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Wing Commander IV Post Mortem

Product Support and Customer Feedback

Game Release Date	2-12-96
Post Mortem Date	5-10-96

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Thanks to J. Allen Brack, and the Wing Commander IV QA Team

Wing Commander IV Post Mortem

Product Support and Customer Feedback

Introduction

This document summarizes most of the comments, compliments, problems encountered and complaints encountered in testing and supporting Wing Commander IV as well as features and design issues Quality Assurance, Customer Service, and actual non-Origin gamers would like to see fixed and added to future Wing Commanders (if applicable, Maniac Missions, Wing Commander V, Privateer II, etc.) It is divided into several sections, namely **Positive Feedback**, **Interviews With The Development Team**, **Problems**, and **Suggestions**. Customer letters, faxes and e-mail messages will emphasize both the positive and negative aspects of Wing Commander IV, with the hope that they will be taken into consideration not only for future Wing Commanders, but for any future Origin Product.

Overview of the Development/Testing Cycle

Wing Commander IV was in QA approximately 6 months. To sum up the development feeling in one word, *'rushed'* comes to mind. The shipped product is one of the best products on the market, but it was not as good as it could have been. Important bugs were killed, documentation was shipped and printed before the game was completed, and too many design changes were made during the later stages of the development process. We need to take the time to make a good game; the Wing Commander property is too important.

Overview of the Tracking Cycle

Once shipped, the project was tracked in Customer Service for 6 weeks. Reports on the status of the support for the game were sent to the key members of the team.

Along with troubleshooting problem calls with the game, steps were taken to record anything that could be used to make a better game.

During this time...

- ✎ problem hardware was isolated; vendors were contacted for product swaps; hardware was tested for possible solutions.
- ✎ patches for common problems were made.
- ✎ a WC4HELP.TXT file was created and released online to help customers troubleshoot problems without the need to contact Technical Support.

☞ data was collected for the Post Mortem.

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Positive Feedback

All aspects of Wing Commander IV have received positive feedback :

Graphics

- 👉 Stunning movies, filmed with real sets
- 👉 Photo-realistic ship and terrain textures
- 👉 Multi-colored HUDs
- 👉 Explosions are beautiful!
- 👉 Cockpit lens effects were not confined to one area

Sound

- 👉 16-bit Dolby Surround™ stereo sound during cinematic sequences

Storyline and Gameplay (Player Interaction and User Interface)

- 👉 The game itself is fun!
- 👉 All star cast : Mark Hamill, Malcolm McDowell, Tom Wilson, John Rhys Davies, Jason Bernard [and Robert Rusler! Ahem... 😊]
- 👉 Multiple endings (2 winning, 2 losing)
- 👉 The gameflow map
- 👉 The return of the tractor beam
- 👉 MIPs (Manned Insertion Pods, small torpedo sized 'missiles' designed to hold one marine during takeover operations)
- 👉 Variable on-screen wingman stats
- 👉 Branching plotline enables replay value
- 👉 Multiple mission gameflow states, where your choice of 3 possible missions is selected
- 👉 Plot branching missions
- 👉 The virtual dogfight in Mission A1
- 👉 Greater variety of missions, not just 'Search and Destroy' and 'Escort'
- 👉 Wing Commander III flight model

AI

- ↳ More challenging than Wing Commander III
- ↳ Docking ships
- ↳ AI finally shoots missiles at player on the ACE difficulty level

Technical Issues

- ↳ A new movie player capable of displaying 16-bit (32,000) color movies in 640x480 with Dolby Surround™!
- ↳ A working boot disk maker
- ↳ Machine speed test used for benchmarking
- ↳ Soundcard autodetection
- ↳ Test movie in the installation program

Documentation Issues

- ↳ Machine SKU did not reflect a 486DX2/66

QA/PD Relationship

- ↳ PD was very receptive to all QA suggestions, even though most could not be implemented in the timeline.
- ↳ It would appear that the overall opinion of QA from a development standpoint has changed for the better.
- ↳ Unlike Wing Commander III, where the QA team received a new version of the game per day, with Wing Commander IV, the QA team received a new version of the game every 2-3 days. This gave the testing team more time to test the version.
- ↳ Chris, Tony and Frank went out of their way to make QA feel like part of the team.

Fixed from Wing Commander III

- ↳ Capital ship collision detection was improved
- ↳ Texture warping was fixed
- ↳ Mouse spaceflight was fixed
- ↳ Long load times were shortened
- ↳ Leech missiles were fixed
- ↳ AI not shooting missiles at the player was fixed (albeit a little 'too' fixed...)

