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ADST
Cold Start Procedures Manual
For the
BDS-D
M1/XROD 1.1.0

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Naval Training Systems Center
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These cold start procedures outline the start up and shut down procedures for the initial software release of the BDS-D M1/XROD 1.0.0

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1.0 Scope

Per DI-MISC-80711, this manual details the M1/XROD Simulator Cold Start Procedures specific to the Ft. Knox, Kentucky. Installation and distribution instructions, interaction with other simulators, and hardware compatibility notes (as applicable), as well as a detailed overview of the software release will be included in the ADST Version Description Document for the BDS-D M1/XROD 1.1.0; document number ADST/WDL/TR--92-003030.

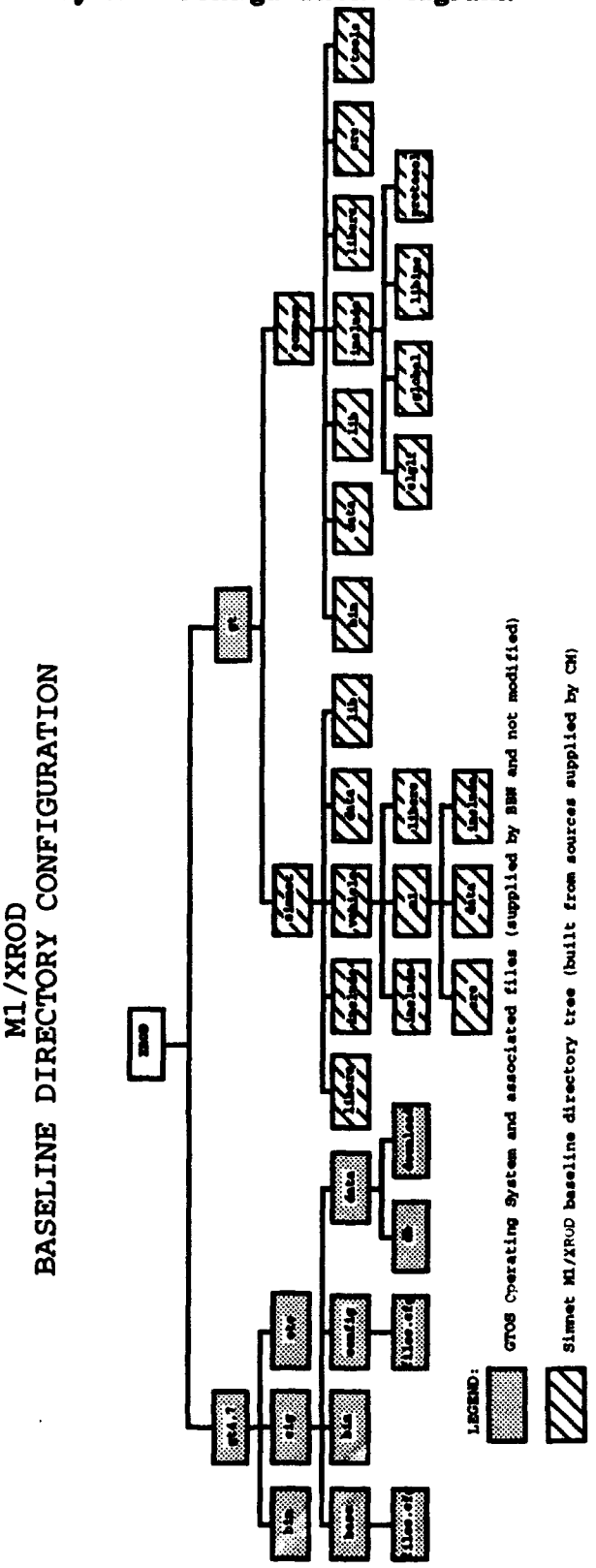
1.1 Purpose

The M1/XROD Start up & Shut down procedures provide a written list of instructions that allow for the power up and invocation of M1/XROD executable images as well as the shutdown and power off of the M1/XROD Simulator.

1.2 Identification

This Cold Start procedure defines the current start up and shut down procedures as they pertain to the Ft. Knox, Kentucky Site. Figure 1 identifies the baseline directory structure.

Figure 1 M1/XROD System Configuration Diagram.



