

46501/46504 TL1 GPP SOFTWARE

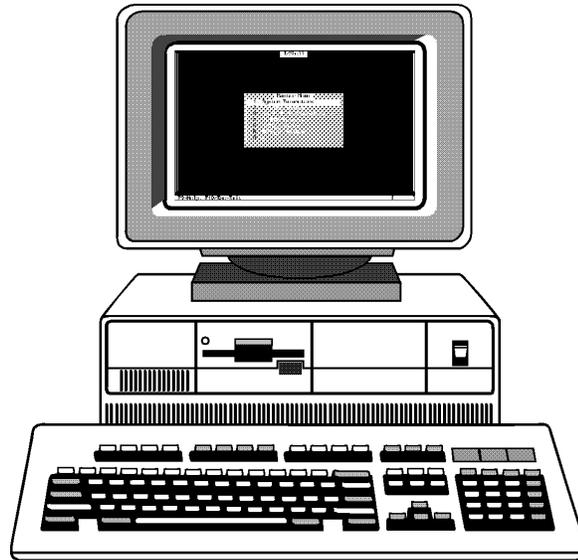


Table of Contents

Ordering Information	2
Installation	2
Standards	3
Getting Started	6
TL1 GPP System Definition	9
TL1 GPP Data Path	50
TL1 GPP Parameters	51
Terminal Emulator	53
Warranty	64

About this Practice:

This practice has been reissued to:

- Document up-issue of the product to incorporate enhancements for operating on PC's with clock speeds in excess of 200 MHz.

Reissued Practices: Updated and new content can be identified by a banner in the right margin.

Issue date: September 1999

UPDATED

CAUTION

- Install or remove modules from the shelf only when the power is off. If you install a module in the shelf with the power on, the internal circuitry may suffer damage and the product warranty will be void.
- Remove and install circuit boards only in a static-safe environment (use antistatic wrist straps, smocks, footwear, etc.).
- Keep circuit boards in their antistatic bags when they are not in use.
- Do not ship or store circuit boards near strong electrostatic, electromagnetic, magnetic, or radioactive fields.
- For more complete information on electrostatic discharge safety precautions, refer to Bellcore™ Technical Reference # TR-NWT-000870.

ORDERING INFORMATION

UPDATED

NOTE: This section lists the different options available for this product. To order any of the available options, contact Dantel Inside Sales through our toll-free number, 1-800-432-6835.

OPTION NUMBER	FEATURES
F22-46504-02	T/Shell TL1 GPP Editor Software; Version 4.1
E22-46501-02	TL1 GPP Operating Software; Version 5.1

INSTALLATION

The T/Shell program can be installed on an IBM™-compatible computer equipped with the following:

- ◆ 640K of memory
- ◆ CGA/EGA/VGA color (recommended), monochrome, or LCD monitor
- ◆ One serial port
- ◆ One 3.5" diskette drive
- ◆ One hard disk drive
- ◆ DOS version 3.0 or later

This chapter explains how.

To install the software program on your computer:

1. Turn on the power to the computer and monitor. Wait for the DOS (Disk Operating System) prompt to appear.
2. Insert the 46504 software disk from Dantel into the diskette drive.
3. Select the hard disk drive (normally C) where the program is to be installed. At the prompt type **MD TSHELL** to make a directory called TSHELL. Press Enter.
4. At the prompt type **CD TSHELL**. Press Enter.

NOTE: *If a TSHELL directory already exists, you may not be able to copy the new T/Shell program into the same directory. Dantel no longer provides copy protection with its software. T/Shell programs that are not copy-protected must not be placed in the same directory with T/Shell programs that are copy-protected.*

CONTINUED . . .

INSTALLATION

The following T/Shell programs, and all earlier versions of these programs, are copy-protected. Current versions are not copy-protected. Do *not* copy any T/Shell program with a version later than those listed here, into a directory that has T/Shell programs with these versions or lower.

Status Monitor GPP Editor	B22-46502-XX, Version 2.0
TL1 GPP Editor	F22-46504-XX, Version 2.2
40 MAP Editor	C22-46508-XX, Version 1.3
41 MAP Editor	C22-46512-XX, Version 1.1
X.25 Sync Editor	B22-46513-XX, Version 2.1
X.25 Cascade Editor	A22-46516-XX, Version 1.0
TL1/NMA Converter Editor	A22-46521-XX, Version 1.0
X.25 Cascade Editor	A22-46522-XX, Version 1.0
Status Monitor GPP Loader	A22-46703-XX, Version 1.0

If you do not know the version number of a T/Shell program that is already installed on your computer, go to the first screen of the program. Press the F1 (Info) key to display the version number.

5. Type **COPY A:*.*** This assumes that the disk is in drive A. If it is in a different drive, type the letter of that drive.
6. Press Enter to copy all the files into your TSHELL directory from the disk in your diskette drive.
7. After the software has been copied into the TSHELL directory, store the disk in a safe place.

UPDATED

STANDARDS

This section describes those commands, key, and standards common to all Dantel software packages.

SOFTWARE STANDARDS

HIGHLIGHT

A highlighted option in a menu is the currently selected option. To activate an option, do either of the following:

1. Press Enter if the option is highlighted.
2. Type the letter of the hot key. A hot key is a specific key that can open an option. With a color monitor, a hot key is indicated by a yellow letter. With a monochrome monitor, a hot key is indicated by a capital letter. In the Master Menu, the hot keys are the option numbers. When you use the hot key method, the option does not have to be highlighted.

STANDARDS

F3

Opens the Terminal Emulation mode in most cases.

F8

Saves the entries that you make to the database configuration. If there is more than one entry field on a line, the cursor must be in the first field in order to save the information. See rule 1 of **F10 & Esc**.

F9

Activates on-line help.

F10 & Esc

In most cases the F10 and Esc keys work interchangeably. The following rules apply to these keys:

1. When editing a group of fields, returns the cursor to the first field. When editing the first field, they exit that window.
2. When at a submenu, they return cursor to the previous menu.
3. When at the Master Menu, they exit the program.

Up Arrow

The up arrow usually does one of the following two things:

1. Selects the preceding option from a menu.
2. Selects the previous field within an option.

Dn Arrow

The down arrow usually does one of the following two things:

1. Selects the next option from a menu.
2. Selects the next field within an option.

FIELD EDITING STANDARDS

The software program checks each field for the correct type of entry. If a valid entry for a certain field is alphabetic and a numeric key is pressed, the computer beeps.

STANDARDS

When editing fields, the following keys are active:

KEY	FUNCTION
Enter	Accepts the field.
Ctrl-Z	Erases the current field.
Ctrl-R	Restores the default value.
Back Arrow	Deletes the previous character.
Ctrl-H	Lists the editing keys that are available.
Left Arrow	Moves the cursor <i>left</i> within the field.
Right Arrow	Moves the cursor <i>right</i> within the field.
Ctrl-Home	Moves the cursor to the <i>start</i> of the field.
Ctrl-End	Moves the cursor to the <i>end</i> of the field.
Del	Deletes the current character.
Ins	Toggles insert mode.
Ctrl-Left Arrow	Moves the cursor <i>left</i> to the previous word.
Ctrl-Right Arrow	Moves the cursor <i>right</i> to the previous word.
Ctrl-K or Alt-K	Deletes to the end of the field.
Ctrl-D	Calls up the Default Box if there is one.

There may be times when the screen cannot display all the data. In such cases, use special keys to scroll different parts of the data onto the screen.

Usually these special keys are active only when the cursor is at the first item (far left) in a given line of data. The special keys and their functions are as follows:

KEY	FUNCTION
Up Arrow	Moves the cursor up one line. When the cursor is on the top line, the previous line scrolls into the window.
Down Arrow	Moves the cursor down one line. When the cursor is on the bottom line, the next line scrolls up into the window.
Home	Brings the first page of data into the window.
End	Brings the last page of data into the window.
PgUp	Brings the previous page of data into the window.
PgDn	Brings the next page of data into the window.

DEFAULT BOX

NOTE:

The arrow keys are not active in these default boxes. Choices can be made only with the TAB or SHIFT-TAB keys.

When defining certain fields, a default box appears to aid in the selection process. The default box displays the valid selections for the current field that is being editing. Select from the default box or type the entry. To select from the default box, use the keys below, then press Enter.

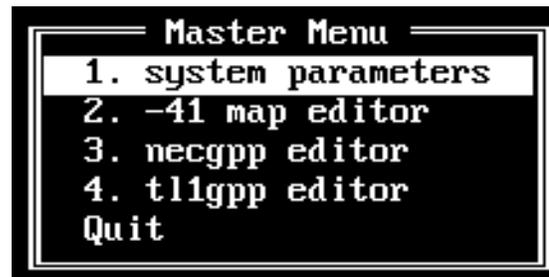
KEY	FUNCTION
Tab	Moves the select bar down one selection.
Shift-Tab	Moves the select bar up one selection.

GETTING STARTED

The T/Shell software program with the 46504 TL1 GPP Editor configures 46062-22 and 46062-24 General Purpose Processor (GPP) databases.

To start the T/Shell program:

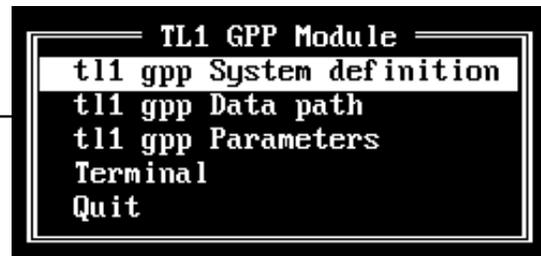
1. Log into the TSHELL directory.
2. Type **TSHELL**.
3. Press Enter. The Dantel logo appears, followed a few moments later by the Master Menu. Here is an example of the Master Menu:



WARNING:

Always exit the program cleanly. Select the *Quit* option from the Master Menu whenever leaving the T/Shell program. NEVER turn off the computer without properly exiting the program. Doing so could corrupt the data files.

4. To change the system parameters, highlight *System Parameters* and press Enter. The System Parameters window appears. From this window, configure the system for LCD or color mode, menu verification, and pulse or tone dialing. Refer to the *System Parameters* section of this chapter. When finished, the Master Menu appears.
5. At the Master Menu, highlight the *TL1 GPP Editor* option.
6. Press Enter. The TL1 GPP Module menu appears:



This menu allows full interaction with the T/Shell software. (A brief description of each option on the TL1 GPP Module menu appears below.)

7. Highlight an option. Press Enter.
8. Go to the chapter that explains the option selected.

GETTING STARTED

TL1 GPP System Definition

- ◆ Creates T/Shell TL1 GPP configurations that define how the 46062 GPP operates.
- ◆ Uploads and downloads configurations between the 46504 TL1 GPP Editor and the 46062 GPP.
- ◆ Generates reports about configurations.

TL1 GPP Data Path

- ◆ Sets the DOS path where T/Shell configuration files created by the program will be stored.

NOTE: *It is recommended that the datapath be located on a hard drive. If it is preferred that the datapath be located on a floppy drive, a diskette must be in that drive (A: or B:) while the T/Shell program is operating.*

TL1 GPP Parameters

- ◆ Sets the communications parameters for uploading and downloading T/Shell configurations between the 46504 TL1 GPP Editor and the 46062 GPP.
- ◆ Specifies where to store reports on configurations on your computer.
- ◆ Sets the defaults that the T/Shell software will use to configure alarm levels.

Terminal

Enables a terminal emulator program to communicate with devices, such as the 46062 GPP, that have a terminal interface.

Quit

Returns to the T/Shell Master Menu.

F1 Command Key

Displays the product name, version, and product number of the software.

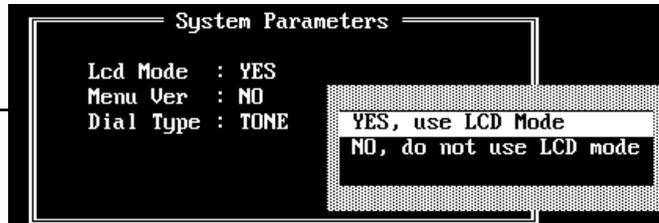
SYSTEM PARAMETERS

After selecting the System Parameters option from the Master Menu, the System Parameters window appears. It allows configuration of the following:

- ◆ LCD or color mode
- ◆ Menu verification
- ◆ Pulse or tone dialing

GETTING STARTED

Here is the System Parameters window:



To change the parameters:

1. Use the Tab key to select the desired value. Press Enter.
2. Press Enter to advance to the next field without changing the current field.
3. If some fields have been changed and all the remaining fields are acceptable, press F8 to save the changes.
4. After the last field (Dial Type), press Enter to save all changes to the system parameters.

NOTE: *If the LCD mode was changed, exit the program to DOS and restart the T/Shell program to enable those changes.*

Here are descriptions of the System Parameters options:

LCD Mode - Select *YES, use LCD mode*, if using a monochrome monitor or a laptop computer with a monochrome LCD display. Select *NO, do not use LCD mode*, if using a color monitor. This field defaults to NO.

Menu Ver - Menu Verification. When off, ("N"), pressing the activating key of a menu option will execute that option at once. When on, ("Y"), pressing the activating key of a menu option will move the highlight bar to that option. Press ENTER to execute that option.

Dial Type - The type of dialing that will be used when making a modem connection from the Transfer screen.

TL1 GPP SYSTEM DEFINITION

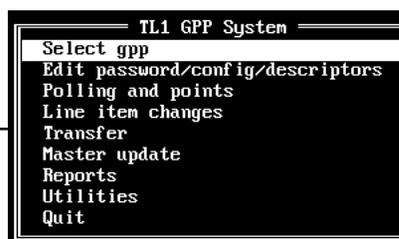
NOTE:

In this manual “definition” and “configuration” are synonymous.

The TL1 GPP System Definition option of the 46504 TL1 GPP Editor Module menu allows the following:

- ◆ Create T/Shell GPP configurations or select an existing one to edit.
- ◆ Upload and download configurations between the 46504 TL1 GPP Editor and the TL1 GPP database or to 46062 GPP memory.
- ◆ Generate reports about configurations.

Here is the TL1 GPP Editor screen with the TL1 GPP System Menu:



To select an option:

1. Highlight an option. For brief descriptions of the options, refer to the next section on *Menu Overview*.

NOTE: Whenever accessing the TL1 GPP System menu from the TL1 GPP System Module menu, choose Select GPP first.

