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BB	Utility with which users may submit jobs, with an optional schedule time, to the batch processor queue.
BBCANCEL	Cancels and logs the currently active batch job.
BBDEL	Deletes a pending job from the batch queue, if executed by the user who submitted the job.
BBLIST	Lists all jobs running in the batch processor and pending on the batch queue.
DIRDUMP	Gives server directory of any disk, sorted by user area.
GO	Moves user to a user area specified by a user-defined name.
GONAME	Allows users to define names for user areas on the system, and to list these area names sorted alphabetically or by user area number.
HELP	On-line help facility providing help on all TurboDOS and Turbo-Plus commands. Additionally, users may add their own help files to this global function.
LOCATE	Searches certain or all system drives for a given file or template.
LOG	Allows user to make time-stamped entries in a daily log file - particularly useful for .DO files submitted to the batch processor.
LOGOFF	Enhanced version of system logoff notifying users of pending mail, and displaying system bulletins.
logon	Enhanced version of system logon notifying users of pending mail, displaying system bulletins, and providing additional levels of privilege.
MAIL	TurboDOS mail facility to allow electronic mail to be sent between users on the system.
PROFILE	Menu-driven utility to maintain system USERID.SYS file.
RESET	Program to reset a user from another user.

SERVER	Enhanced version of the system 'SERVER' command, providing better control of access to the server processor.
STATUS	TurboDOS facility to continuously monitor activity of system users, printers, and buffers.
TWX	TurboDOS TWX facility to allow users to send immediate single or multi-line messages to other consoles on the system.

WHO TurboDOS system status facility to display all current users on the system, the processes which they are running, and other current system characteristics. _____

Turbo-Plus is a set of utilities and function calls which enhance the TurboDOS Operating System, making extensive use of the User Defined Function, (call 7FH in TurboDOS version 1.2x, and 29H in TurboDOS version 1.30) in the process. This manual is designed to provide all of the necessary information to fully utilize these commands and functions.

The manual is divided into sections providing an overview of the package, instructions on using each command, and information about all of the new function calls.

Theory of Operation

Turbo-Plus consists of two primary divisions: the background batch processor, and the inter-user oriented utilities.

The background batch processor (BE) enables an extra user board, not attached to any console, to run jobs submitted by other users on the system, thus allowing the other users to keep their terminals from being tied up by long-running jobs. BB accepts any valid TurboDOS command line as a command, suffixed, if desired, by a schedule time. Each submitted job is placed on a disk-resident queue which is then serviced by the batch processor. All users on the system are able to monitor the status of the processor, and any user may delete a job which he submitted while it is still in the pending state, or abort a job while it is running.

Most of the remaining utilities in Turbo-Plus use the extensions to the TurboDOS function calls included in Turbo-Plus. These functions maintain lists in memory containing information about each station on the system as well as the server. This information creates the ability to have additional commands, such as the WHO command, to find out who is currently logged onto each station; the MAIL command, a complete inter-user mail facility; the TWX command, to send messages to other users on the system, the RESET command, to reset stations which are down (like the RESET command of TurboDOS Version 1.1x)^{*}, and a new SERVER command, limiting the number of stations simultaneously attached to the server processor to one, and thus eliminating any contention problems that may currently occur. Turbo-Plus also adds the ability to restrict users to specified disk drives on the system, providing an additional level of system security.

*<u>Note:</u> The RESET and BBCANCEL commands will not work on certain hardware configurations. If you are having difficulty using these commands, consult your dealer.

