the \OAS directory. These small text files govern the behavior of VUE.EXE with respect to operation with a printer.

PRN_PORT.UDS

This flag file permits the user to direct printed output from VUE.EXE and the Utilities Tray Map program to go to a printer port other than LPT 1. All the user needs to do is create a text file with the name PRN_PORT.UDS and place a single digit corresponding to the desired printer port in the file, from 1 through 3, inclusive. That port will then be used by both VUE.EXE and the Tray Map program for printer output.

If using a serial printing device, the DOS MODE command can be used to redirect printer output to a serial port. Please refer to your MS-DOS manual for information about the MODE command.

Printer Flag Files, continued

PRNDELAY.UDS

This file must be located in the same directory as OAS and must adhere to these specifications:

- * It must contain exactly three numbers (non-negative) separated by a slash.
- * All three numbers must be greater than 0 and less than 65536.

The format for the contents of PRNDELAY.UDS are shown below:

dddd/kkkk/ffff

where dddd is the delay (in clock ticks) to be issued per character count, as set by kkkk. fffff is the delay (in clock ticks) that should be issued when a form-feed character is encountered during printing. There are about 18 computer clock ticks per second.

For example, 18/500/36 will force a one second delay (18 ticks) for every 500th character that gets printed, with a two-second delay when the form-feed is complete. This setting usually is required for non-spoiled, slow laser printers with small buffers.

Here's another example: 5/80/18 will delay for 5 ticks upon reaching each 80th character, with a 1-second delay after doing the form feed.


If the file PRNDELAY.UDS is NOT present, then the default setting of 18/1000/36 is used, forcing a one second delay each 1000th character, with a 2-second delay after a form-feed.

Special Features, Filenames, and Environment Variables

This section is not designed to be read by the casual user of OAS. Instead, it is provided for the benefit of the software supervisor or the person who has been assigned the task of installing and/or maintaining the OAS system.

Abbreviations and terms used in this section:

- Binary** A file designed to communicate with a computer program, generally non-readable (or at least nonsensical) to a human viewer. All 256 ASCII characters may be present in the file. Attempting to TYPE or edit such a file with a text editor will usually yield no worthwhile results.
- CWD** Current Working Directory
- EV** (See ENV)
- ENV** Environment or Environmental Variables
- Spawn** Refers to the parent program starting a child application. SKD_MNU.EXE, for example, spawns SKD_LOG.EXE when the user wishes to “Generate a Playlist.”
- Text** A file designed to be human readable, generally consisting of “printable” ASCII characters, with each terminated by a carriage return/new line combination. These files may be loaded and browsed with a text editor of your choosing or scanned with the DOS TYPE command.

The executable and support files used by OAS all use the extension of BAT or EXE for a program that can be run from the command line or via the program's menu system. All files ending with MSG are message files. OAS does not use any built-in message string, except for certain error messages. Instead, all text displayed on the screen is read from an encrypted MSG file, generally corresponding to the base name of the executable file. Files with an HLP extension are context-sensitive help files. These are invoked with an  key press on a main function menu screen.

Program (EXE/BAT), Message (MSG) and Help (HLP) Files

OAS.BAT:

A simple batch file that invokes the OAS main module, SKD_MNU. It is provided so that a user need not type SKD_MNU at the \OAS prompt. THIS BATCH FILE SHOULD NEVER BE BYPASSED BY ATTEMPTING TO CALL SKD_MNU.EXE DIRECTLY. Certain program and data upgrades occur via instructions that are placed in OAS.BAT.

SKD_BAK.EXE, SKD_BAK.MSG:

The data backup and restore facility. This program is called by SKD_MNU.EXE. It can be run from the command-line with an argument of either BACKUP or RESTORE.

SKD_BLD.EXE, SKD_BLD.MSG, SKD_IDX.MSG:

The index (re)build utility. This program also has the ability to zero out the machine and slot fields of the database for customers wanting SKD_BLD.HLP to “start over” with their tray assignment. It is called by the sub-menu of SKD_MNU. Although it can be run from the command-line, it is recommended that it be run from the SKD_MNU environment since the arguments are rather arcane.

Essentially, if the index files are in a state of total disarray, the user should run SKD_BLD with the arguments of: ALL DESTROY which will rebuild all of the index files from scratch and remove any possible duplicate keys (which is what the DESTROY argument is all about). If the user wishes only to zero out the machine and slot fields from the command line the argument is CLR NODESTROY.

SKD_CVT.EXE:

This file is necessary when OAS is used with a UDS. Actually, this program is part of the UDS Utilities. It is spawned by UDSMENU when a user elects to build a database for the UDS.