2. Press Enter.
3. Go to the section of this chapter that explains the option that selected.

MENU OVERVIEW

Here are brief descriptions of the command keys available while in the TL1 GPP System menu:

F3 - Terminal - Enters the terminal emulator.

F9 - Help - Describes menu options.

F10/Esc - Exit - Exits to TL1 GPP System Module menu.

Here are brief descriptions of each option in the TL1 GPP System menu:

SELECT GPP

Opens a new file to create a configuration or selects an existing configuration to edit.

TL1 GPP SYSTEM DEFINITION

EDIT PASSWORD/CONFIG/DESCRIPTORS

Lets you select the following:

- ◆ The GPP printer port address.
- ◆ The password to access the configuration.
- ◆ A description to identify the configuration.
- ◆ Define the GPP Type.

POLLING AND POINTS

Configures polling list entries and their corresponding alarm points.

LINE ITEM CHANGES

Changes any information in the polling list on a line-by-line basis. Use this option when a GPP operates with an existing database and it is necessary to add or change information in the database. Changes can be downloaded to the module without interfering with the module's operation.

TRANSFER

Provides utilities for the following:

- ◆ Downloading the operating software to a TL1 GPP.
- ◆ Downloading the configuration to a TL1 GPP database.
- ◆ Uploading a configuration from a TL1 GPP database.
- ◆ Downloading a configuration from another file/folder/directory.

MASTER UPDATE

Updates the Line Item Changes in the master database. Line Item Changes previously downloaded are no longer available for Line Item Changes download when you select this option.

REPORTS

Generates reports on the configuration.

UTILITIES

Copies the files associated with the configuration for the following purposes:

- ◆ To backup the files.
- ◆ To transfer the files to another computer.

TL1 GPP SYSTEM DEFINITION

- ◆ To use the files as the basis for creating a new configuration.
- ◆ To delete the configuration from the computer.

QUIT

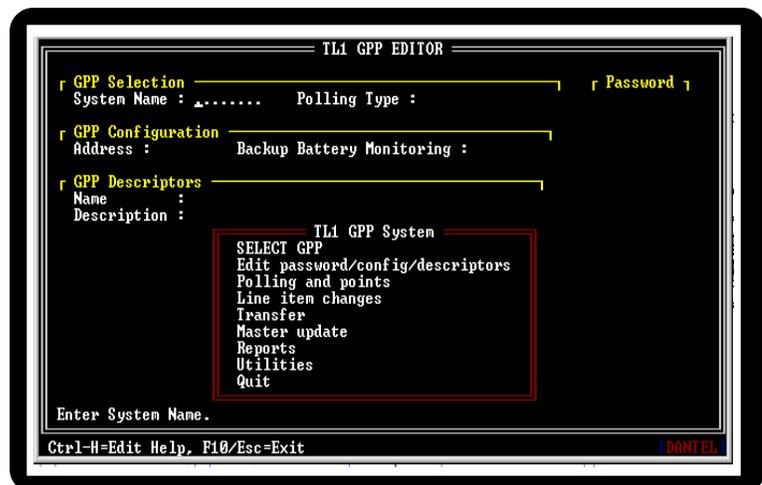
Exits the TL1 GPP System Menu and returns to the TL1 GPP System Module menu.

SELECT GPP

The Select GPP option creates a T/Shell GPP configuration or selects an existing one to edit.

Before most of the options in the TL1 GPP System menu can be used, open a file to create a configuration or select an existing configuration.

Here is the TL1 GPP System screen with the GPP selection fields:



Below are the instructions for entering a system name.

SYSTEM NAME

A T/Shell GPP configuration must have a name. If there are existing configurations, a default box appears with their names.

CAUTION:

When uploading a GPP configuration, use a name other than one for an existing configuration. If a database has text errors, the TL1 GPP Editor corrects the errors by referring to an older copy of that database.

TL1 GPP SYSTEM DEFINITION

WARNING:

Refer to the *Utilities* section of this chapter for information on copying configurations. Do not use the DOS copy function.

NOTE:

In this release, a new database will default to a Low Battery type. This results in a polling configuration where address 255 is used for low battery alarm messaging. To select a non-low battery database, go to the GPP Edit menu and select Edit GPP Type.

NOTE:

DCP(F) (Framed DCP) has higher quality error checking and multiple address polling characteristics and is required for remotely configuring MAPS connected to the GPP.

To select an existing name:

1. Use the Tab key to highlight a name. Press Enter.
2. If the configuration has a password, type it and press Enter. If there is no password, just press Enter. To create a password or to change an existing one, refer to the next section on *Edit Password/Config/Descriptors*.

TO CREATE A NEW SYSTEM NAME:

1. Enter a name. Press Enter.
The name can have a maximum of eight characters. The name must use characters that form a valid DOS file name. Use any alphabetic and numeric characters except those that are reserved by DOS, such as the period and space.
2. The following question appears at the bottom left corner of the screen:
Not there. Wish to add (Y/N)?
Type **Y** to add the new name. If **N** is typed, you will be prompted for another name.
3. Press Enter.

POLLING TYPE

Define the type of polling protocol for a new system.

To define a new system protocol type:

1. Enter a name.
Use the Tab key to highlight DCP for DCP or DCP(F) protocol or E2 for E2 protocol.
2. Press Enter.

PASSWORD

Enter a password for a new system.

1. Enter a name. Press Enter.
The password can have a maximum of eight characters. Use any alphabetic and numeric characters except those that are reserved by DOS, such as the period and space.

WARNING: *Dantel cannot recover password-protected files.*

TL1 GPP SYSTEM DEFINITION

EDIT PASSWORD/CONFIG/DESCRIPTORS

The Edit Password/Config/Descriptors option creates or changes the following:

- ◆ A password to access the configuration
- ◆ The GPP address
- ◆ Edit Descriptors
- ◆ The GPP Type
- ◆ A description to identify the configuration

Enter at least the date in the description field. Site and operator information can also be entered in the name or description fields. The system name is not a good location for storing complicated information.

Here is the TL1 GPP System screen with the Edit GPP menu:



Below are the instructions for entering a password, a GPP address, and a description of the system configuration.

EDIT PASSWORD

This option creates or changes a password to access the configuration.

To create or change a password:

1. Highlight *Edit Password*. Press Enter.
2. Type in up to eight characters. Press Enter.
3. Retype the password. This is a safety feature to insure that the password was entered correctly the first time. Press Enter.

TL1 GPP SYSTEM DEFINITION

EDIT ADDRESS

This is the GPP configuration address. The default address is 1.

To change the address:

1. Highlight *Edit Address*. Press Enter.
2. Type in the address. Acceptable values are 1-8. Press Enter.

EDIT DESCRIPTORS

Entering text in this field is optional. Enter text to name the GPP and provide a reminder about the purpose or function of the GPP configuration.

Enter at least the date in the description field. Site and operator information can also be entered in the name or description fields. The system name is not a good location for storing complicated information.

To create or change descriptors:

1. Highlight *Edit Descriptors*. Press Enter.
2. Type in a GPP name. Do not exceed 40 characters. Press Enter.
3. Type in a GPP description. Do not exceed 40 characters. Press Enter.

EDIT GPP TYPE

This matches the database type to either a backup battery messaging GPP or a non-backup battery messaging GPP.

To change the GPP type:

T/Shell will ask if the target GPP has low battery messaging feature (Y/N)?

Type **Y** if the target GPP has low battery messaging. Type **N** if the target GPP does not have low battery messaging.

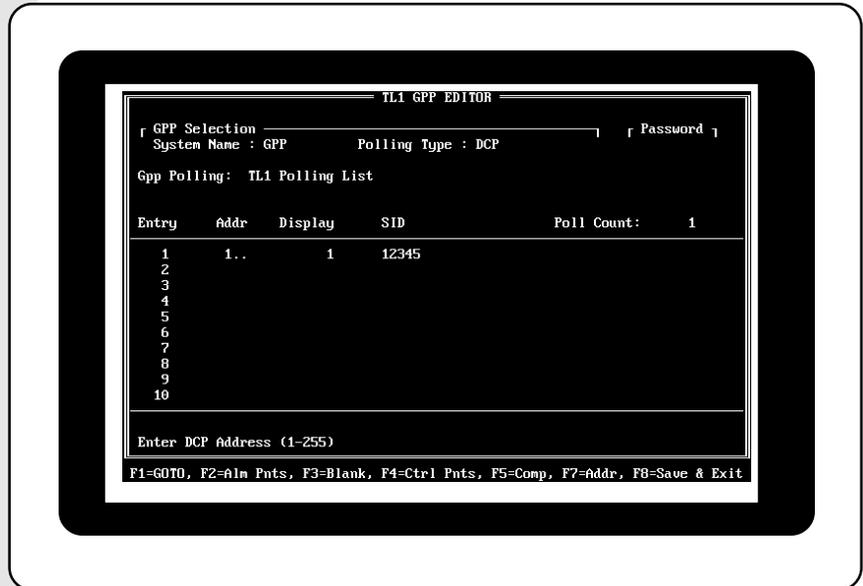
NOTE:

The low-battery feature is available on the 46062-24.

TL1 GPP SYSTEM DEFINITION

POLLING AND POINTS

This option configures GPP polling list entries and their alarm points. Below is the GPP Polling List screen:



TO CONFIGURE A POLLING LIST:

In this version, all new databases created default to the low-battery type GPP. If a non-low battery database is desired, go to the **TL1 GPP SYSTEM Menu** and select “**Edit Password/Config/Descriptors**”. Select “**Edit GPP Type**” and answer “N” in the response to the prompt at the bottom of the screen.

T/Shell will warn you that a type change has been made and will automatically go to the polling list entry screen.

To Configure a Non-Low Battery Messaging Polling List:

1. In the *Addr* field, type in the DCP(F) address of the device to be polled. Acceptable values are 1-255. Press Enter.
2. In the *Display* field, enter the number of the display to be monitored or controlled at the address entered in step 1. Press Enter.

If more than one display is to be monitored or controlled at the address in step 1, create a separate polling entry for each display. Acceptable values for displays are 1-64.

It is important to understand the impact of the configuration option known as Failure Report. (Refer to Utilities Section, Choose Failure Display and Issue subsection.) If Failure Report Mode is enabled (enabled is the default condition), then displays 61-64 serve a special purpose. Refer to the section **Device Failures - TL1 GPPs and MAPs**, following this section.

CONTINUED . . .

TL1 GPP SYSTEM DEFINITION

3. In the *SID* field, enter the TL1 Source Identifier to be used for this address and display. The SID may be up to 20 characters in length.

Here are brief descriptions of the command keys available while the cursor is in the *SID* field:

Alt-F9 - Show Table - Lists all defined SIDs.

Up Arrow - Previous Field - Returns to the *Address* field.

F10/Esc - Returns to entry *Address* field.

4. Press Enter to accept the SID entry. If the SID did not previously exist, the following question appears at the bottom left corner of the screen:

Entry not found. Add it? (Y/N)

Type Y to add the SID. Type N to return and enter another SID.

5. Use F2 or F4 to configure the alarm or control points for this display.

Here are brief descriptions of the command keys available while the cursor is in the *Addr* field:

F1 - GOTO - Goes directly to any entry.

F2 - Alm Pnts - Sets alarm points for each entry. Refer to *Alarm Point Configuration/To edit alarm points*, later in this section.

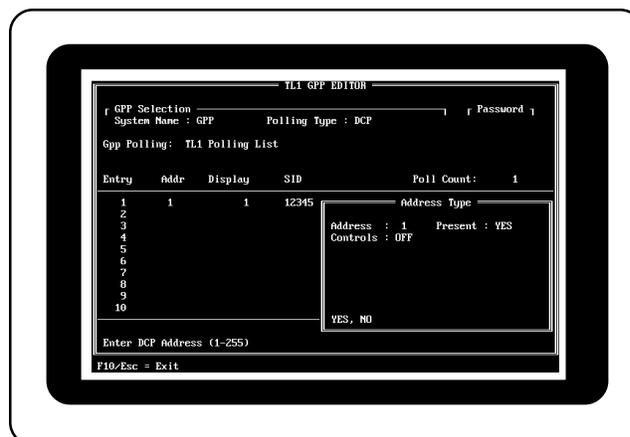
F3 - Blank - Deletes the current entry.

F4 - Ctrl Pnts - Sets control points for each entry. Refer to *Control Point Configuration/To edit control points*, later in this section.

F5 - Compress - Removes all unreferenced entries from SID, AID and COND tables.

NOTE: *Compression time depends on the number of defined points in your database.*

F7 - Addr - When you press F7, the Address Type window pops up:



CONTINUED . . .

TL1 GPP SYSTEM DEFINITION

The Address Type window:

- ◆ Views the TL1 address defined.

If the TL1 address is in a database built into the printer port, validate the presence of the address in the uploaded database.

- ◆ Sets address controls to ON or OFF.

- ◆ Selects whether the address is present. Enter **YES** for a present address or **NO** for a hidden address.

The TL1 GPP Editor does not poll a hidden address in the data port. The printer port SYS command lists the hidden address.

A subsequent download of the database allows polling of this address when you enter YES for a present address.

- ◆ Sets the E2 polling method to A (Alm), D (Disp) or V (VGS).

If E2A polling was selected for a uploaded database, then sets the E2 polling method.

6. Repeat steps 1-5 to configure additional polling list entries.

A maximum of 768 entries are allowed. When Failure Report Mode is enabled, additional displays are created by the TL1 GPP at poll time. Sufficient space in the polling list must be left for the creation of those displays.

7. Press F8 to save the polling list.

To Configure a Low Battery Messaging Polling List:

1. Configure the external polling list first (addresses 1- 254), following the steps described in the previous section. Make sure that you re-serve at least one entry for the low battery point definition.

2. For the reserved open entry, define the low battery point. Type in address 255 in the *Addr* field. NOTE: address 255 behaves like a *hidden address*, no external poll on the data port will occur. Press Enter.

3. In the *Display* field, display 1 is pre - defined in the edit window. Press Enter.

4. In the *SID* field, the default description DANTEL is loaded in the edit window. This description can be changed by typing over DANTEL with the new SID identifier. NOTE: the default description does not exist in the SID table, unless the return key is pressed while DANTEL is showing in the edit window of the SID field. The naming conventions for the low battery SID are the same as for standard polling entries.