COMMANDS

BB Command	The BB command enables you to enter a job onto the batch queue.
Syntax	 BB command BB command @hh:mm BB command @hh:mm+d
Explanation	The 'command' argument is any legal TurboDOS command which will not require any console input. Such input would cause the batch processor to reset itself, providing that the CONBB module has been included in your user generation.
	The second form of the command is used for scheduling jobs. hh:mm is the time which the job should run in 24 hour time. The +d is a further option, shown in the third form of the command, which specifies the number of days later that the job is to be run. (e.g. @00:00+2 means 'Run the job at midnight tomorrow night.').
	A multi-command string may be entered onto the batch queue. This command's format should be similar to a multiple command entered directly onto the Command Line Interpreter, except that the vertical bar character () should be substituted for the back-slash character (\) expected by TurboDOS.
Examples	0A}BB DO REPORT @00:00+1 BATCH JOB 0308 QUEUED-WAITING 02 TO RUN 0A}BB PRINT FILE DO PRINT BATCH JOB 1969 QUEUED-WAITING 01 TO RUN

Error Messages	Command line is Bad format in so Bad format in so	chedule time
Parameters	USER = 01 DRIVE = 01	User number where BB processor resides. Drive (0=A, 1=B, etc.) where BB processor resides.

BBCANCEL Command	The BBCANCEL command enables you to stop the execution of an active job in the batch processor.
Syntax	BBCANCEL
Explanation	Since there is at most one job running at any time, no job number is required on the command line. This command must be issued by either a privileged user or by a user under the userid from which the job was queued. Otherwise, the warning: "***User Unauthorized to Delete Job" will be issued. If the deletion is
	successful, a message will appear on the console stating the job number and user area from which is was queued.

Examples

 2F} <u>BBCANCEL</u> JOB #: 1120	QUEUED BY SYSTEM FROM 08-J CANCELLED	
Error Messages	 User Unauthorized to delete job There is no job currently running 	

Parameters

USER = 01	User number where BB processor resides.
DRIVE = 01	Drive (0=A, l=B, etc.) where BB processor resides.
BUSER = 01	User number (0=A, 1=B, etc.) of BB processor.

The BBDEL command pending job from	enables you to delete a the batch queue.
 BBDEL nnnn 	
deleted (leading zer	is the job number to be oes may be left off).
privileged user or b from which the job the warning: "***Use Job" will be issue successful, a mess	be issued by either a by a user under the userid was queued. Otherwise, er Unauthorized to Delete ed. If the deletion is sage will appear on the job number and userid and was queued.
10F} <u>BBDEL 46</u> JOB #: 0046 QUEUED BY SYSTEM FROM 10-F: DELETED	
Illegal job numb Job not found User unauthorize	1
USER = 01	User number where BB processor resides.
DRIVE = 01	Drive (0=A, 1=B, etc.) where BB processor resides.
	<pre>pending job from BBDEL nnnn The 'nnnn' argument deleted (leading zer This command must privileged user or b from which the job the warning: "***Usd Job" will be issue successful, a mess console stating the area from which is w Gueueb BY SYSTEM FRC Illegal job numb Job not found User unauthorize USER = 01 USER = 01 </pre>

BBLIST Command		ommand enables the user and pending jobs on t	
Syntax	 BBLIST {;c	<pre>ptions }</pre>	
Explanation	first, only currently run	consists of two section present when there in ing, lists that job. The all jobs waiting on the	is a job he second
	of the user from which i time. For t the time the	it lists the job number who requested it, the use t was queued, and the he current job it also job began running, and it includes the time f cheduled.	iser area request includes for the
Options	Option	Explanation	
	;F	The report will include each job line, the co string which was queued	mmand

Examples

```
_____
  5F BBLIST
  BACKGROUND BATCH: 13-Aug-83 AT 17:10
  CURRENT PROCESS:
  JOB # 045 QUEUED BY RJ FROM 2-J AT 15:06:22 - BEGAN:15:06:39
  PENDING PROCESSES:
  JOB # 046 QUEUED BY JG FROM 10-F AT 17:09:51 FOR 00:00
  5F BBLIST :F
  BACKGROUND BATCH: 13-Aug-83 AT 17:10
  CURRENT PROCESS:
  JOB # 045 QUEUED BY RJ FROM 2-J AT 15:06:22 - BEGAN:15:06:39
       * DO STAM101
  PENDING PROCESSES:
  JOB # 046 QUEUED BY JG FROM 10-F AT 17:09:51 FOR 00:00
       * DO REPORT
                      _____
Parameters
                    USER = 01
                                   User number where
                                    BB processor resides.
                     DRIVE = 01
                                    Drive (0=A, 1=B, etc.)
                                    where BB processor
                                    resides.
```