SKD_DAT.EXE, SKD_DAT.MSG, SKD_IDX.MSG, SKD_DAT.HLP:

This is the actual music database module. It can be run from the command-line without any arguments. Normally, though, it is spawned by SKD_MNU with an appropriate argument to perform a smooth screen restoration upon termination. The program will exit on error if there is not a music database file (S_MUSIC.DT) or if the index files are corrupted.

Program (EXE/BAT), Message (MSG) and Help (HLP) Files, continued

SKD_ENV.EXE, SKD_ENV.MSG:

Standing for “Scheduler Environment”, this utility, which can be run from the command-line, requires no argument. It checks the user's platform to ensure that the OAS has the minimum resources required to operate. This program's output can be viewed from the OAS main screen by pressing **[ALT] [S]** for “System Info”. This program is called upon startup by SKD_MNU and expects to receive a return value of 0. If not, then SKD_MNU halts with a warning and the SKD_ENV screen is then displayed. The program makes sure that the host has:

- a) DOS version 3.3 or greater.
- b) At least 624 kb of installed base RAM.
- c) At least 448 kb of base RAM currently free.
- d) At least 3 MB available on the hard disk.

The kb multiplier is defined as 1024, thus the display of the user's memory will show 655,360 as opposed to 640,000. If any of the minimums are not met, the program terminates with an error message describing which parameter is too low.

SKD_FMT.EXE, SKD_FMT.MSG, SKD_FMT.HLP:

Normally called by SKD_MNU, this program can be run from the command-line without arguments. It handles all of the elements associated with the set up for scheduling to take place, including the creation of clocks, the assignment grid and naming of categories.

SKD_LOG.EXE, SKD_LOG.MSG, SKD_IDX.MSG, SKD_LOG.HLP:

This actually does the work of generating a single day music schedule. It also permits the user to change the current playlist date. This program is called by SKD_MNU but can run from the command line. If no argument is given, then a schedule is generated for the next scheduling date. Otherwise, a command-line argument of the form mm/dd/yy can be used to reset the scheduling date and then generate a schedule for that date.

Program (EXE/BAT), Message (MSG) and Help (HLP) Files, continued

**SKD_MNU.EXE, SKD_MNU.MSG, SKD_MNU.HLP, SKD_SET.MSG,
SKD_PWD.MSG:**

This orchestrates the entire OAS suite of programs, calling each of the child processes with the appropriate argument. As of this version, all of the “children” and related data and index files are expected to be in the CWD. As a result, support for multiple databases is not enabled. One very important aspect of this program is that it creates blank data and index files if none are found. Consequently, a user can be given just the executables, message and help files and then create the OAS system without necessarily being given any “seed” files from On Air Digital. SKD_SET.MSG contains the screen displays for the program configuration setup. SKD_PWD.MSG contains the text strings for screens displaying password.

<p>IMPORTANT! Unless otherwise instructed by On Air Digital, NEVER issue a direct call to SKD_MNU.EXE! The ONLY correct way to invoke the program is via a call to the batch file, OAS.BAT!</p>
--

SKD_ORD EXE, SKD_ORD MSG, SKD_IDX MSG:

Sets and maintains the current category stack/scheduling order maintained in S_ORDER.DT. It is called by the sub-menu of SKD_MNU if a user elects to reset the current play history. Otherwise, it is normally called by SKD_LOG just prior to the actually scheduling process. If run from the command line, with no arguments, it will simply reset the current play history. This program is also called when the user elects to “View or Modify” the scheduling stack order.

SKD_REG.EXE, SKD_REG.MSG:

Normally spawned by SKD_MNU, this program can be run from the command-line. It is the executable that handles all of the details of registering OAS for use by the client.

SKD_UPD.EXE, SKD_UPD.MSG:

Designed to be an “on the fly” update/conversion utility to convert ANY form of S_MUSIC.DT to the latest version of the structure. It can be run from the command-line with no arguments. It does expect S_MUSIC.DT to be in the CWD. Normally, though, SKD_UPD is called by SKD_MNU. When SKD_MNU checks for the existence of data, index and configuration files, it calls SKD_UPD to check the version information found in the header of S_MUSIC.DT. If S_MUSIC.DT shows the current version, nothing happens. If the version is outdated, then the internal conversion utility is called and the “new” S_MUSIC.DT is created.

Program (EXE/BAT), Message (MSG) and Help (HLP) Files, continued

VUE.EXE, EVUE.HLP:

This utility is for viewing of a completed schedule file or the optional audit log. EVUE.HLP is the external message file containing the online help for VUE.EXE. The program can also function as a simple text editor for files under 48 kb in size and with lines less than 80 characters. If in editor mode, the current line is displayed in yellow on black. [ESC] is used to exit the program unless it is used in editor mode, when [ALT] [X] is the exit command.