5. The following question appears at the bottom left corner of the screen:

Entry not found. Add it? (Y/N)

Type **Y** to add the description. If you type **N**, the screen prompts you for another description.

REMINDER:

Address 255 is reserved for low-battery alarm messages and alarms.

CONTINUED . . .

TL1 GPP SYSTEM DEFINITION

6. Use F2 for configuring the low battery alarm point. NOTE: F4 has been disabled for the low battery configuration. Control points are not defined for this address.
7. In the *AID* field, the default description TL1 GPP 1 is loaded in the edit window. This description can be changed by typing over with the new AID identifier. NOTE: the default description does not exist in the AID table, unless the return key is pressed while TL1 GPP 1 is showing in the edit window of the AID field. The naming conventions for the low battery AID are the same as for standard polling entries.
8. The following question appears at the bottom left corner of the screen:
Entry not found. Add it? (Y/N)
Type **Y** to add the description. If you type **N**, the screen prompts you for another description.
9. In the *EQT* field, type in the EQT attribute. Press Alt-F9 for a list of attributes. Type in the attribute or the forward slash key and the EQT code in the attribute list; for example, type /1 for **LINE**. The default is **EQPT**. Press Enter.
10. In the *COND* field, the default description TL1 GPP BATTERY LOW is loaded in the edit window. This description can be changed by typing over with the new COND identifier. NOTE: the default description does not exist in the COND table, unless the return key is pressed while TL1 GPP BATTERY LOW is showing in the edit window of the COND field. The naming conventions for the low battery COND are the same as for standard polling entries.
11. The following question appears at the bottom left corner of the screen:
Entry not found. Add it? (Y/N)
Type **Y** to add the description. If you type **N**, the screen prompts you for another description.
12. Type in the LEV attribute. Press Alt-F9 for a list of attributes. Type in the attribute or the forward slash key and the LEV code in the attribute list; for example, type /1 for **MJ**. The default is **NA**. Press Enter.
13. Type in the DIRN attribute. Press Alt-F9 for a list of attributes. Type in the attribute or the forward slash key and the DIRN code in the attribute list; for example, type /1 for **ZA**. The default is **AZ**. Press Enter.
14. Type in the LOCN attribute. Press Alt-F9 for a list of attributes. Type in the attribute or the forward slash key and the LOCN code in the attribute list; for example, type /1 for **FEND**. The default is **NEND**. Press Enter.
15. Type in the EFF attribute. Press Alt-F9 for a list of attributes. Type in the attribute or the forward slash key and the EFF code in the attribute list; for example, type /1 for **NSA**. The default is **SA**. Press Enter.
16. Type in the point type. Press **E** for an environmental point or **A** for an alarm point. The default is **A**. Press Enter.

CONTINUED . . .

TL1 GPP SYSTEM DEFINITION

NOTE: *The edit window does not advance to the next alarm point but returns to the AID field of the low battery point definition. Press F8 to save the low battery descriptions and return to the polling and points screen.*

Editing Non-Low Battery Databases To Low Battery:

1. Select a GPP configuration as described on page 11 of this practice. Verify the type from the “GPP Configuration” display of the TL1 GPP EDITOR screen. It should show that the “Backup Battery Messaging” status is indicated by “N”.
2. Change the status of the configuration, to Low Battery, by selecting “Edit Password/Config/Descriptors” from the TL1 GPP System menu and then selecting “Edit GPP Type” from the Edit GPP menu. Answer the prompt at the bottom of the screen with “y”.
3. T/Shell will warn that a type change has been made and will automatically go to the polling list entry screen.
4. If polling list entries are present using address 255 from the non low battery database, then a warning message will be displayed to remove them. This is required, before T/Shell will allow the low battery point to be configured.

The lines containing address 255 can be removed by highlighting the appropriate entries, and using the F3 (Blank) key.

5. Define the low battery point as outlined in the “new databases” section for low battery polling lists starting with step 2.

TL1 GPP SYSTEM DEFINITION

DEVICE FAILURES - TL1 GPPs AND MAPs

A MAP can report up to 64 displays of alarm and control information per MAP address. In Failure Report Mode, the GPP uses displays 61-64 for a different purpose.

When the polling type is set for DCP(F), displays 61 through 64 may be used to report display failures. These displays correspond to lines 129 through 136 as defined by DCP protocol (two lines equal one display).

NOTE:

Each MAP display polled is made up of 64 individual alarm points, numbered 1 through 64. These 64 points are further organized into 4 "groups" with 16 points in each group. Points 1-16 make up Group 1, points 17-32 make up Group 2, points 33-48 make up Group 3, and points 49-64 make up Group 4.

When the GPP's data port is configured for DCP or DCPF polling, the GPP, for each MAP ID, will generate displays 61-64. These displays are used to report the status of devices, rather than alarm points. For each MAP ID, each point in GPP displays 61 through 64 represents the status of 16 alarm points (1 group). Refer to Table A.

If an alarm point in display 61-64 has not been specifically defined in the GPP database, its failure results in a message from the GPP. This message contains a number which identifies the device failure. Refer to Table A, under the column labeled "Unconfigured Point Number".

NOTE: *If in Failure Report Mode, it is not necessary to create displays 61-64. They are created automatically by the TL1 GPP at poll time. If the TL1 GPP creates these displays, the alarms are reported in the unconfigured alarm format. The message will contain a number which identifies the device failure. Refer to Table A. It is recommended that the displays and alarm points in these displays be defined to associate TL1 information with each point.*

The TL1 GPP only creates displays 61-64 at poll time if the Failure Report Mode is enabled and none of the four displays are in the polling list. If any of displays 61-64 are defined in the polling list, then the remainder of 61-64 will not be created. Failure to create these displays may result in device status information not being reported.

There are two devices to consider when using the device failure functions of a TL1 GPP.

The first is the 46020-40 or 46020-41 Multi Alarm Processor (MAP) that the GPP is polling. When configuring the MAP, point 64 of every display can be used as an alarm point or as a device failure point. This is an option selected in the Responder Port Menu of the T/Shell program used to configure the MAP: "Disable Point 64 Device Failure". Valid options are yes, ("Y"), or no, ("N"). If "N" was selected when the MAP was configured, then any device failure will give a point 64 alarm indication in the display associated with that device. If "Y" was selected, the MAP will use point 64 as a normal alarm point and device failures will not be reported.

CONTINUED . . .

TL1 GPP SYSTEM DEFINITION

The second factor to be considered is the 46062-22 General Purpose Processor (GPP). During the creation of the GPP's database, the user will select the Utility menu, and then, from that menu, "Choose the Failure Display and Issue". In response to the choice "Failure report: 'Y or N'", select "Y" to configure the GPP to use displays 61 through 64 to report device failures. Select "N" to use displays 61 through 64 for reporting normal alarm points.

Between the MAP and the GPP, there are four combinations possible:

GPP set for "Failure Reports: Y"; MAP set for "Disable point 64: N"

In this option, which is the recommended option, any MAP display reporting a device failure will set point 64 of that display. The GPP will report that bit 64 in that display. Additionally, the GPP displays 61 through 64 are used to report which device has failed. Refer to Table A.

For example: A remote MAP is polling four Dantel Multi-Alarm Transmitters (MATs). The first MAT reports its alarms to display 1, points 1-16 of the MAP. The second reports to points 17-32, the third to 33-48, and the fourth to 49-64. When the first MAT fails, the MAP will set point 64 of display 1. This will then be sent to the GPP. The GPP will report that same bit 64 in display 1. This, however, will only indicate that one of the four MATs in that display has failed. Looking at display 61, however, will show bit 1 set. This indicates that the device which reports to the first 16 bits of display 1, has failed. That indicates the first of those four MATs. Refer to Table A.

Bit 63 of display 64 is used to indicate a communications failure between the GPP and the MAP.

GPP set for "Failure Reports: Y"; MAP set for "Disable point 64: Y"

This option works much the same as the one described above, but because the MAP is not reporting bit 64 device failures, the GPP will not show bit 64 in the failed display. GPP displays 61 through 64 work as described above. Refer to Table A.

NOTE:

Each DCP(F) device polled by the GPP has its own displays 61-64. A message from the GPP that says (for example) that display 62, point 15 is in alarm, will not tell you which MAP is reporting a device failure. The beginning of every message from the GPP includes the MAP ID (SID).

NOTE: *In DCP(F) devices which return 32 displays of alarms and 32 displays of controls, do not assign any controls to displays 29-32. Control points assigned to these displays ultimately report to displays 61-64 in the GPP and interfere with the Display Failure Mode.*

CONTINUED . . .

TL1 GPP SYSTEM DEFINITION

TABLE A - DISPLAY FAILURE POINT ASSIGNMENT (DISPLAY 61)

FAILURE DISPLAYS - DISPLAY 61								
Point	Unconfigured Point Number	MAP Display	Group Number		Point	Unconfigured Point Number	MAP Display	Group Number
1	3841	1	1		33	3873	9	1
2	3842	1	2		34	3874	9	2
3	3843	1	3		35	3875	9	3
4	3844	1	4		36	3876	9	4
5	3845	2	1		37	3877	10	1
6	3846	2	2		38	3878	10	2
7	3847	2	3		39	3879	10	3
8	3848	2	4		40	3880	10	4
9	3849	3	1		41	3881	11	1
10	3850	3	2		42	3882	11	2
11	3851	3	3		43	3883	11	3
12	3852	3	4		44	3884	11	4
13	3853	4	1		45	3885	12	1
14	3854	4	2		46	3886	12	2
15	3855	4	3		47	3887	12	3
16	3856	4	4		48	3888	12	4
17	3857	5	1		49	3889	13	1
18	3858	5	2		50	3890	13	2
19	3859	5	3		51	3891	13	3
20	3860	5	4		52	3892	13	4
21	3861	6	1		53	3893	14	1
22	3862	6	2		54	3894	14	2
23	3863	6	3		55	3895	14	3
24	3864	6	4		56	3896	14	4
25	3865	7	1		57	3897	15	1
26	3866	7	2		58	3898	15	2
27	3867	7	3		59	3899	15	3
28	3868	7	4		60	3900	15	4
29	3869	8	1		61	3901	16	1
30	3870	8	2		62	3902	16	2
31	3871	8	3		63	3903	16	3
32	3872	8	4		64	3904	16	4

CONTINUED . . .

TL1 GPP SYSTEM DEFINITION

TABLE A (CONTINUED) - DISPLAY FAILURE POINT ASSIGNMENT (DISPLAY 62)

FAILURE DISPLAYS - DISPLAY 62								
Point	Unconfigured Point Number	MAP Display	Group Number		Point	Unconfigured Point Number	MAP Display	Group Number
1	3905	17	1		33	3937	25	1
2	3906	17	2		34	3938	25	2
3	3907	17	3		35	3939	25	3
4	3908	17	4		36	3940	25	4
5	3909	18	1		37	3941	26	1
6	3910	18	2		38	3942	26	2
7	3911	18	3		39	3943	26	3
8	3912	18	4		40	3944	26	4
9	3913	19	1		41	3945	27	1
10	3914	19	2		42	3946	27	2
11	3915	19	3		43	3947	27	3
12	3916	19	4		44	3948	27	4
13	3917	20	1		45	3949	28	1
14	3918	20	2		46	3950	28	2
15	3919	20	3		47	3951	28	3
16	3920	20	4		48	3952	28	4
17	3921	21	1		49	3953	29	1
18	3922	21	2		50	3954	29	2
19	3923	21	3		51	3955	29	3
20	3924	21	4		52	3956	29	4
21	3925	22	1		53	3957	30	1
22	3926	22	2		54	3958	30	2
23	3927	22	3		55	3959	30	3
24	3928	22	4		56	3960	30	4
25	3929	23	1		57	3961	31	1
26	3930	23	2		58	3962	31	2
27	3931	23	3		59	3963	31	3
28	3932	23	4		60	3964	31	4
29	3933	24	1		61	3965	32	1
30	3934	24	2		62	3966	32	2
31	3935	24	3		63	3967	32	3
32	3936	24	4		64	3968	32	4

CONTINUED . . .

TL1 GPP SYSTEM DEFINITION

TABLE A (CONTINUED) - DISPLAY FAILURE POINT ASSIGNMENT (DISPLAY 63)

FAILURE DISPLAYS - DISPLAY 63								
Point	Unconfigured Point Number	MAP Display	Group Number		Point	Unconfigured Point Number	MAP Display	Group Number
1	3969	33	1		33	4001	41	1
2	3970	33	2		34	4002	41	2
3	3971	33	3		35	4003	41	3
4	3972	33	4		36	4004	41	4
5	3973	34	1		37	4005	42	1
6	3974	34	2		38	4006	42	2
7	3975	34	3		39	4007	42	3
8	3976	34	4		40	4008	42	4
9	3977	35	1		41	4009	43	1
10	3978	35	2		42	4010	43	2
11	3979	35	3		43	4011	43	3
12	3980	35	4		44	4012	43	4
13	3981	36	1		45	4013	44	1
14	3982	36	2		46	4014	44	2
15	3983	36	3		47	4015	44	3
16	3984	36	4		48	4016	44	4
17	3985	37	1		49	4017	45	1
18	3986	37	2		50	4018	45	2
19	3987	37	3		51	4019	45	3
20	3988	37	4		52	4020	45	4
21	3989	38	1		53	4021	46	1
22	3990	38	2		54	4022	46	2
23	3991	38	3		55	4023	46	3
24	3992	38	4		56	4024	46	4
25	3993	39	1		57	4025	47	1
26	3994	39	2		58	4026	47	2
27	3995	39	3		59	4027	47	3
28	3996	39	4		60	4028	47	4
29	3997	40	1		61	4029	48	1
30	3998	40	2		62	4030	48	2
31	3999	40	3		63	4031	48	3
32	4000	40	4		64	4032	48	4

CONTINUED . . .