DIRDUMP Command	The DIRDUMP command enables you to get a master directory of a disk drive.
Syntax	
Explanation	If you specify a drive letter, as in the first example, the master directory will be obtained for that drive. Otherwise, the current drive will be listed. The report will have a heading consisting of the disk's label and the current date and time. Following this it will list the user areas in order from 0 to 31, omitting any which are empty, producing in each area a directory sorted alphabetically. It will give the total disk usage for each area consisting of number of files, and number of K in use. The program will take a few minutes to sort the directory. Once the sort is complete, it will send the report either to the screen or the printer, as specified by the option. If sent to the screen, it will pause after each screenful for you to press the RETURN key.
Options	Options Explanation ;L The directory listing is to be sent to the printer instead of the console.
Examples	6D} <u>DIRDUMP</u> (display of all files on drive D)

Parameters CLSCR = 1,1A This may be a string of up to 10 bytes for the terminal clear-screen sequence. The first byte specifies the length of the string.

GO Command	The GO command enables you to move around between user areas whose names were predefined using the GONAME utility. (cf. GONAME Command).	
Syntax		
Explanation	The argument is the predefined name of a user area, up to eight characters in length. If the argument is not matched, GO will look for any area name whose first n letters agree with 'argument', where n is the length of 'argument'. If no such name exists, GO will return the message 'No Such User Area Defined'. If a non-privileged user attempts to use this command, the same message will be printed.	
Example	 	
	6F} <u>GO SYSTEM</u>	
	0A} <u>GO JJJ</u> No Such User Area Defined	
	OA} <u>GO TURBO</u>	
	5F} <u>GO SY</u>	
	A0 }	
Error Messages		
-	No Area on Command Line No Such User Area Defined	

L

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Parameters

1 1

I

SDRIVE = 01 System search drive (1=A, 2=B, etc.)

GONAME Command	The GONAME command enables you to establish names for various user areas on the system.
Syntax	GONAME
Explanation	The program, which is menu driven, enables you to create area names, delete area names, and produce listings of the user areas and their names, both in user number order and in alphabetical order.
	Upon issuing the GONAME command, the user will be presented with the following menu:
	l) Enter User Area Names 2) Delete User Area Names 3) List Areas Alphabetically 4) List Areas in User Number Order 5) Exit
	If the user specifies choice 1, he will be prompted for the user number, then the drive, and finally the assigned name. Pressing the return key for either of the first two prompts will return the user to the main menu. If a duplicate name is given, an error message will be returned.
	If the user specifies choice 2, he will be prompted for the name to delete. Pressing the return key will return him to the main menu. Giving a name will result in either the name being deleted, or, if it is not found, an error message being returned.
	If the user specifies choice 3 or 4, he will be asked whether the output should go to the Terminal or the Printer. Following this choice, the areas will be listed in two columns, where the first is the user area (e.g. 11-G) and the second is the name associated with it. For choice 3, the order will be alphabetical by name. For choice 4, the order will be by user area, which means

Parameters

	f A drive will be listed in , then all of B drive, etc.
If the user spec	ifies choice 5, he will be
returned to the c	operating system.
	System search drive
SDRIVE = 01	(1=A, 2≈B, etc.)
CLSCR = 1,1A	This may be a string of up to 10 bytes for the terminal clear-screen sequence. The first byte specifies the length of the string.

HELP Command	The HELP command enables you to obtain information about various TurboDOS and Turbo- Plus commands.
Syntax	
Explanation	The 'command 'argument is optional, and if present indicates the command for which you require assistance.
	If the argument is omitted, HELP will provide a list of all the topics for which help is available. Any of these topics may then be used as an argument to obtain more specific information.
	When an argument is present, HELP will provide the information on all topics matching the string provided.
	After each screenful of information is printed, HELP will pause and wait for a carriage return input from the console before continuing. To abort at this point, press 'X'.
	Note: If you wish to add your own help files to the facility, simply create a file called command.HLP on user zero of your search drive; set the global attribute on the file, and it will be included in future HELP listings.
Parameters	SDRIVE = 01 System search drive (1=A, 2=B, etc.)