2.0 Ft. Knox M1/XROD Configuration

M1 Simulator Startup and Shutdown Procedure

To Start UP the M1 Simulator

Locate M1 simulator, and the Computer Image Generator (CIG). The CIG is a GT-111.

If CIG power is already on, reset the CIG by pressing the RESET button located on the upper left hand CPU card and proceed to step 4. Otherwise, turn on the system power in sequence. The power switches are in the upper right-hand corner of the CIG and are labelled 6U, 9U and 9U. The power on sequence is "6U, 9U and 9U" from left to right.

Once the power is on, the CIG will enter a "Power-up self test" and attempt to "autoboot". This takes about 5 minutes and is preceded by the console message: "Autoboot in progress, break to abort." Break is accomplished by pressing the "break" button on the console, or pressing the "abort" button on the GtO processor. (It is recommended to allow the self test to proceed)

The console at this time consists of a FALCO F5000 terminal, with session control performed by pressing the "switch session" key. This key causes a toggle between the GTO and GTl consoles. Power on or reset places the session control in the GTO position. If the console is not in GTO position, place it so and continue with the next step.

On GTO console, enter "source runcig". This will invoke a command script which will start the GT real-time operating system. Wait for the following message to appear "=== USING MPV INTERFACE ===". If any other message appears, reboot the CIG.

On GTl console, enter "source x", where x is any appropriate startup script file such as run_xrod.kx.

The command scripts in the previous 2 steps perform their operations with a certain degree of synchronization. If something in one script cannot be performed, the other will pause and wait for it. Until two separate consoles are implemented, it is wise to switch back and forth between GTO and GTl with the session switch until both complete their scripts and the M1 simulator is ready. This means that the TV screens contain an out-the-window view of the database, and the M1 is operational.

To shut down the M1 Simulator

1) On console GTl, press q (to quit) the simulation.

2) On console GTO, press return key to exit real-time. You will get a prompt: GOSSIP>.

3) To power off the simulator, turn off power switches 9U, 9U, 6U from right to left. (reverse sequence of step 2 in startup procedure)

3.0 GTOS4.7 Operating System Software Release Notes.

The following attachment includes the GTOS4.7 Operating System software release notes prepared by BBN Systems and Technologies Corporation.

BBN GT100 SERIES
VISUAL SYSTEM
SOFTWARE RELEASE NOTES

GT100 Series Visual System Software Release 5.7
Final Release
Release Date: 20-May-1991

This release includes a new version of the GT operating system: GTOS4.7
Release Date: 27-February-91

RELEASE NOTES AND INSTALLATION INSTRUCTIONS

These notes provide the information to install the operating system, real time application software and utilities for the GT100 Visual System. One cartridge tape is provided for this purpose. It contains the system software.

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1.0 CHANGES MADE

1.1 CHANGES MADE WITH RELEASE GTOS4.7

- The release of GTOS4.6 was supposed to have a change to the 'ape:', 'idc"', and 'terminal:' drivers. Due to a procedural error, this fix did not get incorporated into the release. GTOS4.7 fixes this problem.

1.2 CHANGES MADE WITH RELEASE GTOS4.6.

- The Caliper CP150A SCSI tape drive has been discontinued. The replacement is a CP150SE. A change has been made to the SCSI tape driver to use a string table from the MVME147's nonvolatile RAM rather than from inline code.

- The release procedure has been modified to build the string table in the nonvolatile RAM.

- A change has been made to the ethernet driver to return an error status to the caller if a transmission error ocurrs. Previously the driver would attempt to repeat the transmission forever.

- The tape archive utility (tar) has had a bug fixed where an absolute pathname was not parsed properly resulting in an infinite loop.

- The tool 'dbread' has been modified to be more verbose in its execution. It is more difficult to accidentally cause the program to continue operations accross a tape volume until the user is ready.

1.3 CHANGES MADE WITH THIS RELEASE 5.7

- Real-time software "quit" function implemented in gossip.

- Dual pool of DED model space implemented on systems utilizing 7Km databases and having a minimum AAM configuration of 6Mb.

1.4 CHANGES MADE WITH PREVIOUS RELEASE 5.6

- On line shot reporting added. Interface note available for SIM/CIG message interface modifications. This change is active in slave ballistics version **ballgtr5.5.**

- Channel specific color lookup table switching on TX backends fixed. Interface note available for the MSG_SUBSYS_MODE structure.