Syntax: VUE <fn> args where fn is the filespec to the desired file and args is exactly one of the arguments.

Arguments to VUE are:

- v: Forces “view only” mode thus bypassing its editor functions.
- b: Force “big-file” mode, which disables editor functions and allows viewing of files larger than those that will fit into VUE's memory buffer.
- hxx: Where xx is an integer greater than 7 and less than 509. This invokes VUE as a binary viewer of fixed-length record files. This is a non-editor mode.
- n Forces “no title” mode, which means that headers will not appear on the VUE screen.

Data (DT), Index (NX) and Configuration (CFG) Files

All of the following files are binary. Those with a DT extension are data files and those with NX are the associated index files;

S_SKD.CFG:

The OAS binary configuration file. It is set by Special System Functions of SKD_MNU.

SKD_CVT.DT:

This is not, in the strictest sense, a OAS file (although it does follow the naming conventions for the OAS data files extension). A binary file, it is used to support SKD_CVT.EXE for users wishing to create a UDS database for selected categories only.

S_MUSIC.DT:

The master OAS music data file. Using a layout of 512 bytes per record (with a 512 byte header), this file is accessed (both reading and writing modes) by SKD_BLD, SKD_DAT, SKD_LOG and SKD_ORD.

S_MUSIC.BAK:

Prior to each scheduling session, the S_MUSIC.DT file is copied to this safety backup. In the event of a system crash during scheduling when S_MUSIC.DT is open for reading and writing, S_MUSIC.BAK can be copied to S_MUSIC.DT to restore the database.

This step should only be done if the user has failed to maintain a current backup and has elected not to take advantage of the Scheduling Backup configuration option. Prior to attempting to use S_MUSIC.BAK to recover from a system crash, a complete index file rebuild should be attempted. Only if that fails should S_MUSIC.BAK be used, and then a complete rebuild is necessary. This file is made available as a safety net and as a last resort to recover a corrupted music database.

S_ARTIST.DT, S_ARTIST.NX:

Unique artist key table used by SKD_DAT.

S_CAT.DT, S_CAT.NX:

Unique category key table used by SKD_DAT.

S_TITLE.NX, S_TITLE.DT:

Unique title key table used by SKD_DAT.

Data (DT), Index (NX) and Configuration (CFG) Files, continued

S_INDEX.DT, S_INDEX.NX:

Together, these index into S_MUSIC.DT, the master OAS music data file. The internal index system permits SKD_DAT to search by artist, category and title. The unique index key maintained by these files is on the Song ID which consists of a combination of the CD identifier and the track. Consequently, OAS guards against entering of duplicate song identifiers.

S_ASN.DT:

Contains the clock assignment grid.

S_BREAK.DT:

The text of the breaknotes are stored here.

S_CATNM.DT:

Contains the user-defined names for each of the twelve categories.

S_CATSEL.DT:

Contains the user-selected category numbers if choosing to filter categories to SKD_DAT's Inventory module.

S_CLOCK.DT:

The structure of the 48 user-defined clocks is contained here.

S_DATE.DT:

Only 4 bytes in size, the most recently scheduled date is maintained in this file. If this file is not found, scheduling takes place on the current date, as read from the DOS clock.

S_ORDER DT:

Maintains the scheduling/stack order for each category that may be scheduled, categories 01-11.

Output Files

AUD_\$\$\$.\$\$\$:

A text file of the audit log showing the scheduling process may be enabled by the user by selecting this item in the configuration setup. This highly detailed report may then be viewed within the context of SKD_LOG or from the command line using any ASCII viewer or editor. Among other things, it shows the search depth for each category pass for a successfully scheduled song. It also shows what conflicts and violation points were assigned to a song (and at what depth) as it is scheduling.

INV_\$\$\$.\$\$\$:

A text file that is produced by SKD_DAT's Inventory module. It contains the report that is available for viewing or printing the current state of the user's music database.

EVT_\$\$\$.\$\$\$:

This is a binary file used internally by SKD_LOG to keep track of play history. As of this writing, the contents of EVT_\$\$\$.\$\$\$ contain play history for the schedule prior to the current one, if any.

LOG_\$\$\$.\$\$\$:

A text file showing the completed schedule for the most recent scheduling session. Although it can be viewed from the command-line, it is better to look at it through the SKD_LOG program since VUE is invoked with an internal argument enabling special attribute settings, error trapping and hour marker location. One nice feature of LOG_\$\$\$.\$\$\$ is that the current active clock is shown for each hour of the schedule.