....

LOCATE Command	The LOCATE command enables you to search one or more active drives on the system for a given file or files.				
Syntax	LOCATE filename {;options}				
Explanation	If "filename" contains wild-cards, the LOCATE command can be used to find more than one file on the system.				
	The "options" argument may be any combination of the letters A-P, S, or '*'. A-P and '*' specify the drives on which to search, and the order in which to perform the search. S means that the program should stop after it finds the first match. The default setting is to search every drive on the system, and not stop, i.e. ';*'.				
	If "filename" is omitted from the command line, then the LOCATE command operates in an interactive mode. It accepts commands from the console, prompted by an asterisk, until a null command is entered. The commands in interactive mode do not accept options of their own, but rather obey the options set in the initial program invocation.				
Examples					
	0A}LOCATE *.PRN:GD* ???????.PRN Searching Drive G SYSTEM .PRN 5-G PROGRAM .PRN 21-G Searching Drive D STAM .PRN 2-D Searching Drive A CON96 .PRN 0-A Searching Drive B				
	(continued)				

2-15

```
Searching Drive C
Searching Drive E
Searching Drive F
LOCATE .PRN 3-F
Searching Drive H
Searching Drive I
    0A } LOCATE:S
* TEST.BAS
TEST .BAS
Searching Drive A
Searching Drive B
Searching Drive C
Searching Drive D
TEST BAS 10-D
* LAB* PAS
LAB????.PAS
Searching Drive A
Searching Drive B
Searching Drive C
Searching Drive D
Searching Drive E
Searching Drive F
LAB2A .PAS 13-F
*
(A0
```

LOG Command	The LOG command enables you to log the progress of a job in a special file.				
Syntax	 LOG comments 				
Explanation	This command will get the system date, and create a file of the name mmddyy.LOG if it does not already exist. Then it will append your comments, preceded by the date and time to the end of the file, as well as printing them on the console.				
	This command is particularly useful for a job running in a batch processor as part of a .DO file. It is possible to insert LOG commands at various points in the file so that as the job passes each critical point, it can log its progress into the file, allowing another user to check on it.				
Example	10F}LOG STARTING JOB 10/19/83 09:12:54 STARTING JOB 10F}LOG JOB COMPLETE 10/19/83 10:23:38 JOB COMPLETE 10F}TYPE 101983.LOG 10/19/83 09:12:54 STARTING JOB 10/19/83 10:23:38 JOB COMPLETE 10F}				

LOGOFF Command	The LOGOFF command is used in multi-user configurations of TurboDOS to terminate your session.
Syntax	LOGOFF

Explanation The LOGOFF command sets the user number to a reserved value (31), selects the system drive as the default disk, and makes the TurboDOS function call to log the user off. The user will then, under normal configurations, have the WARMSTRT.AUT file, containing LOGON.COM, automatically, loaded, prohibiting further activity until a successful LOGON has been accomplished.

If there is a BULLETIN.OFF file on user 0 of the system search drive, its contents get printed on the screen prior to logoff. The file must have the global attribute set in order for non-privileged users to receive it. Also, if the user logging off has any mail pending, he will receive a message stating so and will be asked whether he wants to log off. If he says no, he remains on the system and may receive his mail. (Cf. MAIL Command)

If the library for user 31 on the system drive also contains a file named "SYSLOG.SYS", then the LOGOFF command will automatically record your log-off in that file, and will display the information going into the file on your screen.

Note: The SYSLOG.SYS file maintained by Turbo-Plus has a format different from that maintained by TurboDOS. If you are running any programs which read this file, expecting the normal structure, they should be modified. Figure 2-1 shows a typical SYSLOG.SYS file.