- Models with types between 64 and 127 will now display bumper numbers correctly.

- The real-time software will now allow the download of texture maps and ppm files after a "cold" CIG power up.

- The TX backend mode initialization has been corrected.

1.5 CHANGES MADE WITH RELEASE 5.5

- Added the -E switch. Allows ethernet buffer exchanges among groups of applications as well as the exchange of buffers larger than the 1518 byte limitation incurred when using the -e switch.

- The Flea interface now correctly displays the vehicle heading.

- A feature to help the user test the PPM download (screen size & location) has been added to the Flea interface.

- The interface message MSG_FILE_DESCR now supports the specification of an exact filename. Previously, the software would attempt to find the highest version (filename extension) of the file specified.

- When specifying configuration/database files to use, the following precedence is now in effect; highest to lowest:

  MSG_FILE_DESCR - (Gossip input) - SUBSYS.CFG - DATABASE.CFG

- The interface between the Force board and the MPV has been changed slightly to help prevent the "ghosting" of 2D overlay images.

1.6 HARDWARE COMPATIBILITY NOTES

• RTSW Release 5.7 is designed to be backward compatible with currently fielded GT1XX systems. However, software validation testing was only performed on a GT100 model C

•The software support of the new MPV 5 board does require a configuration change to existing MPV 4 boards. To work correctly with Release 5.5 software, DIP switches SW1 on the MPV 4 must be set all OFF. On the MPV 5, DIP switches SW1 must have switch 1 set ON and all other switches set OFF.

1.7 DISCLAIMERS

• The network interface has not been fully tested. It is possible to 'drive' the CIG from a simulation host over an ethernet network using the Simnet 6.0 protocol. Operation with other vehicles on the network has not been verified. The reporting of ballistic hit messages will report erroneous results."

2.0 RELEASE PROCEDURE.

The following description of the prompted dialogue for installing this release uses the conventions described below.

- Instructions and notes are underlined
- Prompts and computer generated text is in plain type
- **User responses are in bold type**

Power up the 6U chassis and then the 9U's.
Wait for the 'gt-0>' prompt.

```
gt-0> shutdown
```

Unmounting all managers and uninstalling all devices ...

```
147-Bug> noab
147-Bug> reset
```

Note: 147-Bug version 1.0 will respond with different prompts than version 2.0.

Version 1.0:

```
Reset Local SCSI Bus [Y,N]Y? y
Cold/Warm Reset [C,W] = C? c
Execute Soft Reset [Y,N] N? y
```

Version 2.0:

```
Reset Local SCSI Bus [Y,N]=Y? y
Automatic Reset of known SCSI Busses on RESET [Y,N] = Y? y
Cold/Warm Reset Flag [C,W] = C? c
Execute Soft Reset [Y,N]=N? y
```

From this point 147-Bug versions 1.0 and 2.0 operate the same.

Enter the tape drive string table into the MVME147's nonvolatile RAM using the following commands. The commands must be entered exactly as shown. If the string table is not built properly, GTOS will not be able to install the devices 'nrst4:, or 'rst4:' and will issue an error message indicating the devices were not found.

```
147-Bug> ms fffe0000 'CALIPER CP150'
```

There is 1 space between 'CALIPER' and 'CP150'.

```
147-Bug> ms fffe000d 00
147-Bug> ms fffe000e 'SANKYO  CP150'
```

There are 2 spaces between 'SANKYO' and 'CP150'.

```
147-Bug> ms fffe001b 0000
```

Verify the contents of the string table with the following command. All bytes should be exactly as shown:

```
147-Bug> md fffe0000:1d;b
FFFE0000 43 41 4C 49 50 45 52 20  43 50 31 35 30 00 53 41     CALIPER CP150.SA
FFFE0010 4E 4B 59 4F 20 20 43 50  31 35 30 00 00             NKYO  CP150..
147-Bug>
```

Set the MVME147 time of day clock

```
147-Bug> set
Tuesday     3/26/91     9:35:30
Present calibration value = -0
Enter data as MM/DD/YY
03/26/91
Enter Calibration value +/-(0 to 31)
-0
Enter time as HH:MM:SS (24 hour clock)
09:36:00
147-Bug>
```

Install the BOOT TAPE into the tape drive and wait for the GREEN light.