TL1 GPP SYSTEM DEFINITION

TABLE A (CONTINUED) - DISPLAY FAILURE POINT ASSIGNMENT (DISPLAY 64)

FAILURE DISPLAYS - DISPLAY 64								
Point	Unconfigured Point Number	MAP Display	Group Number		Point	Unconfigured Point Number	MAP Display	Group Number
1	4033	49	1		33	4065	57	1
2	4034	49	2		34	4066	57	2
3	4035	49	3		35	4067	57	3
4	4036	49	4		36	4068	57	4
5	4037	50	1		37	4069	58	1
6	4038	50	2		38	4070	58	2
7	4039	50	3		39	4071	58	3
8	4040	50	4		40	4072	58	4
9	4041	51	1		41	4073	59	1
10	4042	51	2		42	4074	59	2
11	4043	51	3		43	4075	59	3
12	4044	51	4		44	4076	59	4
13	4045	52	1		45	4077	60	1
14	4046	52	2		46	4078	60	2
15	4047	52	3		47	4079	60	3
16	4048	52	4		48	4080	60	4
17	4049	53	1		49	4081	Not Used	
18	4050	53	2		50	4082	Not Used	
19	4051	53	3		51	4083	Not Used	
20	4052	53	4		52	4084	Not Used	
21	4053	54	1		53	4085	Not Used	
22	4054	54	2		54	4086	Not Used	
23	4055	54	3		55	4087	Not Used	
24	4056	54	4		56	4088	Not Used	
25	4057	55	1		57	4089	Not Used	
26	4058	55	2		58	4090	Not Used	
27	4059	55	3		59	4091	Not Used	
28	4060	55	4		60	4092	Not Used	
29	4061	56	1		61	4093	Not Used	
30	4062	56	2		62	4094	Not Used	
31	4063	56	3		63	4095	Not Used	
32	4064	56	4		64	4096	Not Used	

TL1 GPP SYSTEM DEFINITION

GPP set for "Failure Reports: N"; MAP set for "Disable point 64: N"

In this option, any display that fails to respond to the MAP has point 64 in that display of the MAP and the GPP set. GPP displays 61 through 64 are used for normal alarm point reporting. Because GPP displays 61 through 64 are not used to report device failures, a communications failure between the MAP and the GPP will not be reported.

GPP set for "Failure Reports: N"; MAP set for "Disable point 64: Y"

In this mode, every point of every display of both the MAP and the GPP is available for alarm points. No device failures will be reported by the MAP or the GPP.

When the polling type is set for E2 (same as E2A), define point 64 of each display to indicate a display failure, as defined by the E2A protocol..

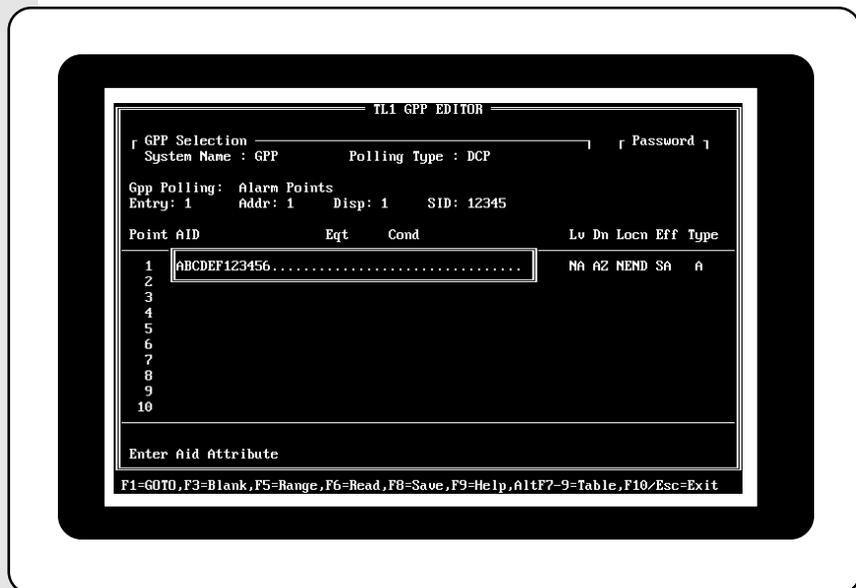
ALARM POINT CONFIGURATION

NOTE:

Editing of alarm points requires that the address and display number be entered in for an entry.

To edit alarm points:

1. In the *Address* field, select an address.
2. Press F2. The Alarm Points screen pops up:



NOTE:

The AID field is truncated in the Alarm Points listing. When the AID field is selected, the entire AID field can be seen in the highlighted box.

3. In the *AID* field, type in the AID attribute. Do not exceed 44 characters. Refer to the *AID and EQT Field Command Keys* for alarm point editing.
4. Press Enter.

CONTINUED . . .

TL1 GPP SYSTEM DEFINITION

5. The following question appears at the bottom left corner of the screen:
Entry not found. Add it? (Y/N)
Type **Y** to add the address. If you type **N**, the screen prompts you for another address.
6. In the *EQT* field, type in the *EQT* attribute. Press Alt-F9 for a list of attributes. Type in the attribute or the forward slash key and the *EQT* code in the attribute list; for example, type /1 for **LINE**. The default is **EQPT**. Press Enter.
7. In the *COND* field, type in the *COND* attribute. Do not exceed 15 characters. Press Enter.
8. The following question appears at the bottom left corner of the screen:
Entry not found. Add it? (Y/N)
Type **Y** to add the address. If you type **N**, the screen prompts you for another address.
9. Type in the *LEV* attribute. Press Alt-F9 for a list of attributes. Type in the attribute or the forward slash key and the *LEV* code in the attribute list; for example, type /1 for **MJ**. The default is **NA**. Press Enter.
10. Type in the *DIRN* attribute. Press Alt-F9 for a list of attributes. Type in the attribute or the forward slash key and the *DIRN* code in the attribute list; for example, type /1 for **ZA**. The default is **AZ**. Press Enter.
11. Type in the *LOCN* attribute. Press Alt-F9 for a list of attributes. Type in the attribute or the forward slash key and the *LOCN* code in the attribute list; for example, type /1 for **FEND**. The default is **NEND**. Press Enter.
12. Type in the *EFF* attribute. Press Alt-F9 for a list of attributes. Type in the attribute or the forward slash key and the *EFF* code in the attribute list; for example, type /1 for **NSA**. The default is **SA**. Press Enter.
13. Type in the point type. Press **E** for an environmental point or **A** for an alarm point. The default is **A**. Press Enter.
14. Repeat steps 1-20 to configure other alarm points. When finished, press F8 to save the information.

AID AND EQT FIELD COMMAND KEYS

Here are brief descriptions of the command keys that you can use while the cursor is in the *AID* or *EqT* fields.

F1 - GOTO - Goes directly to an *AID* or *EqT* entry.

F3 - Blank - Deletes the current point.

F5 - Range Functions - Specify a range of points to:

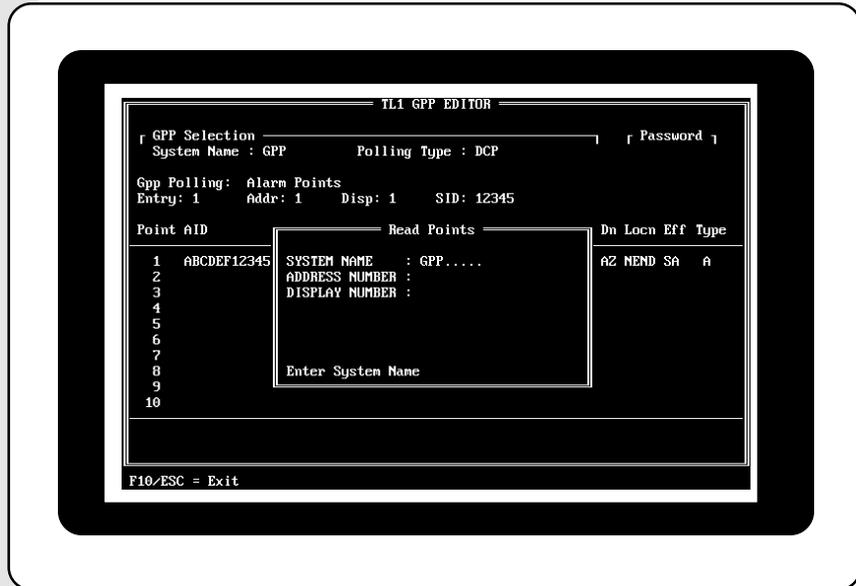
- ◆ Edit specific attributes of points.

CONTINUED . . .

TL1 GPP SYSTEM DEFINITION

- ◆ Copy attributes of one point to a range of points.
- ◆ Delete one point or a range of points.

F6 - Read - Reads point definitions of one database polling list and copies them into the current database polling list. When F6 is pressed, the Read Points window pops up:



To read point definitions:

1. Type in the name of the system being read. The current system name is the default. Press Enter.
2. Type in the address of the system being read. Acceptable values are 1-255. Press Enter.
3. Type in the display number of the system being read. Acceptable values are 1-64. Press Enter.

F8 - Save - Saves point definitions and returns to the polling list.

F9 - Help - Displays a help screen.

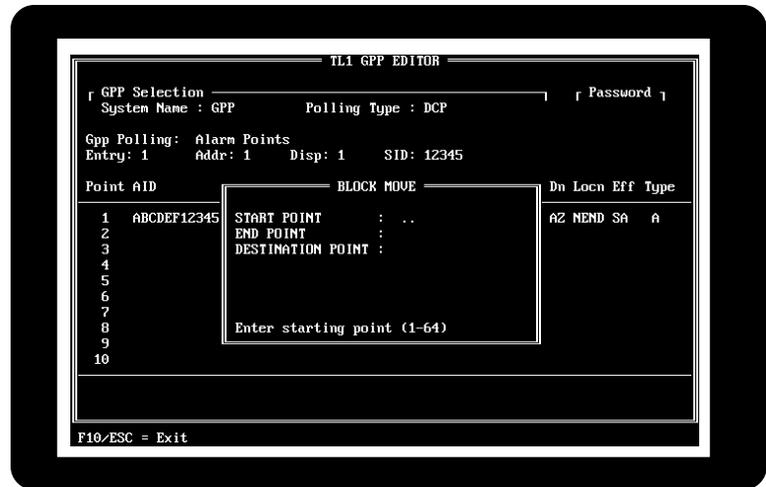
Alt-F3 -Delete Point - Deletes current point. All points below the deleted point move up one position.

Alt-F4 -Insert Point - Inserts one point above the current point.

CONTINUED . . .

TL1 GPP SYSTEM DEFINITION

Alt-F5 -Block Move - When you press Alt-F5, the Block Move window pops up:



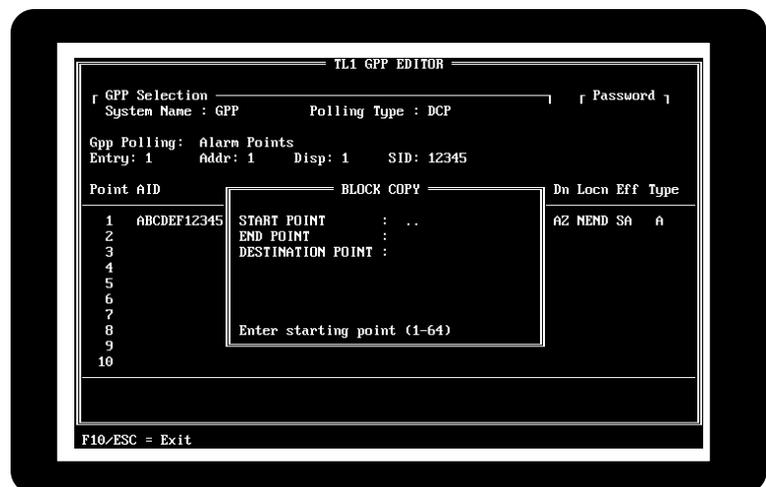
NOTE:

The selected destination block must accommodate the entire source block. For example, a block from points 1-10 cannot be moved to a block starting at point 60, because the maximum block is 64.

To move a block:

1. Type in the first point of the block. Acceptable values are 1-64. Press Enter.
2. Type in the last point of the block. Acceptable values are 1-64. Press Enter.
3. Enter the first point of the new block location. Acceptable values are 1-64. Press Enter.

Alt-F6 -Block Copy - When you press Alt-F5, the Block Copy window pops up:



TL1 GPP SYSTEM DEFINITION

NOTE:

The selected destination block must accommodate the entire source block. For example, a block from points 1-10 cannot be moved to a block starting at point 60, because the maximum block is 64.

To copy a block:

1. Type in the first point of the block. Acceptable values are 1-64. Press Enter.
2. Type in the last point of the block. Acceptable values are 1-64. Press Enter.
3. Enter the first point of the new block location. Acceptable values are 1-64. Press Enter.

Alt-F7 -Previous Entry - Goes to previous entry in the selected field.

Alt-F8 -Next Entry - Goes to next entry in the selected field.

Alt-F9 -Show - Displays a list of all entries you made in the selected field.

F10/Esc - Exit - Returns to the *GPP Polling* Display screen.

NOTE: When F10/Esc is pressed, the alarm point configuration is not saved. Press F8 to save the information.

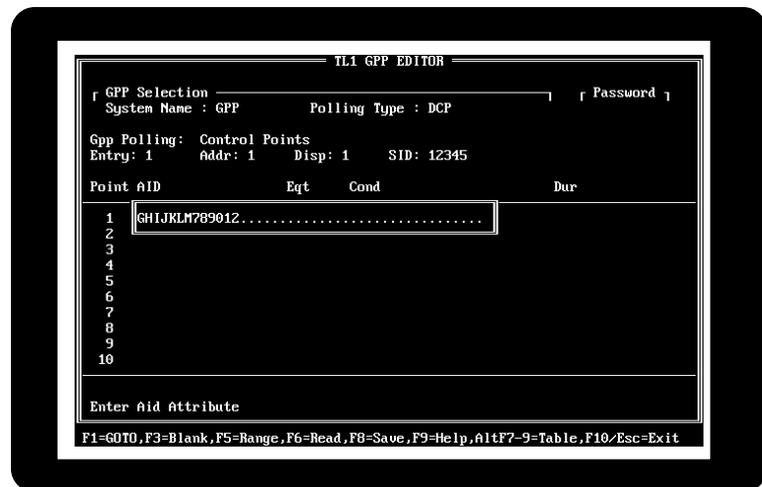
CONTROL POINT CONFIGURATION

To edit alarm points:

1. In the *Address* field, select a DCP address. Acceptable values are 1-255.

NOTE: The address and display number for an entry must be entered before alarm points can be edited.

2. Press F4. The Control Points screen pops up:



CONTINUED . . .