Example

5C}LOGOFF

Logged Off...

A CARACTER AND A

LOGON Command	There are substantial differences between this command and the LOGON command as supplied with TurboDOS. Please read this section carefully. The LOGON command provides password-type security in multi-user configurations of TurboDOS. The purpose of this command is to prevent unauthorized access to the system and to protect private file libraries.
Syntax	LOGON
Explanation	LOGON is normally used as a WARMSTRT.AUT file on user 31 of the system boot disk, rather than as a explicit command. Upon entering LOGON, you are prompted to enter your user-ID from the console keyboard. The user-ID is validated against the file USERID.SYS in the user 31 library. USERID.SYS is an ASCII text file containing entries of the form:
	userid, [password], userno[P], [drive], [access]
	where "userid" and "password" are up to 8 characters in length, "userno" is a user number 030, and "drive" is a drive letter AP. The password, drive, and access fields are optional.
	If your user-ID has an associated password specified in USERID.SYS, then LOGON prompts you to enter a password, and validates it. The log-on succeeds only if you enter both the user-ID and password correctly, in which case your console is logged onto the specified user number, and the specified drive is selected as the default disk. If your entry in USERID.SYS has the user number suffix "P", you are logged-on as a "privileged" user, enabling you to access various protected facilities of TurboDOS.

The access field is optional and, if present, should be a string between one and sixteen bytes long, containing any combination of the letters A-P. Any letters present indicate disk drives to which that user may have access. The list should include the system search drive and spool drive, as well as any other drives desired. If the field is absent, the user may access all drives.

If the user 31 library also contains a file named SYSLOG.SYS, then the LOGON command will automatically record your log-on in that file.

Note: The SYSLOG.SYS file maintained by Turbo-Plus has a format different from that maintained by TurboDOS. If you are running any programs which read this file, expecting the normal structure, they should be modified. Figure 2-1 shows a typical SYSLOG.SYS file.

If user 0 on the system search drive contains a file named BULLETIN.ON, then the contents of that file will be printed on the screen following a successful logon. This facilitates the broadcast of announcements about the system. The file must have the global attribute set in order for nonprivileged users to receive it.

If the userid logging on has any new mail pending, LOGON will print a message on the screen stating: "*** You have new mail ***". He may then use the MAIL Facility (Cf. MAIL Command) to receive his mail.

Parameters SDRIVE = 8 System search drive (1=A, 2=B, etc.) LOGMSG = 'x...x' User-specified logon message, terminated with '\$' CLSCR = 1,1A This may be a string of up to 10 bytes for the terminal clear-screen sequence. The first byte specifies the length of the string.

Figure 2-1 Sample Turbo-Plus SYSLOG.SYS

	Fi	rsi	<u>Column</u>	Last	Colu	nn	<u>C</u>	onter	nts			
			1 11 20 29 32 36 42	9 1 2 3 3 6	8 7 9 4 6		Ti Us St Us Di		on Lette Number	er		
19 19 19 19 19 19 19 19 19 19 19 19 19 1	Oct to Contract to	83 83 83 83 83 83 83 83 83 83 83 83 83 8	12:58:01 12:58:26 13:05:43 13:14:21 13:16:11 13:18:20 13:21:16 14:13:41 14:23:10 14:42:18 14:46:09 16:06:24 16:50:12	LV JG SKA7 RJ LV JG SKA7 LV JG LV LV LV LV SKA1 SKA1 SKA1 SKA1 SKA1 SKA1 SKA1 SKA1	(1) (1)	2P 2P 2P 2P 2P 2P 2P 2P 2P 2P	FELK FK KEE EEE EKK EK ME L	* * * * * * * * * * * * * * * * * * * *	ON : ON : ON : ON : ON : ON : ON : ON :	LOG LOG LOG YS LOG PRIN LOG LOG LOG	OFF OFF OFF OFF OFF OFF OFF OFF	 DN 9E
-	Oct Oct		17:04:27 17:09:53	SKA1 RJ	(F) (C)	12 02				LOG LOG		

