
BACKLASH
Software Revision v1.20

Revision B / 26NOV95
SANCTUARY SOFTWARE STUDIO, INC.
Proprietary Information



REVISION HISTORY

Revision	Release Date	Author	Summary of Changes
NR	21NOV95	MJT	Initial plan for version 1.20
A	23NOV95	MJT	Added feedback from TDF, more bug fixes from ZDI feedback.
B	26NOV95	MJT	Patch information. Win95 setup removed. Added notes to tasks.

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1. INTRODUCTION

1.1. PURPOSE

This document describes the changes to be made to the **BACKLASH - A Turret Gunner Simulation** software package for development of version 1.20 from the existing version 1.10. It would be preferable to make the enhancements to the game before providing public release of the full release of the software. Presumably, the FormGen release of the product will generate press causing increased BBS activity. The proposed changes will increase the ability to sell registered versions of BACKLASH.

1.2. EFFECTED PRODUCTS

1.2.1. BACKLASH - A TURRET GUNNER SIMULATION - FULL RELEASE

The full release will incorporate all changes to the product. Documentation updates will be placed in the READ.ME or in a printed addendum to the manual.

1.2.2. BACKLASH - A TURRET GUNNER SIMULATION - SHAREWARE RELEASE

The shareware version of the software will incorporate changes that are not specific to the missions in Operation Gambit and Operation Iron Horse. Changes will be documented in the read.me file.

1.2.3. BACKLASH - A TURRET GUNNER SIMULATION - SHAREWARE RELEASE - BBS VERSION

The BBS version of the shareware package consists of a ZIP file. It does not include the INSTALL.EXE program and as such is not effected by changes to the INSTALL program.

1.2.4. BACKLASH - A TURRET GUNNER SIMULATION - FULL RELEASE 1.10 TO 1.20 PATCH

If sufficient numbers of users have registered version 1.10 of the software, a patch from 1.10 to 1.20 shall be made available to registered users. Presumably, the minimal distribution of the software will allow redistribution to all registered users.

1.2.5. BACKLASH - A TURRET GUNNER SIMULATION - SHAREWARE 1.20 PATCH

The patch contains the information to upgrade an existing installation of BACKLASH to version 1.20. The patch will be made available as a ZIP file for downloading. The patch may be applied to version 1.00 or version 1.10 of the shareware. The patch may be applied to the FormGen / Gold Medallion release (presumably).

1.3. GLOSSARY

Term	Definition
PATCH	A subset of the product that consists of the changes between software versions.

1.4. REFERENCES

None

2. ENHANCEMENTS

The following changes to the software product are enhancements to the existing software.

2.1. ALTERATION OF DIFFICULTY LEVELS

2.1.1. REASON FOR CHANGE

Feedback regarding version 1.10 of the game indicates that the operation of the software is too difficult for many players to advance through the SHAREWARE version. Players who do not fare well in the shareware version of the software are unlikely to purchase the full release of the game. As such, even experienced players are challenged to frustration with the current release of the software.

Anthony Starkey : Can't get out of level 2.
 Steve Zeller : Can't get out of level 2.
 Robert Terry : Can't get out of level 7.
 id Software : Who's the psycho.

Several of the players (AS, SZ, RT) have given up even though they say the game is "cool."

2.1.2. PROPOSED CHANGE

Add a new, easier difficulty level with increased energy and armor levels. Rename the existing difficulty levels to make room for the new level. The default level of difficulty will remain MEDIUM, but the MEDIUM level will be easier to complete.

- EASY : New. Mission layout is as in MEDIUM, but the player automatically gets a bonus to energy and shields.
- MEDIUM : The same as the v1.10 easy difficulty level.
- HARD : The same as the v1.10 medium difficulty level.
- RAMPAGE : Unchanged.

2.1.3. TASKS

Task	Update NEW game interface
Classification	Software
Summary	Add "HARD" level to the game interface. Allow shareware users to select easy, medium or hard. Allow rampage only in the full release.