Note: If "go ffa00000" is entered before the green light on tape drive, the following message may appear up to 10 times.

```
Waiting for tape drive.
147-Bug> go ffa00000
Effective address: FFA00000
   RTSCOPE 68K v1.03

 FPU Detected
RC>go

GTOS version 4.7 of Tue Jan 8 15:05:51 PST 1991
3013720 (0x2dfc58) bytes of free system memory starting at 0xe03a4
Installing config: at 0x0 ==> OK.
bootstrap_data: illegal value
Can't open bootfile "" - IFXENOSYSDEV  0x0780 no system device.
gt-0> install nrst4:
Installing nrst4: at 0x0 ==> OK.
gt-0> install rst4:
Installing rst4: at 0x0 ==> OK.
gt-0> setsys ip0:
gt-0> install ip0:
Installing ip0: at 0xffffa000 ==> OK.
gt-0> mount cache:
Mounting cache: on ip0: ==> OK.
gt-0> nrst4:
Perform COMPLETE disk init (all data will be lost) [y or n]? y
Hard formatting ...
FORMAT: Formatting track 0.
FORMAT: Formatting track 100.
FORMAT: Formatting track 200.
FORMAT: Soft error on track 269 11.
FORMAT: Formatting track 300.
```

```
FORMAT: Soft error on track 328 2.
FORMAT: Soft error on track 328 2.
FORMAT: Soft error on track 328 2.
FORMAT: Slip sector on track 328 2.
FORMAT: Formatting track 400.
FORMAT: Formatting track 500.
FORMAT: Formatting track 600.
.
.
.
VERIFY: Verifying track 1200.
Initializing partition table ...
Initializing boot sector ...
Writing bootstrap ...
Soft formatting A: ...
Partition table zero OK.
Unmounting A: ==> OK.
Formatting A: ... OK.
```