TL1 GPP SYSTEM DEFINITION

3. In the *AID* field, type in the AID attribute. Do not exceed 44 characters.

NOTE: *The AID field is truncated in the Alarm Points listing. Select the AID field to view the entire AID field.*

Refer to the ***AID and EQT Field Command Keys*** for alarm point editing. Press Enter.

4. The following question appears at the bottom left corner of the screen:
Entry not found. Add it? (Y/N)

Type **Y** to add the address. Type **N** to prompt for another address.

5. In the *EQT* field, type in the EQT attribute. Press Alt-F9 for a list of attributes. Type in the attribute or the forward slash key and the EQT code in the attribute list; for example, type /1 for **LINE**. The default is **EQPT**. Press Enter.

6. In the *COND* field, type in the COND attribute. Do not exceed 20 characters. Press Enter.

7. The following question appears at the bottom left corner of the screen:
Entry not found. Add it? (Y/N)

Type **Y** to add the address. Type **N**, and the screen prompts for another address.

8. In the *DUR* field, type in the duration table. Press Alt-F9 for a list of tables. Type in the table or the forward slash key and the table code in the attribute list; for example, type /1 for **MNTRY**. The default is **CONTS**. Press Enter.

9. Repeat steps 1-12 to configure other alarm points. When finished, press F8 to save the information.

AID AND EQT FIELD COMMAND KEYS

Here are brief descriptions of the command keys available while the cursor is in the *AID* or *Eqt* fields.

F1 - GOTO - Goes directly to an AID or Eqt entry.

F3 - Blank - Deletes the current point.

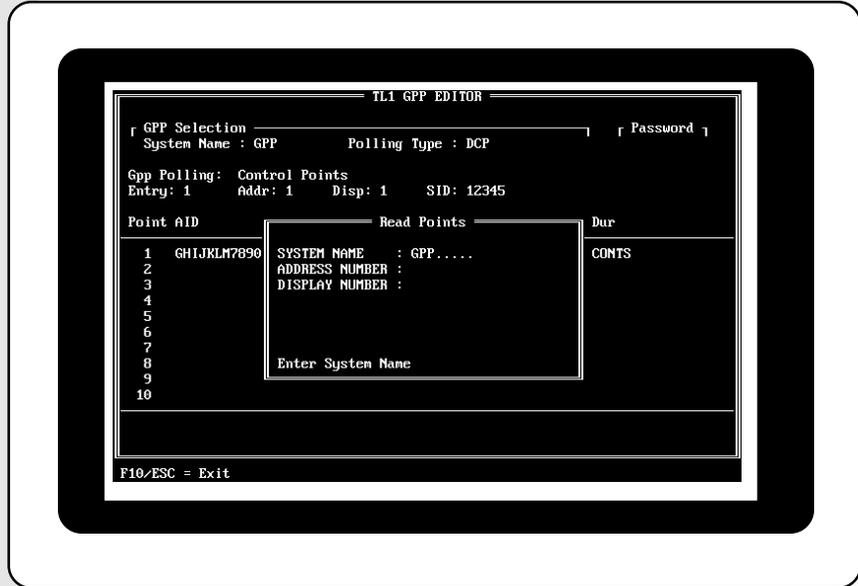
F5 - Range Functions - Specifies a range of points to:

- ◆ Edit specific attributes of points.
- ◆ Copy attributes of one point to a range of points.
- ◆ Delete one point or a range of points.

TL1 GPP SYSTEM DEFINITION

To read point definitions:

F6 -Read - Reads point definitions of one polling list and copies them into the current polling list. When F6 is pressed, the Read Points window pops up:



1. Type in the name of the system being read. The current system name is the default. Press Enter.
2. Type in the address of the system being read. Acceptable values are 1-255. Press Enter.
3. Type in the display number of the system being read. Acceptable values are 1-64. Press Enter.

F8 - Save - Saves point definitions and returns to the polling list.

F9 - Help - Displays a help screen.

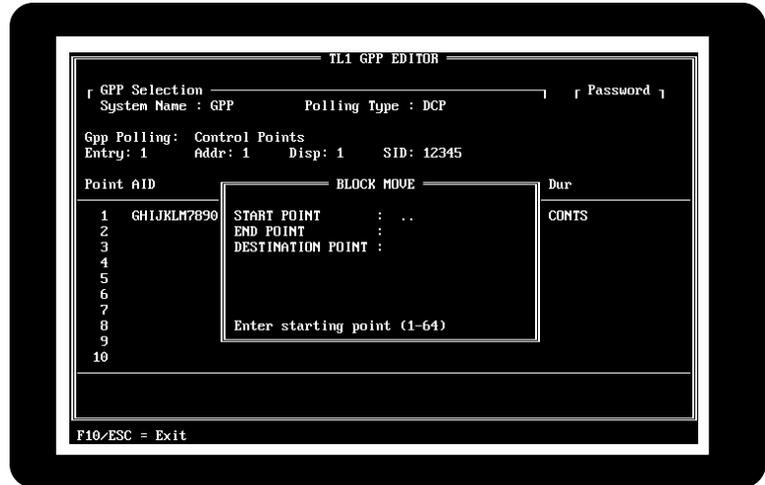
Alt-F3 -Delete Point - Deletes current point. All points below the deleted point move up one position.

Alt-F4 - Insert Point - Inserts one point above the current point.

TL1 GPP SYSTEM DEFINITION

To move a block:

Alt-F5 - Block Move - When Alt-F5 is pressed, the Block Move window pops up:



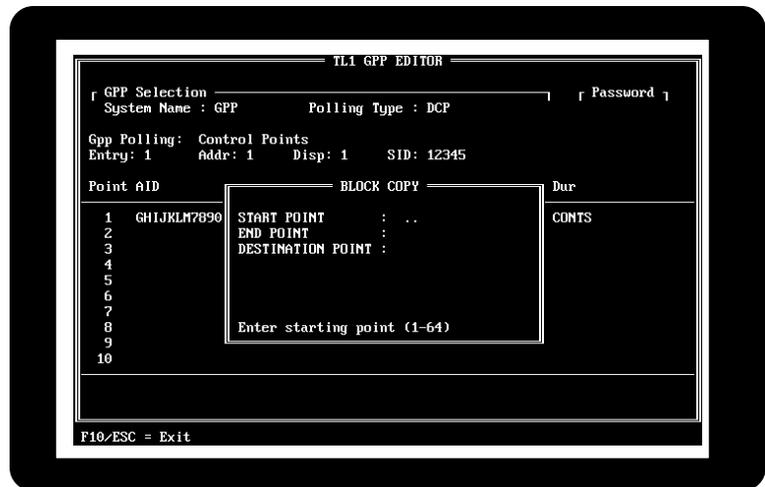
NOTE:

The selected destination block must accommodate the entire source block. For example, a block from points 1-10 cannot be moved to a block starting at point 60, because the maximum block is 64.

1. Type in the first point of the block. Acceptable values are 1-64. Press Enter.
2. Type in the last point of the block. Acceptable values are 1-64. Press Enter.
3. Enter the first point of the new block location. Acceptable values are 1-64. Press Enter.

To copy a block:

Alt-F6 - Block Copy - When you press Alt-F5, the Block Copy window pops up:



CONTINUED . . .

TL1 GPP SYSTEM DEFINITION

1. Type in the first point of the block. Acceptable values are 1-64. Press Enter.
2. Type in the last point of the block. Acceptable values are 1-64. Press Enter.
3. Enter the first point of the new block location. Acceptable values are 1-64. Press Enter.

NOTE: *The selected destination block must accommodate the entire source block. For example, a block from points 1-10 cannot be moved to a block starting at point 60, because the maximum block is 64.*

Alt-F7 -Previous Entry - Goes to previous entry in the selected field.

Alt-F8 -Next Entry - Goes to next entry in the selected field.

Alt-F9 - Show - Displays a list of all entries you made in the selected field.

F10/Esc - Exit - Returns to the *GPP Polling* Display screen.

NOTE: *When F10/Esc is pressed, the alarm point configuration is not saved. Press F8 to save the information.*

LINE ITEM CHANGES

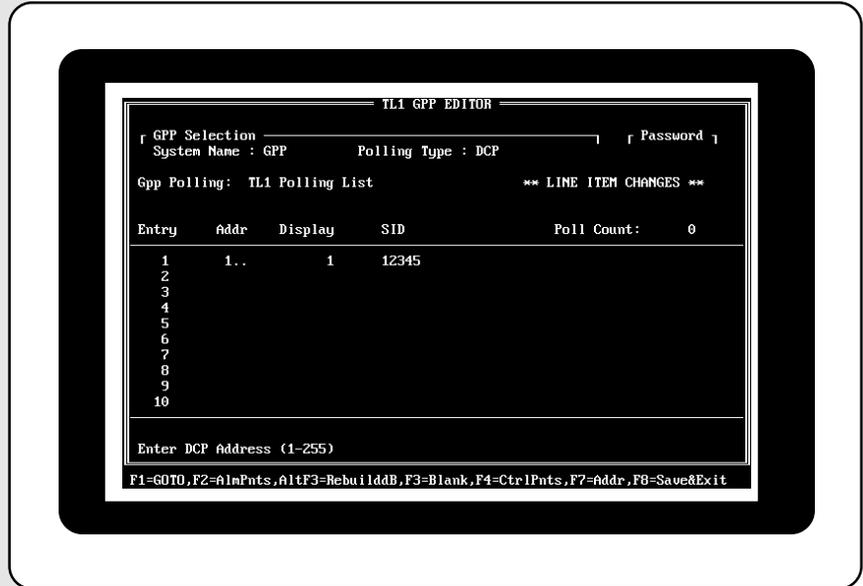
Line Item Changes is a special feature used to specify minor changes to the database in order to minimize download time. Rather than changing the database using the Polling and Points option and having to download the entire database (see Polling and Points section - this chapter), the Line Item Change feature may be used. When used with the "L" download option of the Transfer screen (see Transfer section - this chapter), minor changes are made quickly. The Master Update then makes the changes final in the Polling and Points database (see Master Update section - this chapter).

This feature is especially useful for making minor changes to large databases. Because the capabilities of the Line Item Change are limited however, it is recommended that, for smaller databases, the normal Polling and Points with a full Download be used.

Empty displays (displays where no alarm or control points are assigned) are not downloaded. An empty display that has been added or had the SID changed on the Line Item Change screen, will not be downloaded to the TL1 GPP. Because these displays are not transferred to the GPP during a Line Item Change, they cannot change the behavior of the GPP or be uploaded from the GPP. In this situation, use Polling and Points to edit the polling list and Download to transfer the entire database to the TL1 GPP.

TL1 GPP SYSTEM DEFINITION

Below is the Line Item Changes screen:



NOTE: *Previously defined points appear in magenta, and new entries appear in white.*

To edit a polling list by line item:

The Line Item Changes screen is nearly identical to the Polling and Points screen. As with the Polling and Points screen, the F2 key allows editing of the alarm points for the display. The F4 key allows the editing of control points for the display. There are a few differences:

- ◆ Pre-existing polling list entries appear as magenta in color, while new or changed entries appear as white.
- ◆ The F5 Compression feature is unavailable.
- ◆ The ALT-F3 feature is available. This feature (RebuilddB) resets the database according to the last Polling and Points information

Downloading Line Items

When the changes to the Line Item Changes are complete, download the changes and additions to the TL1 GPP. Use the "L" option described in the Transfer section of this chapter.

TL1 GPP SYSTEM DEFINITION

TRANSFER

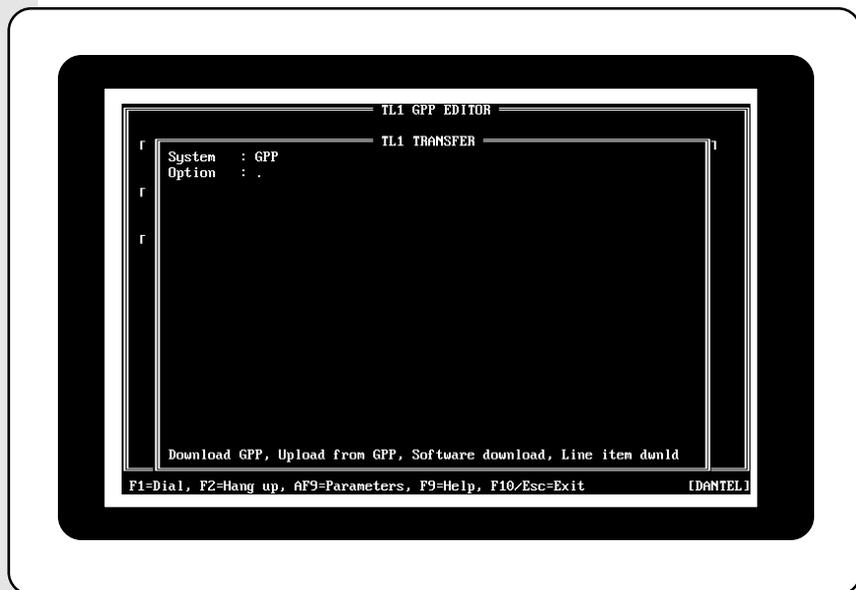
NOTE:

The operating software (*.ABS) should be located in the same directory or folder as the T/Shell files.

The Transfer option:

- ◆ Downloads operating software (with the *.ABS extension).
- ◆ Downloads the configuration to a GPP database.
- ◆ Uploads a configuration from a GPP database.
- ◆ Downloads a GPP configuration to 46062 GPP memory.
- ◆ Requests a GPP database to identify itself.

Here is the TL1 GPP Editor screen with the Transfer window:



Before beginning the transfer process:

1. Press Alt-F9 to check the communications parameters. Refer to the chapter on *Parameters* for descriptions of the parameters.
2. Check the GPP Configuration address. The address is shown in the TL1 GPP Editor screen. Press F10 to exit the Transfer window and display the full TL1 GPP Editor screen. The address must be the same as the default address of the GPP.