- 👉 Victim camera was fixed
- 👉 Thrustmaster hat works in flight to control views
- 👉



Interviews with Members of the Development Team

Frank Roan, Lead Programmer

- 1) **As a game, what was your opinion of Wing Commander IV?** *I believe it was a good game, but I was a bit too close to the development to be very subjective. I plan to go back and play it "fresh".*
- 2) **Did you have any problems with the way the game was developed?** *It was too rushed.*
- 3) **Did you have any problems with the way the game was tested?** *No, QA went way beyond the call of duty.*
- 4) **What would you like to have seen in Wing Commander IV?** *Hard question. I can't really answer this...*
- 5) **What suggestions do you have for future Wing Commanders?** *As I am directing Wing 5, all the suggestions I have for future Wing Commanders I'm trying to do!*

David Downing, Associate Producer

- 6) **As a game, what was your opinion of Wing Commander IV?** *Great game!*
- 7) **Did you have any problems with the way the game was developed?** *Not enough time and resources --- too much pressure to ship*
- 8) **Did you have any problems with the way the game was tested?** *Testing did an awesome job!*
- 9) **What would you like to have seen in Wing Commander IV?** *More time to finish and get docs correct.*
- 10) **What suggestions do you have for future Wing Commanders?** *More time.*

JC Combs, Art Director

- 11) **As a game, what was your opinion of Wing Commander IV?** *I have not played it. The art and cinematic sequences, though, are some of the best in the industry.*
- 12) **Did you have any problems with the way the game was developed?** *Yes, no direct leadership and vast communication problems.*
- 13) **Did you have any problems with the way the game was tested?** *I am not completely sure how testing is handled, so [perhaps] I should not comment. One thing, I should be kept in the loop concerning any art related suggestions, that way [I] can determine if they have precedence or not.*

- 14) **What would you like to have seen in Wing Commander IV?** *Better (any) preproduction, more development time and profit sharing.*
- 15) **What suggestions do you have for future Wing Commanders?** *I believe, since the driving force behind WC has departed the company, that WC should be more game driven than cinematic driven. You have no one here able to pull off what Chris did, so don't try or it will fail badly, thus destroying the franchise.*

Anthony L. Sommers, QA Project Leader

You can consider the Post Mortem as my feedback on the project... ☺

J. Allen Brack, QA Assistant Project Leader

- 16) **As a game, what was your opinion of Wing Commander IV?** *Wing IV, the greatest game ever made. Interesting game, far better movies, far more detailed story,: Great technology, OK story, good art, decent objects, a real achievement for such a short dev cycle. The game is one of the slower games I've ever seen. I think this could have been avoided with fewer faced objects. While Origin has a reputation for creating the best looking games, it has been rather conclusively that people would rather have a smoother game than a great looking game. Development needs to keep this in mind.*
- 17) **Did you have any problems with the way the game was developed?** *Development time was far too little for a game of this magnitude. This was "The largest and most expensive game in computer gaming history." The development cycle did not allow [enough] time for some of the [original problems/killed bugs] from Wing III to be corrected.*
- 18) **Did you have any problems with the way the game was tested?** *The test team was FAR to green for a project of this magnitude. Experienced testers are in short supply! Avoid the *Mostly Green* teams from now on, if possible.*
- 19) **What would you like to have seen in Wing Commander IV?** *The list is endless... Check killed bugs #1 through 100. Most important suggestions were here, but were killed due to time. Top suggestions : Revamped damage system, Collision imminent alarm, etc...*
- 20) **What suggestions do you have for future Wing Commanders?** *Most important : An on-line help system. During Install of Wing V, the option "Use help" would default to on during installation. The first time anything unusual happened, (ie, morale choice, moving around gameflow, etc.) the game would stop and a nifty "help box" would appear, presented in a complete "non-fiction" sort of way. This would minimize calls regarding faulty documentation and could eliminate ""My screen locks up with 'Help him out/ Straighten him out' and I don't know what to do?????"*
- "Privateer" like damage system. Make players feel the pain and fear of damage.*
- Check killed bugs #1- 100*
- 21) **Any other comments?** *On the QA side, a potential Project Leader should be assigned to the project from inception. If this job rotates, fine, but QA will have been part of the*

"Core Team" and involved in various decisions from the beginning. I understand this is being done with Wing V. This should be part of the normal procedure.