Task	Correct xxxByDifficulty functions
Classification	Software
Summary	The by difficulty functions (regenerate, addmines) must be updated to properly handle the new difficulty level.

Task	Update the reset mission function
Classification	Software
Summary	Update the reset mission function to allow increases to the base armor and energy when playing in easy mode.

Task	Testing
Classification	Testing
Summary	Verify operation of the software under each difficulty level by spot testing missions at each difficulty level. Make sure that a mouth breather can advance on the easy level.
Notes	Played the entire SHAREWARE version on EASY level. Able to play through without getting destroyed. Some of the missions are still challenging.

2.2. DIGITAL AUDIO DRIVER ENHANCEMENT

2.2.1. REASON FOR CHANGE

User request specifically for support of interrupt 10 under OS/2. BACKLASH already supports operation under OS/2 version 3.0 (WARP) or later.

2.2.2. PROPOSED CHANGE

Add support for sound card interrupts residing on the cascade interrupt controller.

2.2.3. TASKS

Task	Update EROS16 sound driver.
Classification	Software
Summary	Add support for interrupts above 7 in the digital audio driver for BACKLASH. High interrupts require resetting both interrupt controllers.

Task	Update SETUP program
Classification	Software
Summary	The setup program needs support added for selection of the interrupts added to the supported list.

Task	Update CONFIG program
Classification	Software
Summary	The configuration program needs support added for selection of the interrupts added to the supported list.

Task	Verify Interrupt Support
Classification	Testing
Summary	Verify operation of interrupts for the sound driver on all supported interrupt channels under conditions of chaining and non-chaining operation.
Notes	Tested on Sound Blaster Pro interrupt 10 in chaining and non-chaining modes of operation. Unable to test interrupts 11, 12 and 15 because a sound card that supports them could not be found. The other interrupts use the same code and algorithm for operation. Re-tested operation of the sound drivers for interrupts 5 and 7 (the normal settings).

2.3. CD-ROM SUPPORT

2.3.1. REASON FOR CHANGE

Verify that BACKLASH is ready to be installed from CD-ROM and the shareware version is suitable for distribution by such mediums as PC-GAMER. Determine that we are able to create CD-ROMS with the Pinnacle CD/R system for other developments.

2.3.2. PROPOSED CHANGE

Create a prototype CD-ROM containing the full and shareware releases of BACKLASH. The software would install from the CD-ROM

2.3.3. TASKS

Task	Create CD version of BACKLASH
Classification	Production
Summary	Make a CD-ROM that contains both the shareware and full releases of the game.
Notes	Created CD-ROM version of the software. Game may be installed from CD-ROM. AutoPlay feature works for starting INSTALL.EXE.

2.4. WINDOWS 95 SOFTWARE SET-UP

2.4.1. REASON FOR CHANGE

Make the software more accessible to Windows 95 users. Win95 users will comprise a greater and greater share of the product market.

2.4.2. PROPOSED CHANGE

Make the installation of the BACKLASH product more user-friendly to Win95 users by providing an icon for the BACKLASH game application and investigate the possibility of providing a Windows 95 target set-up applications.

2.4.3. TASKS

Task	ICON
Classification	Graphics
Summary	Create an icon for BACKLASH that is suitable for use as a shortcut icon and on the task bar. Icons should be provided for (1) BL.EXE - Game

Task	W95SETUP
Classification	Software
Summary	Investigate generation of a Win95 hosted installation that will configure short-cuts to the BACKLASH game software by updating the task bar.
Notes	This task was determined to be too difficult for near term implementation. It has been dropped in order to not delay the release of version 1.20.

2.5. BACKLASH.BAT

2.5.1. REASON FOR CHANGE

Make it easier for users to start the game program.

2.5.2. PROPOSED CHANGE

Add the file BACKLASH.BAT to the file set that starts the game from the directory where it was installed.

2.5.3. TASKS

Task	Make BACKLASH.BAT
Classification	Software
Summary	Create a batch file in the installation directory called BACKLASH.BAT that will run the game as BL.EXE. Some users have a hard time figuring out how to start the program.