The structure of SYSLOG.SYS is:

MAIL Command	The MAIL command enables you to send mail to and receive mail from other users on the system.				
Syntax	 MA MA	IL IL userid 			
Explanation	absen mode,	serid parameter is optional. If it is t, the program will put you into command with a prompt of 'Mail>>>'. In this you have eight valid commands:			
	D	Gives you a directory of all of your pending mail. The directory includes the letter number, a '*' if it is unread, the userid of the sender, the date and time when it was sent, and the subject of the letter.			
	L	This will give you a list, sorted alphabetically, of all the users on the system who have mailboxes.			
	R	This will read your next new letter. The letter will appear on the screen with a header telling you who sent it, and when it was sent. The letter will then be marked as having been read.			
	S	This permits you to send a letter to another user. You will first be prompted for the userid of the person to whom you are sending the letter. You will then be prompted for the subject of the letter and for the letter itself. The letter may be aborted with a control-Q, and ended with a control-E.			
	Kn	This command will kill letter number 'n', as specified by the directory letter numbers.			

n	on 'R'	s command displays letter number 'n' the screen in the same format as the command. It enables you to reread mail which has not been killed.
H	com	s displays a brief help menu for the mand options. '?' will also produce s menu.
X	Thi	s takes you out of MAIL, and returns to the operating system.
A	you mod	s is a privileged command. It puts into an administrative sub-command le, with a prompt of 'Admin>>>', ch has the following options:
	С	This will prompt you for a userid, and create a mailbox for the specified user.
	D	This will prompt you for a userid, and delete that user's mailbox if it exists.
	Q	This returns you to the main command mode.
	Н	This displays a brief help menu for the administrative options. '?' will also produce this menu.
	х	This takes you out mail MAIL, and returns you to the operating system.
line, mode, the r of th	the , as remaine le	id is present in the initial command e program will go directly into send king you for the subject, and then nder of the letter. Upon completion etter, you will be returned to the command level.

If the user receiving mail is logged onto the system when the mail is sent, he will receive a message on his screen saying '*** You have mail from XXXXXXX', where XXXXXXXX is the userid of the person who sent the mail.

Error Messages	directory file c out of range k does not exist k already exists mber specified I/O error user	
Parameters		
	SDRIVE = 01	System search drive (1=A, 2=B, etc.)
	CLSCR = 1,1A	This may be a string of up to 10 bytes for the terminal clear-screen sequence. The first byte specifies the length of the string.
	$ECHAR = '^E'$	The character used for indicating the end of a letter on input for the send command.
	QCHAR = '^Q'	The character used to abort a letter on input for the send command.

PROFILE Command The PROFILE command enables privileged users to add and delete userid's from the system user file in a menu-driven environment. Syntax PROFILE Upon issuing the PROFILE command, the user Explanation will be presented with the following menu: User Identification Maintenance Α Add a System User Delete a System User D L E List All System Users Exit Program Enter Choice >>> If the user specifies choice 'A', he will be asked a series of questions about the new user, as follows: | Enter Userid (Max 8 characters): ACCOUNT EnterPassword (Optional: Ifpresent, max8 characters): MYPASS | Enter User Number (0-31) : 10 | Is the user to be privileged (Y/N)? N Drive to log on to (Optional: If present, A-P)? D | Drivestorestrict user to(Optional:Ifpresent, combinations | of A-P)? ADHI To exit from this mode, the user must press the return key when prompted for a userid. If the user specifies choice 'D', he will be prompted for the userid to delete. Pressing the return key will return him to the main menu. Giving a userid will result in either that userid being deleted, or, if it is not found, an error message being returned.

	If the user specifies choice 'L', the USERID.SYS file will be displayed in five columns: userid, password, user number, default drive, and access. The program will pause after each screenful, and wait for the return key to be depressed before continuing. If the user specifies choice 'E', he will be returned to the operating system.
Error Messages	Duplicate Userid Non-privileged user Userid not present in file There is no USERID.SYS file on the system disk
Parameters	
	CLSCR = 1,1A This may be a string of up to 10 bytes for the terminal clear-screen sequence. The first byte specifies the length of the string.