TL1 GPP SYSTEM DEFINITION

To transfer files over a modem:

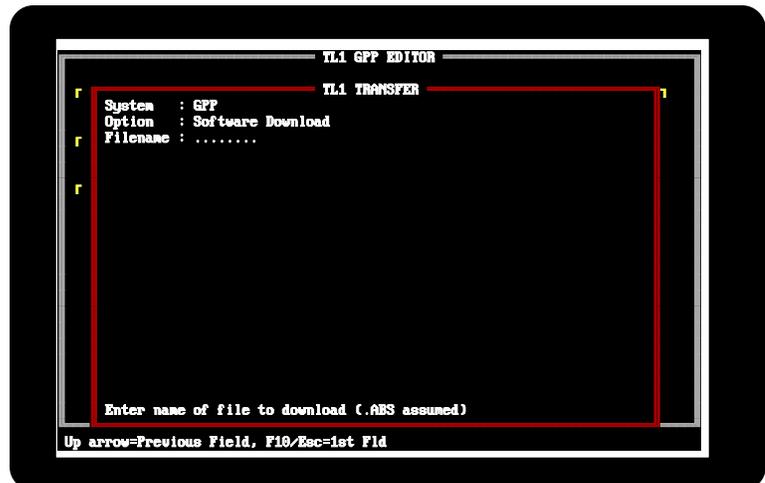
1. Press F1. A Hayes-compatible modem is required. The dial type (pulse or tone) is selected from the *System Parameters* option of the Master Menu.
2. Enter the telephone number. Press Enter.
3. After the other end answers, upload or download a configuration. See instructions below.
4. When the transfer is complete, press F2 to hang up the modem.

DOWNLOADING OPERATING SOFTWARE TO GPP

1. At the *Option* field, type S. Press Enter. The system prompts for a file name:

NOTE:

The file must have a DOS file extension of ".ABS" and must be in the designated data path. Refer to the next chapter, TL1 GPP SYSTEM DEFINITION, to view or change the data path.



2. Type in the file name. Do not exceed 8 characters. Press Enter.

TL1 GPP SYSTEM DEFINITION

NOTE:

For Packet Network Downloading only, set the following parameters using the ALT-F9 keys:

DCPR = Yes
DCPF = Yes

For all other transfers:
DCPR = No

NOTE:

Press Esc to abort a download in progress. Aborted downloads partially configure the GPP and disable polling.

NOTE:

For Packet Network Uploads, turn DCPR off.

NOTE:

Press Esc to abort an upload in progress.

DOWNLOADING THE GPP CONFIGURATION

To download the configuration:

1. At the *Option* field, type **D**. (Type **L** to download Line Item Changes.
2. Press Enter.
3. Type in your password and press Enter. If there is no password, just press Enter.

NOTE: *T/Shell will compare the database type (low battery messaging/non-low battery messaging) to the target GPP. The download will be aborted if they do not match.*

In order to avoid a corrupted configuration in the TL1 GPP, do not:

- ◆ Download Line Item Changes when the selected T/Shell database is not the same database as the one currently loaded in the GPP
- or
- ◆ Download the same Line Item Changes more than once.

NOTE: *After a successful Line-Item download, a Master Update is required to maintain an accurate copy of the database in the T/Shell Editor.*

UPLOADING A GPP CONFIGURATION

NOTE: *Uploading a database into an existing file overwrites all previously saved data in that file.*

To upload a configuration:

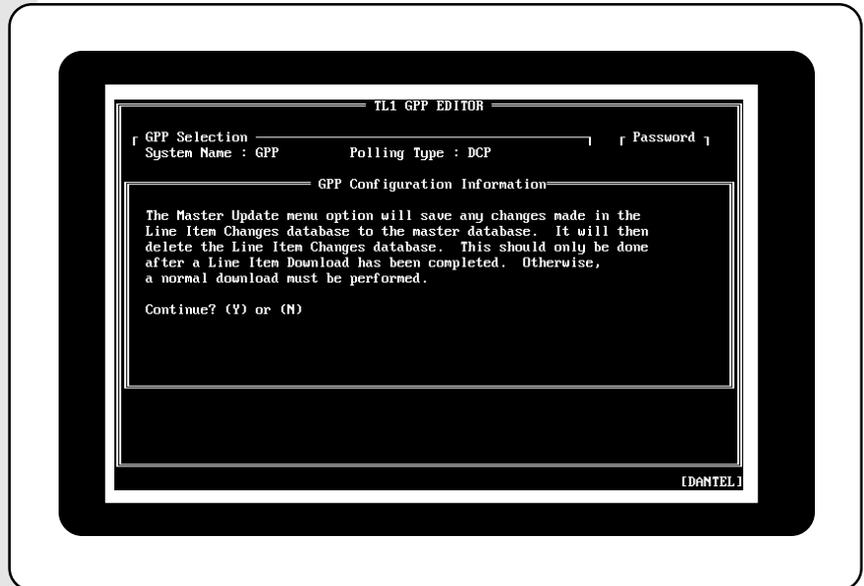
1. At the *Option* field, type **U**. Press Enter.
2. A warning appears advising that the data about to be uploaded will overwrite any configuration data in the computer. Type **Y** and press Enter to continue or press Enter to discontinue the operation. To avoid overwriting a configuration, exit the Transfer window, choose *Select GPP* from the TL1 GPP System Menu, and create a new configuration. Press Enter.
3. Type in the password and press Enter. If there is no password, just press Enter.

TL1 GPP SYSTEM DEFINITION

MASTER UPDATE

The Master Update option updates the master database with Line Item Changes. Use the Master Update option only after downloading Line Item Changes to the 46062 GPP.

Here is the TL1 GPP Editor screen with the Master Update window:



Type **Y** to update the database. Type **N** to return to the TL1 GPP System menu. If there are no changes in the Line Item Changes database, the system reports no detected changes and returns to the TL1 GPP System menu.

The TL1 GPP Editor automatically updates the master database and clears the Line Item Changes database.

NOTE:

Do not download Line Item Changes already downloaded to the 46062 GPP.

TL1 GPP SYSTEM DEFINITION

REPORTS

The Reports option generates reports on the GPP database. Most of the reports can be sent to either the screen, a file or a printer.

Here is the TL1 GPP Editor screen with the GPP Reports menu:



NOTE:

To maintain the accuracy of reports, perform a compression (F5) in the Polling and Points screen. The SID, AID, and COND reports will report all entries, whether they are currently used in the database or not. Performing a compression removes any entries that are stored in tables but not used in the database. The EQT report will display only the entries used in the database.

To select an option:

1. Highlight an option. A brief description of each option appears below. Press Enter.
2. Go to the subsection that explains the option you selected.

Polling List Without Points - Contains an output of all defined polling list entries.

Polling List With Points - Contains an output of all defined polling list entries and their points.

SID Table - Shows SIDs defined in the selected data path.

AID Table - Shows AIDs defined in the selected data path.

Cond Table - Shows CONDS defined in the selected data path.

Eqpt Table - Shows all used equipment table entries.

TL1 GPP SYSTEM DEFINITION

POLLING LIST WITHOUT POINTS

To generate a report:

1. In the *Output to* field, type **F** for file, **P** for printer, or **S** for screen. Press Enter.

CAUTION: *When a printer is the destination, an error message will appear if there is no printer connected to your computer or if the printer is not turned on. If the error message appears, press any key to continue. The computer exits the program and returns to the Master Menu.*

When a file is selected as the destination of a report, enter a DOS file name at the prompt. If no file name extension is entered, the extension .LST is automatically appended. The file will be sent to the destination specified in the *Rpt Path* of the *Parameters* option. Refer to the *Parameters* chapter.

Here is an example of the report on the screen:



```
TL1 GPP EDITOR                                     Page 1
Sys : GPP
Entry Add Display SID
 1     1     1    12345
Press any key to return to menu                    [DANTEL]
```

TL1 GPP SYSTEM DEFINITION

CAUTION:

When a printer is the destination, an error message will appear if there is no printer connected to the computer, or if the printer is not turned on. If the error message appears, press any key to continue. The computer exits the program and returns to the Master Menu.

POLLING LIST WITH POINTS

To generate a report:

1. In the *Output to* field, type **F** for file, **P** for printer, or **S** for screen. Press Enter. When printing the report to a printer, the following prompt asks:

Do a form feed after the points of each polling list entry (Y/N)

Press **Y** (Yes) to print the points from each polling list on its own page. Press **N** (No) to print all points in a continuous report with only a two-line break between polling list entries.

NOTE: Before printing form feeds, ensure the first line of print is at the very top of the page. Reports print on all 66 lines of a standard 8 1/2 by 11 inch page.

When a file is selected as the destination of a report, enter a DOS file name. If no file name extension is entered, the extension .LST is automatically appended. The file will be sent to the destination specified in the *Rpt Path* of the *Parameters* option. Refer to the *Parameters* chapter.

Here is an example of the report on the screen:



```
TL1 GPP EDITOR
Entry: 1  Addr: 1  Disp: 1  SID: 12345  Page 1
Pt AID  Eqt  Cond  Lv Dn Locn Eff T
1 ABCDEF123456  EQPT  12345  NA AZ MEND SA A
F10/Esc = Exit, Any Other Key to See Next Page  [DnATEL]
```

The top lines in the report list the system entry number, address, display and the SID number. The report lists all attributes of defined points.

TL1 GPP SYSTEM DEFINITION

SID TABLE

Here is an example of a report of SID table entries that appears on the screen:



The SID Table reports all SIDs defined in the selected data path.

AID TABLE

Here is an example of a report of AID table entries that appears on the screen:



The AID Table reports all AIDs defined in the selected data path.

TL1 GPP SYSTEM DEFINITION

COND TABLE

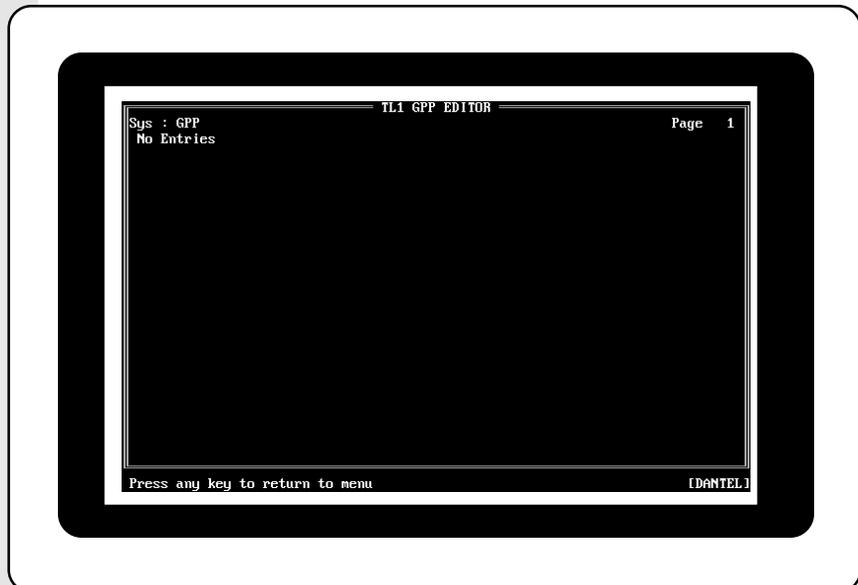
Here is an example of a report of COND table entries that appears on the screen:



The COND Table reports all CONDs defined in the selected data path.

EQT TABLE

Here is an example of a report of EQT table entries that appears on the screen:



The EQT Table reports all EQTs used in the selected data path.

TL1 GPP SYSTEM DEFINITION

Issue

The TL1 GPP Editor uses Bellcore Issue 3 or Issue 5 standards for TL1 commands sent out of the module.

Type **3** to use Bellcore TR-TSY-000833 Issue 3 standards. Type **5** to use Bellcore TR-NWT-000833 Issue 5 standards. (Default is **3**.)

CondDescr

Type **Y** (Yes) to report address conditions. Type **N** (No) to have conditions unreported. (Default is **Y**.)

Single Rspblk

Type **Y** (Yes) to enable the Single Response Blocks feature. With this feature on, autonomous TL1 messages will contain only one entry in a response block.

KEY FILES REBUILD

WARNING:

This option should not be used unless there is a problem with the system files.

Select Key Files Rebuild option from the Utilities menu to rebuild the system index file. This process will begin immediately and rebuild an index file in the event that the data file and index file get out of synchronization. The Key Files Rebuild process deletes the “out of sync” index file and uses the data file to create a new index file.

This option will most often be used in the event of a catastrophe with the TL1 GPP T/Shell system files and when recommended by a Dantel Customer Support Services Representative.

COPY GPP FILES

In the Utilities menu, highlight *Copy GPP Files*. Press Enter.

WARNING: *Refer to the Utilities section of this chapter for information on copying configurations. Do not use the DOS copy function.*

COPY TO

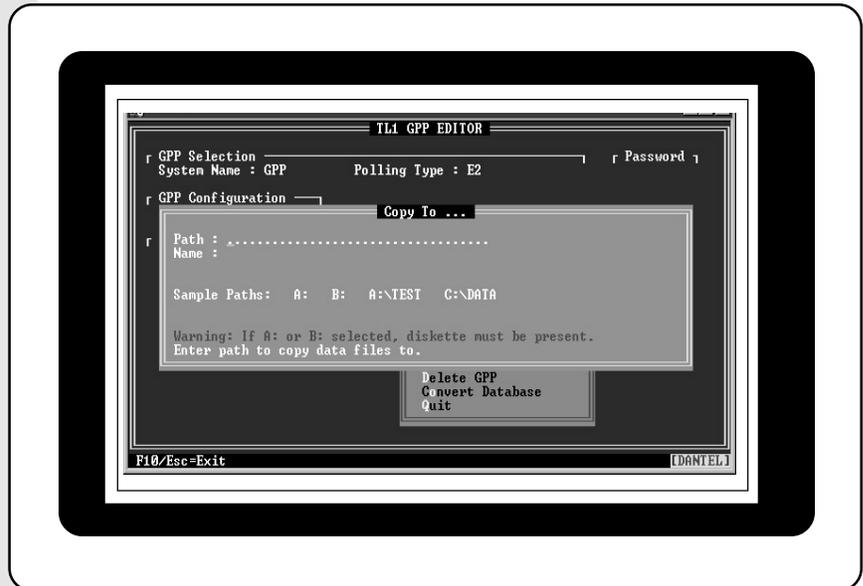
To copy a file to another location:

1. Highlight *Copy From Data Path To . . .*
2. Press Enter.

CONTINUED . . .

TL1 GPP SYSTEM DEFINITION

Here is the Copy To ... window:



WARNING:

If there is no disk in the selected destination, T/Shell will lock up. Exit by inserting a disk or halting T/Shell.