Task	Update File Set
Classification	Software
Summary	BACKLASH.BAT must be added to the file installation set.

2.6. MISSION NUMBER INDICATOR

2.6.1. REASON FOR CHANGE

User request from Robert Terry. Likes to know where he is at in the game and he tends to not read much in the interface screens.

2.6.2. PROPOSED CHANGE

Change the top line of the objectives display from **OBJECTIVES:** to an indicator of the current mission number such as **MISSION 12:**.

2.6.3. TASKS

Task	Update in flight Objectives Screen
Classification	Software
Summary	Indicate the current mission number in the objectives screen during game play.

3. BUG FIXES

The following changes address problems existing in version 1.10 of the software package.

3.1. AVAILABLE MEMORY CHECK

3.1.1. SUMMARY OF PROBLEM

The software does not properly detect that sufficient conventional memory is available at start-up for operation of the game package. If less than 500k of conventional memory is available, the software will attempt to run and will crash during operation with an out of memory exception.

3.1.2. PROPOSED SOLUTION

Correct the program initialization routine to determine the amount of memory available for the program, considering the program footprint. If less than 500k is available, the software will terminate with a message indicating that additional conventional memory is required for operation.

3.1.3. TASKS

Task	Conventional Memory Detection
Classification	Software
Summary	The software should determine the amount of conventional memory available immediately after loading. Based on observation (the difference between available memory before and during operation) the memory footprint of the program can be determined. If the footprint plus the available conventional memory is less than 500K, the program should terminate.

Task	Display available conventional memory in setup program
Classification	Software
Summary	The system information screen in the setup program should display the available conventional memory for running the game.

Task	Allow memory error override
Classification	Software
Summary	Provide a command line option (/OM) in the BACKLASH program to override the not enough conventional memory error.

Task	Verify operation under various memory configurations.
Classification	Testing
Summary	The software operation should be verified under a variety of memory configurations in order to test proper operation and clean termination on error.

3.2. DEFAULT CONFIGURATION

3.2.1. SUMMARY OF PROBLEM

The default configuration of the program does not attempt to set up the sound card. The program can be run without first configuring the game, a more likely possibility when the game is distributed as a ZIP. Some users are not properly configuring their system before operation.

3.2.2. PROPOSED SOLUTION

Use the BLASTER environment variable to configure the sound card. Do not default to no music, speaker sound unless the BLASTER environment variable is not set. If the program is started and BL.CFG file does not exist, provide an error message (Run SETUP.EXE) and terminate. Do not continue with worst case settings, as the user may never properly configure the game.

3.2.3. TASKS

Task	Update Defaults in SETUP.EXE
Classification	Software
Summary	Update the default configuration routine to use the BLASTER environment variable to configure the sound card.

Task	Terminate on no configuration
Classification	Software
Summary	Force termination with error message from BL.EXE if the game has not been configured via the setup program (BL.CFG does not exist).

Task	Testing
Classification	Testing
Summary	Test for proper device detection and default configurations.

3.3. DISK SPACE REQUIRED

3.3.1. SUMMARY OF PROBLEM

The full release installation program does not indicate the proper amount of disk space required for installation of the software package.

3.3.2. PROPOSED SOLUTION

Correct the full release installation program to report the proper disk space requirements.

3.3.3. TASKS

Task	Update Full Release Installation Program
Classification	Software
Summary	Update the definition in INSTALL.C for the full release installation build to indicate the proper amount of disk space required for installation.

3.4. ABORT MISSION CONFUSION

3.4.1. SUMMARY OF PROBLEM

User reports that ALT-F8 for abort mission does not consistently function. This is partly user error, incomplete documentation and poor implementation. Abort does not indicate that the mission is being aborted and time is required to abort the mission.

3.4.2. PROPOSED SOLUTION

Update the documentation to indicate that not all missions may be aborted. Indicate that an abort mission sequence is in process using the a standard pilot message.

3.4.3. TASKS

Task	Update documentation
Classification	Software
Summary	Update the documentation (INSTRUCT.TXT) to indicate that aborting a mission is not always an option in the game.