NEWADDS.DB, NEWADDS.OLD:

Each time a music database change is made that will impact the UDS database, that change is written to the binary file NEWADDS.DB in the CWD. When the schedule is transferred to the target, NEWADDS.DB is renamed NEWADDS.OLD in the CWD and NEWADDS.DB is placed on the target so that the UDS can be updated. NEWADDS.DB is read by the UDS when a schedule is imported.

SS_\$\$\$.\$\$\$:

This is a binary file copy of the most recent UDS PLAYLIST.SS file. It used when "Regenerate File" is selected on the "Playlist and Scheduling Menu".

Output Files, continued

TMP?.\$\$\$:

These are temporary data files (usually binary) produced by OAS, during the scheduling process. They are automatically deleted after a session with OAS. If these files are present in the OAS directory when the program is not running, they may safely be deleted.

SKD_BACK.LZH:

Produced in the CWD by the Archive option shown on SKD_MNU (or by SKD_BAK if run on the command-line). This is the hard disk copy of the LHA-compressed complete data backup.

SKD_GEN.LZH:

If the user has elected to configure the system so that a backup is made on the hard drive just prior to scheduling, this file is produced. It contains only certain data files necessary to restore OAS to its pre-scheduling state.

PLAYLIST.SS:

By default, OAS produces this binary event file for the UDS.

SSMUSIC.DB, SSMUSIC.TXT:

These files are produced when a database is built for the UDS from the Utilities for the UDS menu. SSMUSIC.DB is the binary file that must be installed in the \UDS directory and SSMUSIC.TXT is its text file equivalent available for viewing and printing.

TRAYS:

Created by the Utilities for the UDS, this binary file has the CD Player machine and slot assignments for the UDS.

OAS_????:

These files should never be removed or modified. They are encrypted with the program's registration codes. Any hacking of these files may not only cause the program to fail, but may destroy the program. In addition, it violates copyright laws and trade agreements if these files are modified or hacked.

Environmental Variables

If you are planning to read this part of the documentation, you should be familiar with environmental variables (EV) and the SET command. It is also taken for granted that you have the ability to configure your computer to increase the space for the environment from the default value.

CAUTION: Many of the environmental variables used with OAS are designed to default certain “safety nets” built into the program. If you decide to set these, the results may not be good for your particular application. Generally, it is advised that an environmental variable be set only if you are instructed to do so by On Air Digital.

Also note that the day-to-day user of OAS may notice unusual behavior of the program. This is because environmental variables always take precedence over any configuration setting.

SKD_ENV_IGNORE

If this is set to any value, then the OAS will attempt to run regardless of the problems indicated on the host platform. This EV should only be set under the most unusual of circumstances.

SKD_NO_MUSIC_BAK

If the user absolutely, positively wishes to run the risk of data loss, the environmental variable SKD_NO_MUSIC_BAK can be set. This will completely cancel the S_MUSIC.DT backup that occurs by default just prior to each scheduling session.

SKD_NO_BACKUP

Users who wish to live dangerously (or perhaps those who run a daily streaming tape backup) may opt to set an environmental variable, SKD_NO_BACKUP to disable the automatic request for a backup. A backup can still be done from OAS. This variable simply eliminates the prompting to do a backup each time the program is exited.

SKD_AUDIT

If defined, the scheduling audit log file is forced ON, regardless of the user's configuration settings.

SKD_CTRY

If defined, international-style dates and times are forced ON regardless of the setting of COUNTRY in the user's CONFIG.SYS file. Like all EVs, this takes precedence over the settings selected by the user in the configuration menu.

Environmental Variables, continued

SKD_ERRFILE

If defined, an ASCII error file is enabled. Then, if any of the OAS programs exits on error, the nature of the error (including date, time and the actual error message) is written (in append mode) to the error file in the CWD as `__SKD__ERR`. All versions of OAS support this EV. There is no need to have special debugging version of the programs to generate the error file. This EV, however, should only be enabled upon request by On Air Digital.

DEBUG=ON

If the user has made arrangements with On Air Digital to get debugging mode versions of OAS, this EV will cause certain debugging assert statements within the program to execute. If an assertion fails, the offending program will immediately exit with a value of 3 passed to the caller. This EV should be set only at the direction of On Air Digital and only by users who have the special debugging versions of the programs.

MEMCHECK=1

If the user has made arrangements with On Air Digital to get debugging mode versions of OAS, this EV will cause the Memory Checking routines to be activated. This will slow down the performance of the program considerably, particularly during scheduling. As with `DEBUG=ON`, this EV should be set only at the direction of On Air Digital and only by users who have the special debugging versions of the programs. Any memory allocation violation will be directed to the user's screen if this EV is set.