Note: If you answer NO to all of the formatting questions, you will need to mount the disk before entering the cd a:/ ➚ `gt-0> mount a:`

```
gt-0> cd a:/
gt-0> nrst4: xv
a:/gtos4.7 923 blocks
a:/bin/bctst 100 blocks
a:/bin/boot147 117 blocks
a:/bin/cat.68 blocks
a:/bin/config 117 blocks
a:/bin/cp 104 blocks
a:/bin/date 71 blocks
a:/bin/fmt.abs 116 blocks
a:/bin/dbrw 112 blocks
a:/bin/ddump 73 blocks
a:/bin/diff 69 blocks
a:/bin/diskstat 70 blocks
a:/bin/dload 121 blocks
a:/bin/fdump 73 blocks
a:/bin/fmt 126 blocks
a:/bin/hdr 68 blocks
a:/bin/idcprep 71 blocks
a:/bin/ident 70 blocks
a:/bin/ifxws 67 blocks
a:/bin/ls 106 blocks
a:/bin/mkconfig 123 blocks
a:/bin/mkdir 95 blocks
a:/bin/more 74 blocks
a:/bin/mset 68 blocks
a:/bin/mt 69 blocks
a:/bin/mv 95 blocks
a:/bin/od 99 blocks
a:/bin/printenv 68 blocks
a:/bin/rm 99 blocks
a:/bin/rmdir 95 blocks
a:/bin/sedit 117 blocks
a:/bin/setdate 78 blocks
a:/bin/settime 72 blocks
a:/bin/sreset 69 blocks
```

```
a:/bin/vi 264 blocks
a:/bin/stty 69 blocks
a:/bin/sum 69 blocks
a:/bin/tar 113 blocks
a:/bin/tar.abs 101 blocks
a:/cig/config/data2d.001 7 blocks
a:/cig/config/ammo_map.d 10 blocks
a:/cig/config/assoc.def 1 blocks
a:/cig/config/nsif.def 1 blocks
a:/cig/config/finsimt.001 193 blocks
a:/cig/config/README 1 blocks
a:/cig/config/ballist.cfg 1 blocks
a:/cig/config/files.cfg/cfg101.000 8 blocks
a:/cig/config/files.cfg/cfg102.000 14 blocks
a:/cig/config/files.cfg/cfg110.000 3 blocks
a:/cig/config/files.cfg/cfg111.000 10 blocks
a:/cig/config/files.cfg/cfg120.000 4 blocks
a:/cig/config/files.cfg/dbase2.cfg 1 blocks
a:/cig/config/files.cfg/slave77.cfg 11 blocks
a:/cig/config/files.cfg/dbase1.cfg 1 blocks
a:/cig/config/color.cfg 14 blocks
a:/cig/config/force0.080 65 blocks
a:/cig/config/force1.080 65 blocks
a:/cig/config/veh_map.d 19 blocks
a:/cig/config/lut32.000 7 blocks
a:/cig/config/task2d.415 65 blocks
a:/cig/config/textures.lst 3 blocks
a:/cig/data/db/spec3cow.001 920 blocks
a:/cig/data/db/simtd0ow.01c 747 blocks
a:/cig/data/db/spec3cow.002 920 blocks
a:/cig/data/download/simtowm0.000 65 blocks
a:/cig/data/download/simtowm1.000 65 blocks
a:/cig/data/download/simtowm2.000 65 blocks
a:/cig/data/download/simtowm3.000 65 blocks
a:/cig/data/download/simtowm4.000 65 blocks
a:/cig/data/download/simtowm5.000 65 blocks
a:/cig/data/download/simtowm6.000 65 blocks
a:/cig/data/download/simtowm7.000 65 blocks
a:/cig/data/download/simtowm8.000 65 blocks
a:/cig/data/download/simtowm9.000 65 blocks
a:/cig/data/download/simtowmc.000 9 blocks
a:/cig/data/download/simtowml.000 2 blocks
a:/cig/data/download/simtowmt.000 2 blocks
a:/cig/data/download/gtfade.bft 129 blocks
a:/cig/data/download/gtfade.fcm 2 blocks
a:/cig/data/download/gtfade.gft 129 blocks
a:/cig/data/download/gtfade.rft 129 blocks
a:/cig/data/download/ppmcp.off 2 blocks
a:/cig/data/download/ppmcp.on 2 blocks
a:/cig/data/download/ppmcpa 2 blocks
a:/cig/data/download/ppmspca 2 blocks
a:/cig/data/download/ppmspcb 2 blocks
a:/cig/data/download/ppmss 2 blocks
a:/cig/bin/rttgtr5.5 2241 blocks
a:/cig/bin/ballgtr5.5 280 blocks
a:/cig/bin/ded6.0 71 blocks
a:/cig/base/data2d.001 7 blocks
a:/cig/base/ammo_map.d 10 blocks
```

```
a:/cig/base/assoc.def 1 blocks
a:/cig/base/nsif.def 1 blocks
a:/cig/base/finsimt.001 193 blocks
a:/cig/base/README 1 blocks
a:/cig/base/ballist.cfg 1 blocks
a:/cig/base/files.cfg/cfg101.000 8 blocks
a:/cig/base/files.cfg/cfg102.000 14 blocks
a:/cig/base/files.cfg/cfg110.000 3 blocks
a:/cig/base/files.cfg/cfg111.000 10 blocks
a:/cig/base/files.cfg/cfg120.000 4 blocks
a:/cig/base/files.cfg/dbase2.cfg 1 blocks
a:/cig/base/files.cfg/slave77.cfg 11 blocks
a:/cig/base/files.cfg/dbase1.cfg 1 blocks
a:/cig/base/color.cfg 14 blocks
a:/cig/base/force0.080 65 blocks
a:/cig/base/force1.080 65 blocks
a:/cig/base/veh_map.d 19 blocks
a:/cig/base/lut32.000 7 blocks
a:/cig/base/task2d.415 65 blocks
a:/cig/base/textures.lst 3 blocks

gt-0> /bin/mkconfig

CIG model #:

        1. GT101
        2. GT102
        3. GT111
        4. GT110
        5. GT120

        Enter model type (1 - 5): <answer>

SIMULATION <==> CIG host interface method:

        1. DR11
        2. Shared memory (MPV)
        3. Ethernet

        (1 - 3): <answer>

MVME147 CPU# 0 running GTOS at 1000000 ? (y/n) y
MVME147 CPU# 1 running GTOS at 1400000 ? (y/n) <answer>
MVME147 CPU# 2 running GTOS at 1800000 ? (y/n) <answer>

Operating system version (from release notes)? 4.7

Creating directory '/etc'
Creating '/etc/motd'
Creating '/etc/config.sys'
Creating '/etc/boot0'
Creating '/etc/boot1'
Creating '/etc/boot2'
Copying /cig/base/files.cfg/cfg120.000 to /cig/base/cfg120.000
Copying /cig/base/files.cfg/dbase2.cfg to /cig/base/database.cfg

Boot structure set to:
        Device      : 8
```

```
        Lun          : 0
        Boot String  : ip0:A:GTOS4.7:/etc/boot0

Autoboot is enabled
gt-0> reboot
Rebooting ...


Copyright Motorola Inc. 1988, All Rights Reserved

VME147 Monitor/Debugger Release 1.0 - 4/8/88

FPC  passed test
MMU  passed test

COLD Start
147-Bug>Autoboot in progress... To abort hit <BREAK>
147-Bug>BO

RAM address from VMEbus = $00000000

Booting from:   VME323 8,0 - ip0:A:GTOS4.7:/etc/boot0
IPL loaded at:  $00100000
Booting from file 'GTOS4    .6  '
Searching volume  'VOLUME_A.    '
Found boot file   'GTOS4    .6  '
First cluster = 00000002 file length = 0007348E
The current data sector is 000001B9
Data load address, entry point = 00005FE0 00006000
   RTSCOPE 68K v1.03

 FPU Detected
RC>go

GTOS version 4.7 of Tue Jan 8 15:05:51 PST 1991
3013720 (0x2dfc58) bytes of free system memory starting at 0xe03a4
Installing config: at 0x0 ==> OK.
Installing ip0: at 0xffffa000 ==> OK.
Mounting cache: on ip0: ==> OK.
Mounting A: on cache: ==> OK.
Installing dr0: at 0xffff0000 ==> OK.
Installing frameint: at 0x0 ==> OK.
Installing mmu: at 0x0 ==> OK.
Installing rst4: at 0x0 ==> OK.
Installing esifa1: at 0x0 ==> OK.
Installing esifa2: at 0x0 ==> OK.
Starting MPV component


        Configured as GT120

gt-0>
```