3. If a floppy drive is selected as the destination, a diskette must be in the drive.
4. In the *Path* field, enter the destination drive and path where the configuration is to be copied. Press Enter.
5. The *Name* field defaults to the current name. To change the name, type a new one. Press Enter.

NOTE: *When copying a configuration from one location to another, renaming of the configuration is unnecessary. Copying a configuration from one location to the same location (such as to use a configuration as the basis for creating a new one) however, requires the new configuration be renamed.*

6. To start the copying process, press Enter.

NOTE: *The configuration files are being copied, not moved; therefore, the files being copied are not being erased from their original location.*

COPY FROM

To copy a file from another location:

1. Highlight Copy From ... To Data Path.
2. Press Enter.

CONTINUED . . .

TL1 GPP SYSTEM DEFINITION

Here is the Copy From ... window:



WARNING:

If there is no disk in the selected source, T/Shell will lock up. Exit by inserting a disk or halting T/Shell.

3. If a floppy drive is selected as the source, a diskette must be in the drive.
4. In the *Path* field, enter the drive and path from which you want to copy a configuration. Press Enter.
5. In the *Name* field, enter the system name of the configuration to be copied. Press Enter.
6. In the *Password* field, enter the system name's password if there is one. Press Enter.
7. The *New Name* field defaults to the same name as shown in the *Name* field. To change the name, type a new one. Press Enter.

NOTE: *When copying a configuration from one location to another, renaming the configuration is not necessary. But if you the configuration is copied from one location to the same location (such as to use a configuration as the basis for creating a new one), rename the configuration.*

8. To start the copying process, press Enter.

NOTE: *The configuration files are being copied, not moved; therefore, the files being copied are not being erased from their original location.*

TL1 GPP SYSTEM DEFINITION

DELETE GPP

Here is the screen:



WARNING:

Take care when using this command. This command erases all references to the configuration.

When initiating this command, a warning message appears at the bottom left corner of the screen. An example of the warning message is shown below.

Delete the System "GPP" (Y/N)?

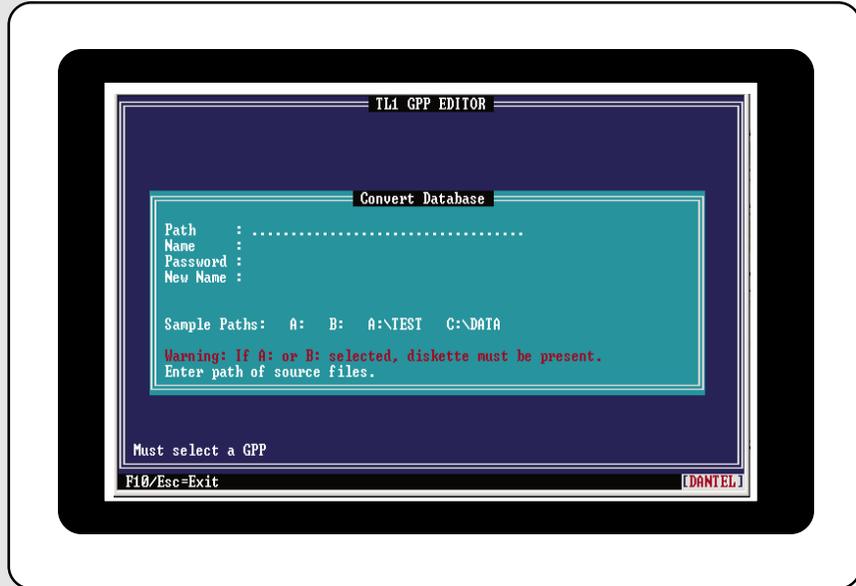
Type **Y** (Yes) to delete the configuration. Type **N** (No) if you do not want to delete the configuration.

TL1 GPP SYSTEM DEFINITION

CONVERT DATABASE

The Convert Database option converts old database files to the new T/Shell database format.

Here is the TL1 GPP Editor screen with the Convert Database window:



WARNING:

If there is no disk in the selected destination, T/Shell will lock up. Exit by inserting a disk or halting T/Shell.

NOTE:

Database files can be imported from multiple diskettes.

To convert a database:

1. If a floppy drive is selected as the destination, a diskette must be in the drive.
2. Select the drive and path where the database file will be copied to. Press Enter for the path defined in the TL1 GPP Data Path menu.
3. Enter the name of the database file. Press Enter.
4. Enter the system password. Press Enter.
5. Type in a new database file name. The default is the current database file name. Press Enter.

NOTE: Press F10 or Esc to abort a database conversion in progress. Erase the converted data from the path in your hard disk drive to copy to the same path using the same file name.

TL1 GPP DATA PATH

The TL1 Data Path option of the TL1 GPP Module menu specifies the drive and directory path where the T/Shell database configuration files will be stored. It is recommended that the database be located on a non-removable hard drive. When a floppy drive is used, verify that a diskette is in the drive at all times.

Here is the TL1 GPP Edit screen with the Edit TL1 GPP Data Path windows:



The current data path is shown in the upper window. The lower window displays any database configurations that are stored at the current path.

To change the data path:

1. If a floppy drive is selected as the destination, a diskette must be in the drive.
2. Type the new path.

Sample path specifications are shown below:

```
B:\
C:\TSHELL\TL1\DATA
C:\TSHELL\TL1\TEST
```

WARNING:

If there is no disk in the selected destination, T/Shell will lock up. Exit by inserting a disk or halting T/Shell.

NOTE: Specifying a drive without a path (for example A: or C:), loads the current path of that drive into the Data Path parameter.

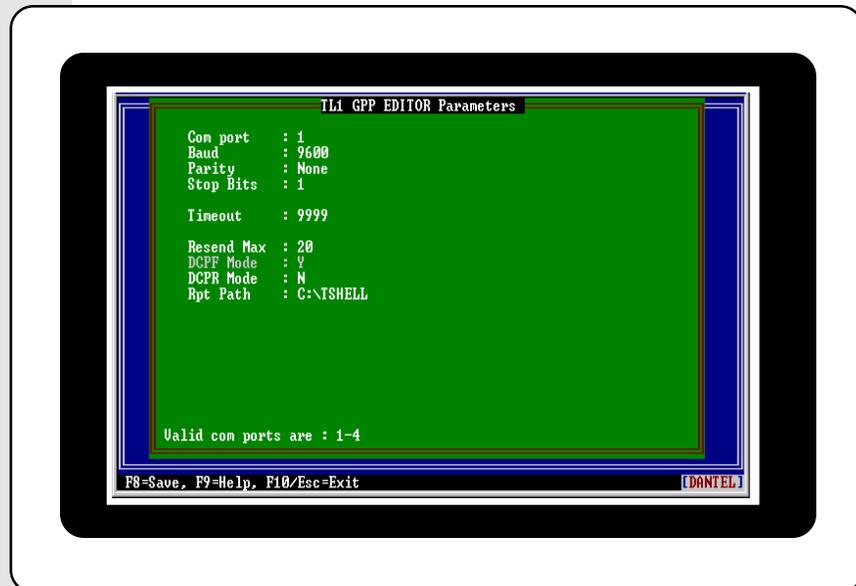
3. Press Enter.
4. Press F8 to save the new path.

TL1 GPP PARAMETERS

The TL1 GPP Editor Parameters option of the TL1 GPP Module menu allows:

- ◆ The selection of the communications parameters for uploading and downloading GPP database configurations.
- ◆ The specification of where to store reports on database configurations on your computer.

Here is the TL1 GPP Parameters window:



To change the parameters:

1. Enter the desired value. Press Enter.

If no change is needed to a value at a particular field, press Enter to advance to the next field.

If some fields have been changed and all the remaining fields are acceptable, press F8 to save the changes and return to the TL1 GPP Editor Module menu.

At the last field (Rpt Path), press Enter to save all changes to the system parameters. The TL1 GPP Editor Module menu appears.

Here are descriptions of each parameter:

Com Port - Specifies which communications port to use when uploading or downloading database configurations. Acceptable entries are 1-4. This field defaults to 1.

WARNING: *Specifying a communications port that the computer does not have causes the T/Shell program to lock up when the computer tries to use that port. Reboot the computer.*

CONTINUED . . .

TL1 GPP PARAMETERS

NOTE:

For Packet Network Downloading only, set the following parameters using the ALT-F9 keys:

DCPR = Yes
DCPF = Yes

For all other transfers:
DCPR = No

NOTE:

DCPR (DCP Robust) should be used when configuring over a packet network. The receiving GPP must have TGOS Version 5.10 or greater.

Baud - Sets the baud rate for the communications port. Acceptable baud rates are 110, 150, 300, 600, 1200, 2400, 4800, 9600, 19 (19,200) and 38 (38,400). This field defaults to 9600.

Parity - Sets the parity for the communications port. Acceptable values are E)ven, O)dd, N)one. This field defaults to N)one.

Stop Bits - Sets the number of stop bits for the communications port. Acceptable values are 1 or 2. This field defaults to 1.

Timeout - Sets the amount of time in milliseconds that the computer waits for the device at the other end of the communications line to acknowledge that it is ready to receive data. Acceptable values are 50 - 9999 milliseconds. This field defaults to 2000 milliseconds (2 seconds).

Resend Max - Specifies the number of resends that the computer attempts before declaring a "Com Port Error" when trying to upload or download data. Acceptable values are 1 - 100. This field defaults to 20.

DCPF Mode - This parameter is greyed out and is always set to Y. DCPF protocol is used for uploading and downloading files.

DCPR Mode - Setting this parameter to Y will activate DCPR. Setting to N will deactivate DCPR. Default is N.

Rpt Path - Specifies the drive and directory that the computer is to use to store any reports that are sent to a file. For more information, see the *Reports* section of the *TL1 GPP System Definition* chapter. This field defaults to the current directory.

TERMINAL EMULATOR

The Terminal option of the TL1 GPP Module menu activates the terminal emulator that imitates a dumb terminal's monitor. The purpose of this mode is to allow direct communications with another device.

The terminal emulator screen is blank except for the bottom line, which displays the available command keys. Here is the screen:



Below is a brief description of the function of each command key. More detailed information is provided in other sections of this chapter.

F1 - Edit Terminal Configuration (Cnf) - Configures how the terminal emulator communicates with another device. Also programs function keys to playback a lengthy string of characters that may constitute a command, an often used phrase, etc.

F2 - Toggle Capture File (Cap) - Starts and stops the capturing of data received by the terminal. The data then can be reviewed at a later time.

F3 - Open Capture File (O/Cap) - Opens a capture file.

F4 - Close Capture File (C/Cap) - Closes a capture file.

F5 - Load Configuration File (Ld Cnf) - Changes the current terminal configuration to a new configuration.

F7 - Download File Transmission (Xfer) - Transfers (downloads) a DOS file from your computer to another device.

F8 - Toggle Protocol Analyzer/Debug (Debug) - Activates and deactivates a protocol analyzer for troubleshooting problems of the device connected to the terminal emulator.

CONTINUED . . .

TERMINAL EMULATOR

F9 - Help Message (hlp) - Displays on-line help.

F10 - Exit Terminal Emulator (Ext) - Exits the terminal mode and returns to the TL1 GPP Module menu.

EDIT TERMINAL CONFIGURATION

Press F1 from the main terminal emulator screen to select the terminal configuration option. The Edit Configuration window appears:



Options include:

- ◆ Change the terminal's configuration for communicating with another device. See *Terminal Attributes* in this section.
- ◆ Program the function keys. See *Shift Fxx*, *Ctrl Fxx*, and *Alt Fxx* in this section.
- ◆ Create a file to save the changes made in the two items above. See *Finish* in this section.

TERMINAL EMULATOR

TERMINAL ATTRIBUTES

To change the terminal configuration:

1. Type **T**. The terminal configuration window appears:



2. Enter the desired value.
3. Press Enter.

If no change is required to a value at a particular field, press Enter to advance to the next field.

If some fields have been changed and all the remaining fields are acceptable, press F8 to return to the Edit Configuration window.

At the last field (Prot base), press Enter after making a change to the terminal attributes. If you do not change the value of the protocol base, press Enter or F8 to make any other changes to the system parameters.

If you change the default settings, the changes remain in effect until you change them again or you exit the program to the Master Menu. When you return to the Master Menu, the computer automatically restores the default settings.

To save these changes, refer to section *Finish*.

TERMINAL EMULATOR

Here is a description of each parameter:

Com Port - Specifies which communications port to use. Acceptable entries are 1 - 4. This field defaults to 1.

NOTE: *The terminal emulator can use the same communications port that the T/Shell software uses for its external communications.*

Baud - Specifies the baud rate for the communications port. Acceptable baud rates are 110, 150, 300, 600, 1200, 2400, 4800, 9600, 19 (19,200), 38 (38,400), and 115 (115,200). This field defaults to 1200.

Word - Specifies the number of word bits for the communications port. Acceptable values are 7 and 8. This field defaults to 8.

Stop - Specifies the number of stop bits for the communications port. Acceptable values are 1 and 2. This field defaults to 1.

Parity - Specifies the parity for the communications port. Acceptable values are E)ven, O)dd, N)one. This field defaults to None.

Echo - Specifies how the terminal emulator communicates. Acceptable values are Y)es, echo (results in half duplex operation) and N)o, don't echo (results in full duplex operation). This field defaults to N.

Append LF - Tells the computer whether to add a linefeed when it receives an Enter (CR or carriage return) command. Acceptable values are Y)es, append a linefeed character after Enter and N)o, don't append a linefeed after Enter. This field defaults to N.

Term Emul - Selects the specific type of terminal the computer emulates. Partial emulation of ADDS Viewpoint functions is available by selecting A. The available ADDS Viewpoint functions are clear screen, clear to the end of line, and cursor positioning. Select N (none) for no terminal emulation. This field defaults to None.

Prot Base - Specifies the number base that the Debug Mode uses to display data. Acceptable values are D (decimal) and H (hexadecimal). This field defaults to D.

Capture File - Displays the name and status of a capture file if one is open.