Task	Message on Abort
Classification	Software
Summary	When an abort sequence begins, generate an indicative message to the player using the message display.

3.5. INCOMPLETE INSTRUCTIONS

3.5.1. SUMMARY OF PROBLEM

Some users find the game difficult beyond the ability to continue play. A root of the problem is a misunderstanding of the physics of the game and lack of thought on the model.

3.5.2. PROPOSED SOLUTION

Provide hints in the instruction manual that may help the player learn to play the game. Of specific interest are the use of the radar and how to destroy enemy ships.

3.5.3. TASKS

Task	Update documentation
Classification	Software
Summary	Update the documentation (INSTRUCT.TXT) providing a hints section.

Task	Add HELP in terminal.
Classification	Software
Summary	Quickly describe the mechanics of the game (missions, upgrades, difficulty, etc). Also point the user to the manual for more information and hints on how to play.

Task	Point to HELP from NEW
Classification	Software
Summary	Indicate that help is available by hitting the help button on the right of the screen when in the NEW game screen. This is the entry point to the game.

4. RELEASE

4.1. SHAREWARE

4.1.1. SHAREWARE V1.20

Version 1.20 of the software will be made available on all major BBS's that are being used for distribution of the shareware software. The file is to be distributed as BL120SW.ZIP.

4.1.2. SHAREWARE V1.20 PATCH

A patch for versions 1.00 and 1.10 shareware will be made available on all major BBS's that are being used for distribution of the shareware software.

4.1.2.1. Patch Format

The patch will be distributed as a ZIP archive that is to be downloaded. Instructions are supplied for applying the patch. The patch is applied by extracting the patch archive over an existing version of the shareware game. The file is to be distributed as BLP120SW.ZIP.

4.1.2.2. Patch Contents

The following files are patched to convert from versions 1.00 or 1.10 to 1.20. These files are placed in the archive P120DATA.ZIP.

File	Changes
BACKLASH.BAT	New file. Batch file to run the game.
BACKLASH.ICO	New file. Icon for Windows 95 users.
BL.EXE	Updated. New game features.
HELP.TXT	Updated. Help for the setup program, not configuration.
SETUP.EXE	Updated sound card configuration.
CONFIG.EXE	Updated sound card configuration for FormGen users.
VENDOR.DOC	New file for version 1.00 users.
ORDER.FRM	Updated the version of the software.
READ.ME	Updated. Lists the changes in the version.
ENGLISH.RSC	Updated. About screen, help screen.
INSTRUCT.TXT	Updated. Minor corrections, additions.
MISSION.RSC	Updated. Changes for version 1.00 users.

The following files are placed in the distribution file BLP120SW.ZIP.

File	Changes
FILE_ID.DIZ	File id providing BBS description for the file.
PATCH120.TXT	Instructions for applying the software patch.
P120DATA.ZIP	Patch archive containing the changed files.

4.1.2.3. Patch for 1.10

One patch will be distributed for updating version 1.00 and 1.10 software packages. A 1.10 patch will be made available on the SANCSOFT BBS and is ready for distribution. However, people may be confused and install the wrong patch, etc. The size of the larger patch is not prohibitive and it contains an enhancement to mission 15, reducing the ending of the mission.

4.1.3. FORMGEN / GOLD MEDALLION

Version 1.20 of the software will be supplied to FormGen / Gold Medallion in order to update their release before the next printing of the commercial shareware release. It must be determined if version 1.00 of the shareware software will ever hit the market. Version 1.20 of the software disks should be shipped for verification to Sanctuary Software Studio, Inc. before it is manufactured.

4.2. FULL RELEASE**4.2.1. FULL RELEASE 1.20**

Version 1.20 will be made available directly from Sanctuary Software Studio, Inc. In addition, version 1.20 will be used for distribution for promotional purposes and will be used for FormGen commercial publication.

4.2.2. FULL RELEASE V1.10 TO V1.20 PATCH

No patch for the full release will be distributed. The first mass release of the full version will be 1.20. Any existing distributions of version 1.10 will be sent complete copies of version 1.20.