Remove the tape from the tape drive.

Follow an Customer specific or CIG specific release notes.

Installation of Release is now completed.

To run the real-time using the "spec" database, type the following.

```
gt-0> cd /cig/base
gt-0> rttgtr5.7 -f 1 -s 15 -d
```

NOTE: For normal operation, users should execute the real-time s/w from the /cig/config directory.

3.0 EXECUTING THE REAL-TIME SOFTWARE

gt-0> rttgtr5.5 <invocation switches>

- **-A**

This activates the SIMNET server task.

- *-e <mode> <48-bit ethernet address>*

This switch is used to configure the CIG to communicate with the host computer via ethernet (the default is DR11). Mode 1 indicates the Master CIG this is the CIG the host communicates with. Mode 2 indicates the CIG is operating in Slave mode and all information from the host is being passed via the Master CIG.

examples:

gt-0-> rttgtr5.7 -e 2 <48-bit ethernet address>

(This CIG is a Slave CIG and will receive its messages via the Master CIG on ethernet)

gt-0-> rttgtr5.7 -e 1 <48-bit ethernet address>

(This CIG is a Master CIG and must pass its messages on to the waiting Slave CIG)

- *-E <site number> <host number>*

This switch is used to configure the CIG to communicate with the host computer via ethernet (the default is DR11). This interface supports the exchange of buffers among groups of applications over a network in a transparent fashion. This interface also supports the exchange of buffers larger than the maximum transmission unit of the underlying network by fragmenting a larger buffer into a number of smaller buffers which are sent in sequence over the network. The receiving end reassembles the fragments and presents the client with a complete buffer. For more information please refer to the Libex Programmers Guide.

- *-f <mode>*

This switch is used to configure the CIG's FLEA process to 1) act as an internal host computer, 2) act as an external host computer via DR11, 3) act as an external host computer via ethernet, 4) act as an embedded host computer via MPV,

examples:

gt-0-> rttgtr5.7 -f 1
(this runs flea in the internal host "standalone" manner)

gt-0-> rttgtr5.7 -f 2
(flea acting as sim-host sending packets to a real-time CIG via a DR-11 interface. This normally would be used only in a dual CIG configuration where 2 CIGs are communicating via DR-11 interface)

gt-0-> rttgtr5.7 -f 4 -m 1 2
(this runs flea to provide a host to another processor running the CIG RTSW. This would only be run on a slave CPU board. The choice of numbers after the -m switch is completely arbitrary)

gt-0-> rttgtr5.7 -m 2 1
(this runs allows the CIG to run with an embedded host or another CPU running rttgtr5.7 as invoked with the previous example. The choice of numbers after -m is in the opposite order as the above example.)