NOTE: *Capture File parameters cannot be changed while editing the terminal configuration.*

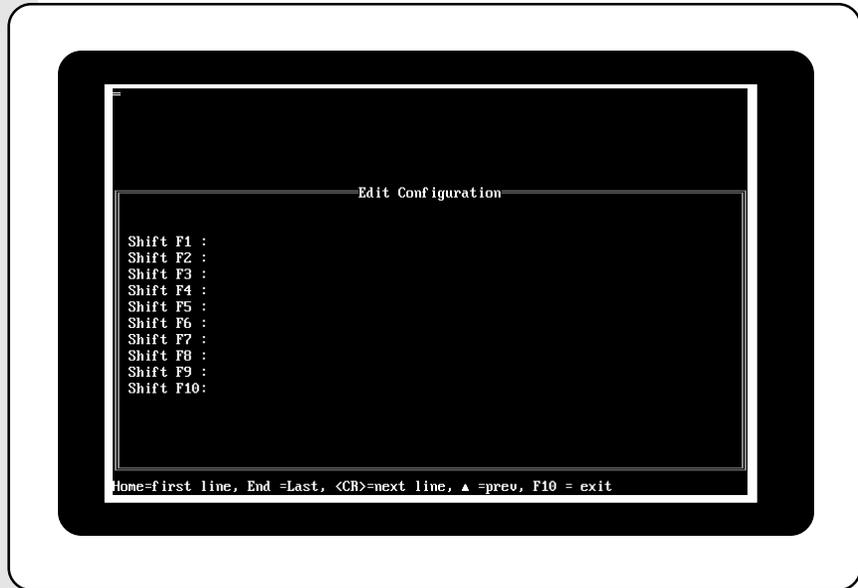
TERMINAL EMULATOR

SHIFT FXX

Use the Shift Fxx option to define text strings that can be played back when you press the Shift key and one of the function keys simultaneously.

To program the Shift and function keys:

1. Type S. This screen appears:



2. Enter a string of characters, up to a maximum of 56 characters. An Enter can be included as part of the string by entering Ctrl-M.

3. Press Enter.

Press Enter to skip one function key and move to the next field.

Press F10 to skip all function keys and return to the Edit Configuration window.

At the last field (Shift F10), the Edit Configuration window appears when you press Enter.

To save these changes, refer to section *Finish*.

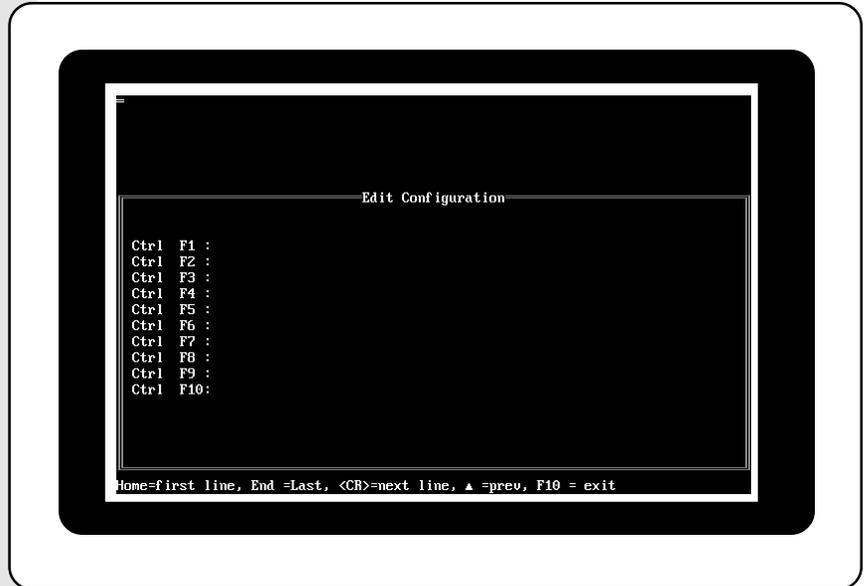
TERMINAL EMULATOR

CTRL FXX

Use the Ctrl Fxx option to define text strings that can play back when the Ctrl key and one of the function keys are pressed simultaneously.

To program the Ctrl and function keys:

1. Type C. This screen appears:



2. Enter a string of characters, up to a maximum of 56 characters. An Enter can be included as part of the string by entering Ctrl-M.
3. Press Enter.

Press Enter to skip one function key and move to the next field.

Press F10 to skip all function keys and return to the Edit Configuration window.

At the last field (Shift F10), the Edit Configuration window appears when you press Enter.

To save these changes, refer to section *Finish*.

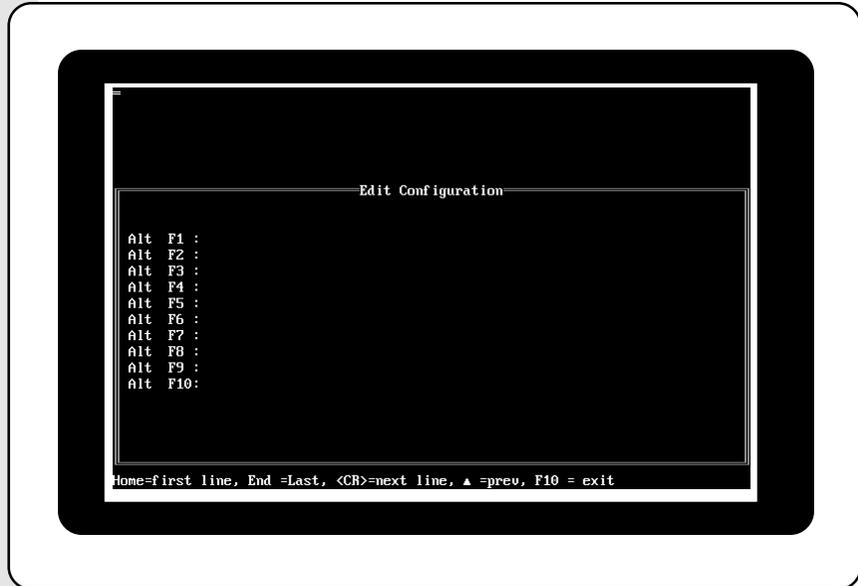
TERMINAL EMULATOR

ALT Fxx

Use the Alt Fxx option to define text strings that can play back when the Alt key and one of the function keys are pressed simultaneously.

To program the Alt and function keys:

1. Type **A**. This screen appears:



2. Enter a string of characters, up to a maximum of 56 characters. An Enter can be included as part of the string by entering Ctrl-M.
3. Press Enter.
Press Enter to skip one function key and move to the next field.
Press F10 to skip all function keys and return to the Edit Configuration window.
At the last field (Shift F10), the Edit Configuration window appears when you press Enter.
To save these changes, refer to section *Finish*.

TERMINAL EMULATOR

FINISH

Use the Finish options to save changes to the terminal configuration. There are two options:

- ◆ A file can be created that replaces the default settings with new default settings. The default settings are those the computer uses for the terminal configuration whenever the Terminal Emulator is entered from the Master Menu. The initial default settings are listed under *Terminal Attributes* in this section.
- ◆ A file can be created that can be used later but does not change the default settings.

To create a file that *does* change the default settings:

1. Make the changes as described under *Terminal Attributes* in this section.
2. Make the changes as described under *Shift Fxx*, *Ctrl Fxx*, and *Alt Fxx* in this section.
3. Type **F** when you are in the Edit Configuration window.
4. Type the file name **TERM**.
5. Press Enter.

The new settings are now the defaults for the terminal configuration whenever the Terminal Emulator is entered from the Master Menu.

To create a file that *does not* change the default settings:

1. Make the changes as described under *Terminal Attributes* in this section.
2. Make the changes as described under *Shift Fxx*, *Ctrl Fxx*, and *Alt Fxx* in this section.
3. Type **F** when you are in the Edit Configuration window.
4. Type a valid DOS file name without an extension. The extension **.CNF** is automatically appended to the name.
5. Press Enter.

Whenever the Terminal Emulator is entered from the Master Menu, the initial default settings are still used for the terminal configuration. To change the default settings using the file that you just created:

1. Press **F5 (Ld Cnf)** from the main terminal emulator screen.
2. Enter the name of the file.
3. Press Enter.

The settings in the file are now the defaults. They remain active until you change the settings, load a different terminal configuration file, or exit the program to the Master Menu.

TERMINAL EMULATOR

CAPTURE FILE

The capture file stores data that is displayed on the computer screen. The F2 (Cap), F3 (O/Cap) and F4 (C/Cap) keys control the capture of displayed data into a capture file.

CAPTURING DATA

To capture data:

1. Press F3 (O/Cap) to open a file for storing captured data.
2. Enter a file name. This can be any valid DOS file name and can include the optional three character file extension. If no file extension is specified, the terminal emulator will append the .CAP extension automatically.
3. Press Enter.
4. The word "off" appears in the lower right corner of the screen. This indicates that a capture file is open but is not capturing data. To activate the capture file, press F2 (Cap). The capture status of the word "on" indicates that data is being captured.
5. To end the screen capture, save the data, and close the file press F4.

The maximum amount of data that can be stored in one capture file is 16 kilobytes. This is the contents of approximately eight screens. When the file is full, new data will overwrite old data. To capture more than 16 kilobytes of data, close the file after about eight screens of data have been captured and open another file.

If you want to temporarily suspend the capture operation, press F2 (Cap). The capture status in the lower right corner changes to "off." At this point, the capture file is still open but is inactive. Incoming data is still received, but it is not recorded. To reactivate the capture, press the F2 key again. The capture status changes to "on."

Viewing a Capture File

To review a captured file, the computer must be in DOS. The file may be reviewed by using any text editor that accepts files in standard ASCII format.

LOAD CONFIGURATION

For information about this option, see *Finish* in the *Edit Terminal Configuration* section.

TERMINAL EMULATOR

FILE DOWNLOAD

Press F7 from the main terminal emulator screen to select the file download option. Here is the File Transmission (Download) window:



To download a file:

1. Enter the values for each field.
2. Press Enter. File transmission will begin after pressing Enter at the *Send Line Feeds* prompt.

During transmission, the screen is blank except for a status line at the bottom of the screen. The message in the status line indicates the name of file being transferred and the number of bytes transferred so far.

To terminate the file transmission, press either Esc or F10. Control returns to the terminal emulator upon completion of the file transmission.

NOTE: Use the *Edit Configuration* screen to set the data transmission parameters. To access this screen, press the F1 key. Before you attempt a file download, verify that the terminal configuration parameters are compatible with those of device that will be receiving the data.

CONTINUED . . .

TERMINAL EMULATOR

Here are descriptions of the File Transmission fields:

File to Transmit - This is the disk drive, path, and filename designation of the DOS file that is to be transferred. For example, to transfer a file named MYFILE.DAT, stored on disk drive A: in directory NEWDIR, enter the following command:

A:\NEWDIR\MYFILE.DAT and press Enter (See your DOS manual for more information on directories and file names.)

Character Delay - This parameter is the amount of time, in milliseconds, that the computer waits between the characters it transmits. The acceptable range is 0-500 milliseconds (one-half second). This field defaults to 0 (zero).

Line Delay - This is the amount of time, in milliseconds, that the computer waits between the lines it transmits. The acceptable range is 0 (zero) to 999 milliseconds. This field defaults to 0 (zero).

Send EOF Char (^Z) - This parameter controls whether the computer transmits an end-of-file (Ctrl Z) character at the end of a DOS file. Acceptable responses are Y (yes) or N (no). The Send EOF Char defaults to N.

Send Line Feeds - This is the parameter that controls whether the computer transmits line feeds at the ends of lines. Acceptable responses are Y (yes) or N (no). The Send Line Feeds defaults to N.

DEBUG MODE (PROTOCOL ANALYZER)

To toggle the debug mode on and off, press F8 from the main terminal emulator screen. It is used for troubleshooting equipment connected to the terminal emulator. When the debug mode is on, data displays beginning at the current cursor position. The ASCII values of any bytes received display rather than the characters themselves. Data can be displayed in either decimal or hexadecimal format. The default display mode is decimal.

To change the display mode setting:

1. Press F1 (Cnf) from the main terminal emulator screen.
2. Type T.
3. Change the *Prot Base* parameter in the Terminal Configuration window.

NOTES

WARRANTY

LIMITED WARRANTY

The Seller warrants that the standard hardware products sold will be free from defects in material and workmanship and perform to the Seller's applicable published specifications for a period of 18 months for hardware, and 3 months for software, from the date of the original invoice. The liability of the Seller hereunder shall be limited to replacing or repairing, at its option, any defective products which are returned F.O.B. to the Seller's plant, (or, at the Seller's option, refunding the purchase price of such products). In no case are products to be returned without first obtaining permission and a customer return authorization number from the Seller. In no event shall the Seller be liable for any consequential or incidental damages.

Equipment or parts which have been subject to abuse, misuse, accident, alteration, neglect, unauthorized repair or installation are not covered by warranty. The Seller shall make the final determination as to the existence and cause of any alleged defect. No warranty is made with respect to custom equipment or products produced to the Buyer's specifications except as specifically stated in writing by the Seller in the contract for such custom equipment.

This warranty is the only warranty made by the Seller with respect to the goods delivered hereunder, and may be modified or amended only by a written instrument signed by a duly authorized officer of the Seller and accepted by the Buyer.

Warranty and remedies on products not manufactured by the Seller are in accordance with warranty of the respective manufacturer. **THE SELLER MAKES NO OTHER WARRANTY OF ANY KIND WHATSOEVER, EXPRESSED OR IMPLIED; AND ALL IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE WHICH EXCEEDS THE AFORESAID OBLIGATIONS IS HEREBY DISCLAIMED BY THE SELLER.**

IN CASE OF DIFFICULTY

If you experience difficulty with this equipment, check the following, as appropriate:

- 1. Switch settings**
- 2. Signal levels**
- 3. Software configuration**
- 4. Connections between Dantel's equipment and your equipment.**

If there is still a problem, substitute equipment that is known to be good. For additional assistance, call Dantel's Customer Support Services Department weekdays, 6 A.M. to 5 P.M. pacific time:

1-800-4DANTEL (1-800-432-6835).

If a thorough checkout shows a piece of equipment has malfunctioned, you may return it to the factory. For repairs and emergency replacements, obtain a Return Material Authorization (RMA) number from the Customer Service Representative at **1-800-4DANTEL (1-800-432-6835)**.

To ensure expedient processing of your order, provide a purchase order number and shipping and billing information when requesting an RMA number. Also, when the units are returned to Dantel, include a description of the failure symptoms for each unit returned. Send defective equipment to:

Dantel, Inc. • 2991 North Argyle Avenue • Fresno, California 93727-1388