RESET Command	The RESET command is a privileged command which enables you to reset any station on the system.
Syntax	RESET station
Explanation	The "station" parameter is optional, and, if present, identifies the station to be reset. If absent, the program prompts the user for the station to be reset: "Station to reset (A-P)? ". The user must respond with a valid station letter or he will be asked again.
	Once the station to be reset has been determined, the user is prompted for verification, with the question: "Okay to reset station x (Y/N) ?" If the user says that the station is to be reset, then that station is downloaded by the server. If not, he is simply returned to the operating system, and nothing happens.
Example	8L}RESET C Okay to reset station C (Y/N)? Y 8L}
Error messages	Non-Privileged user
[CONTROL _] [your own user processor by typing CONTROL _] TROL key down and press the underline key

1. N. S. S. S.

SERVER Command	The Turbo-Plus SERVER command replaces the TurboDOS command of the same name. In a networking configuration of TurboDOS which has a remote server console, the SERVER command allows you to attach your console to the server processor.
Syntax	SERVER
Explanation	This command attaches your console to the server processor. To detach from the server processor (and resume normal local console operation), enter an Attention-Abort sequence <ctrl-s><ctrl-c>.</ctrl-c></ctrl-s>
	While attached to the server, you can make attention requests of the server processor by using CTRL-A (instead of the usual CTRL-S).
	In order to use the SERVER command, it is necessary that the server operating system be generated with the remote console driver module (CONREM).
3	The Turbo-Plus server command differs from that which it replaces because it does not allow more than one user into the server at once, and it keeps track of who is in the server for the WHO command. (Cf. WHO Command) Furthermore, if you attach to the SERVER while it is in the process of executing a job, you will receive a warning giving you the name of the program which is running, so that you do not accidentally give it any unwanted console input. If no job is running, you will receive the normal TurboDOS prompt.

Example	
-	3B} <u>SERVER</u>
	Console attached to server processor
	OA}BACKUP A: B:
	$\begin{array}{c} \text{OA} \\ \leq \text{CTRL-S} \text{CTRL-C} \\ \end{array}$
	Console detached from server processor 3B}
Error Messages	Non-privileged user Remote console driver not present Server processor is busy

STATUS Command	The STATUS command enables you to continuously monitor the system status. It will maintain on your screen a list of who is currently logged onto the system, what each of the users is currently doing, and obtain status reports on the system buffers and printers.
Syntax	STATUS
Explanation	STATUS gives a report showing all system activity. It then continually updates the report at a specified time interval.
	The header line shows the current date and time, and the last time the system was reset.
	Each other line in the report describes one user on the system. It shows what station that user is working on, the userid of that user, the time and date when he logged on, the .COM file which he is currently executing, and the user area from which he ran that program. A star appears to the left of the line displaying the user who typed the command. If the server is logged on, it shows all of the same information, as well as the station to which it is currently attached.
	Below this table, a line appears displaying the number of I/O buffers currently active in the system.
	Finally, there is a list of each printer defined for the station running the program, both local and remote, and from what queue, if any, that printer is despooling.
	Note: Since Turbo-Plus uses the upper eight (i.e. I-P) queues and printers for its own routing purposes, the STATUS report only reports on the lower eight (A-H).

After five seconds, the screen will be cleared, and an updated report will appear. The program will continue running until aborted with a <ctrl-X> character.