- *-d*

The -d switch forces a download of all files to the various graphic processor boards. Files downloaded include color lookup tables, texture maps and screen resolution. The system hardware must have the appropriate configuration to take advantage of these downloadable features, but will not fail if the download feature is not present.

- *-s <frame rate>*

The -s switch establishes the CIG frame rate. Current acceptable frame rates are 15 and 30 hertz. Example: -s 15

- *- h*

The -h invocation switch tells the real-time to display all currently available invocation switches. This is intended as a help facility.

- *- v*

The -v (verbose) switch is for system debugging and is normally not used by the customer.

4.0 FILES ON THIS RELEASE TAPE

GTOS4.7	-	GT Operating system
/ETC/		
BOOT	-	script to boot Master CPU
CONFIG.SYS	-	CPU configuration file
/BIN/		
BOOT147	-	Boots GTOS on slave CPU
CAT	-	List a file
CONFIG	-	Configures CPUs
CP	-	Copy file
DBRW	-	Read / Write multi-volume tape file
DISKSTAT	-	Display disk geometry and useage
FDUMP	-	Hexadecimal listing of a file
FMT	-	Format the disk
HDR	-	Display downloadable file header
LS	-	List directory
MKDIR	-	Make directory
MORE	-	Display ASCII file in page mode
MSET	-	Memory set tool
MT	-	Manipulate cartridge tape
MV	-	Move/rename a file
OD	-	Display binary file
PRINTENV	-	Display current environment variables
RM	-	Remove a file
RMDIR	-	Remove a directory
SEDIT	-	Simple editor
TAR	-	Tape archive utility
/CIG/BIN/		
BALLGTR5.5	-	Relocatable Ballistics task
RTTGTR5.7	-	Relocatable Real Time task
DED6.0	-	Display contents of DED
/CIG/BASE/		
BALLIST.CFG	-	Ballistics configuration
COLOR.CFG	-	Color/Fade configuration
DATABASE.CFG	-	Database configuration
DATA2D.001	-	2D overlay data
FINSIMT.001	-	Final look up table
FORCE0.078	-	Force task
FORCE1.078	-	Force task
LUT32.000	-	GSP 3D color lookup table
TASK2D.414	-	GSP task
TEXTURES.LST	-	List of files to download
/CIG/BASE/FILES.CFG/		
CFG101.000	-	Flea configuration file - GT101
CFG102.000	-	Flea configuration file - GT102

CFG110.000	-	Flea configuration file - GT110
CFG120.000	-	Flea configuration file - GT120
CFG111.000	-	Flea configuration file - GT111

/CIG/CONFIG/ (built by /bin/mkconfig)

/CIG/DATA/DB/

SPEC3COW.001	-	ATP Database
SPEC3COW.002	-	ATP Database
SIMTD0OW.01C	-	Dynamic Element Database

/CIG/DATA/DOWNLOAD/

PPMCP.ON		
PPMCP.OFF		
PPMCPA		
PPMSPCA		
PPMSPCB		
PPMSS		
SIMTOWMT.000	-	Texture id map
SIMTOWM0.000	-	Texture map
SIMTOWM1.000	-	Texture map
SIMTOWM2.000	-	Texture map
SIMTOWM3.000	-	Texture map
SIMTOWM4.000	-	Texture map
SIMTOWM5.000	-	Texture map
SIMTOWM6.000	-	Texture map
SIMTOWM7.000	-	Texture map
SIMTOWM8.000	-	Texture map
SIMTOWM9.000	-	Texture map
SIMTOWMC.000	-	Texture color map
GIFADE.RFT	-	Red fade table
GIFADE.GFT	-	Green fade table
GIFADE.BFT	-	Blue fade table
GIFADE.FCM	-	Fade control map

5.0 Problem Tracking Form

5.1 Reporting Problems

Although every attempt has been made to deliver software that has been fully tested, occasional problems may arise. If this occurs, please complete the attached Problem Tracking Form (PTR). Please be very specific about versions of software executing at the time of the failure.