Example

30F} <u>STATUS</u>					
Turbo+ V1.30	- 31-Aug-8	3 13 : 21 Las	st System R	eset:10:23:42	2 24-Aug-83
Station	Userid	Loc.	Time On	Date On	Process
Printer Prir Prir	LV BB-0623 JG ML RJ of Buffers: s: ter A: Queu ter B: Queu ter C: Offl	08-K 30-F 12-D 05-L 14 e A e B	11:11:02	31-Aug-83 31-Aug-83 31-Aug-83 31-Aug-83 31-Aug-83	STATUS MBAS
arameters					
		TDELAY = 5 The number of seconds to wait between screen refreshes.			
		CLSCR = 1,]	up to l termina	ay be a strin O bytes for al clear-scre ce. The firs	the een

TWX Command	The TWX command enables you to communicate instantly with other users who are logged onto the system.
Syntax	 TWX destid TWX destid message
Explanation	The message parameter is optional. If it is absent, the program will prompt you with asterisks for each line of a multi-line message to send to the specified user. Pressing the return key at the prompt (i.e. giving it a null line) will terminate the program.
	The destid parameter must specify the user who is to receive the message. This may be either in the form of a userid, a station letter, preceded by an exclamation mark (e.g. !A for station A), or ALL, for everybody who is logged onto the system.
	If a userid and message are both present, TWX will send a single line message to the specified userid and automatically terminate.
	Once a message is sent, it will immediately appear on the console(s) of the intended receiver(s). If a userid is specified, the message will be sent to all stations which the specified userid is logged on to. The message will never be sent to the user sending it, whether or not he is the specified userid or it is a TWX ALL. If the user attempts to send a message to a station which is not logged onto the system, he will receive an error message.
	When a user receives a message, it will be preceded by a header line of the form "*** FROM srcid:" where srcid is the userid of the user sending the message. If that user does not have a userid, (i.e. he is running TWX from a station or SERVER which has an AUTUSR

	<pre>specified) the header line will read "*** FROM STAT. x:" where x is the correct letter, or "*** FROM SERVER:" in that case. If a user wishes to disable his station from receiving TWX messages while he is working, he may issue the 'TWX .OFF' command. Anybody who tries to send him a message will receive a message that 'Station X has disabled messages'. To resume receiving messages, issue the 'TWX .ON' command.</pre>
Examples	13F}TWX RJ *RON: MEETING AT 1. *CAN YOU MAKE IT?
	13F}***From RJ : YES, SEE YOU THEN 0A}TWX ALL SYSTEM COMING DOWN IN 5 MINS
Error Messages	
LITOL MESSAGES	Station has disabled messages No userid present in command line Userid too long Station unable to receive message User is not currently logged on system

WHO Command	The WHO command enables you to find out who is currently logged onto the system, what each of the users is currently doing, and obtain status reports on the system buffers and printers.
Syntax	
Explanation	WHO gives a report showing all system activity. The header line shows the current date and time, and the last time the system was reset.
	Each other line in the report describes one user on the system. It shows what station that user is working on, the userid of that user, the time and date when he logged on, the .COM file which he is currently executing, and the user area from which he ran that program. A star appears to the left of the line displaying the user who typed the command. If the Server is logged on, it shows all of the same information, as well as the station to which it is currently attached.
	Below this table, a line appears displaying the number of I/O buffers currently active in the system.
	Finally, there is a list of each printer defined for the station running the program, both local and remote, and from what queue, if any, that printer is despooling.
	Note: Since Turbo-Plus uses the upper eight (i.e. I-P) queues and printers for its own routing purposes, the WHO report only reports on the lower eight (A-H).

. .

Example

```
12M}WHO
[Turbo+V1.30- 31-Aug-83 16:37 Last System Reset:10:23:42 24-Jan-83]
            Userid
                              Time On
   Station
                       Loc.
                                        Date On
                                                   Process
   _____
             _____
                       -----
                              -----
                                        _____
     SRV
                                                  TIP
    * A
                       12-M
                              09:10:46
                                        31-Aug-83
                                                  WHO
            ML
                              14:23:42
08:30:13
                     01-н
                                        31-Aug-83 -batch-
     в
            BB-IDLE
                                        31-Aug-83
     С
            JG
                       05-F
                                                  GEN
     F
            RJ
                       08-J
                              09:22:15
                                        31-Aug-83 --idle--
    Number of Buffers: 14
    Printers:
      Printer A: Offline
      Printer B: Queue B
      Printer C: Queue A
```