Marketing should not post a street date on an ad. Period. End of story. No Exceptions. What happened during Wing Commander IV a hideous mistake, and missing a street date causes far more bad publicity than it generates "hype" should you actually make the date.

[Due to the rushed development cycle, much of the documentation suffered from being incorrect.] Documentation should not reach final sign off until after the game has been completed. This will [allow time to] create better install guides, more user-friendly, and most important, more accurate documentation. This is not the fault of any one person, but more the process.

Post-Game Release Information

Problems and Customer Feedback

The following list details the most common problems with Wing Commander IV, and denotes the most common Customer complaints. It is important to note that most [if not all] of these complaints were voiced during the QA process.

Graphics

- 👉 VGA scaling was too blurry.

Sound

- 👉 General Midi was not implemented
- 👉 Streamed digital music had an impact on frame rate.

Storyline and Gameplay (Player Interaction and User Interface)

- 👉 Higher SKU required, SVGA was not possible on anything less than a Pentium.
- 👉 Game was *too* short.
- 👉 Game was *too* hard after the missile change.
- 👉 Obscene language
- 👉 Flying down to a planet surface reset the power settings
- 👉 Crazy missions B1 : To complete the mission, after locating the frigate, you are supposed to turn toward the white crosshair and afterburn until you receive an Autopilot light. What?!?
- 👉 Crazy mission LC : To complete the mission, you need to destroy all turrets, all rear engines, and inflict 50% damage to the ship. What?!?

AI

- 👉 Missiles! In any AI level, a hit by ONE missile will kill the player.
- 👉 Not much of a delineation in AI levels.

Technical Issues

- 👉 Frame rate was often too slow in combat.
- 👉 Detail levels had minimal impact on frame rate.

- ☞ Communications system would sometimes play with no audio during important comms.
- ☞ Annoying minute 1/2 second pauses while loading in-flight comms during combat.
- ☞ Saving in savegame 100 (the last savegame slot) will cause that game state to be reloaded upon replaying the mission, even if you're several missions past the point you saved!
- ☞ Joystick routines were irritating. The precision control of Wing Commander III was lacking. More accurate joystick control should have been implemented.
- ☞ Windows 95 caused problems with users and 8 MB of RAM. Also, there appeared to be a Windows 95 timer spike that occasionally interfered with joystick control.

Hardware Issues

- ☞ Customers believed the Microsoft Sidewinder 3D Pro joystick should have been natively supported.
- ☞ Video cards with the S3 Vision 968 chipset and the IBM RGB 524 RAMDAC could not view 16-bit color movies. This turned out to be an issue with the movie player, which was subsequently patched.
- ☞ There was a GUS Max option in the installation program, and the GUS Max was not supported in the game.
- ☞ The GUS (a 16-bit stereo sound card) was used as a mono sound card.

Documentation Issues

- ☞ Ordinance information was not included with the documentation.
- ☞ Documentation was erroneous in too many places due to last minute changes in the game during development.
- ☞ Documentation did not undergo formal sign-off until several weeks after the original version of the game was released.

Miscellaneous Issues

- ☞ Certain error messages were too cryptic.

For example : 'Open failed on file ..\..\data\sound\gfmix.iff' is easier to understand as 'Please make sure a Wing Commander IV CD is in the CD-ROM drive before running the game.'
- ☞ Installation program was not too user-friendly.
- ☞ The CD wallet could not be used to do its job of protecting the CDs. After several times of inserting and removing the CDs, often, the CDs would have scratches on them.
- ☞ Help him out/Straighten him out lockup : Possibly due to a lack of good documentation, some customers would not know that a morale choice had to be made in the

introduction. After pressing [ESC] to bypass the introduction, the game appeared to lockup.

QA Frustrations

- ↳ Marketing often would not want to consult QA on items concerning Wing Commander IV (such as ads, box contents, etc.) and requests for changes were often met with opposition. Customer Service has the responsibility of support for the entire product, and should see them.
- ↳ Creative Services placed high demands to sign-off documentation when it was not completed and not correct.
- ↳ QA would often be asked to stay and wait for a version that would not be finished until the next day.

Could Not Be Fixed 'Because of' Wing Commander III

- ↳ Sound system
- ↳ Damage system in spaceflight
- ↳ Collision detection for missiles

Wing Commander IV Patches

There were three patches created for the game. A joystick patch for port/joystick problems, a joystick patch for the Notebook Gameport, and a patch for the 16-bit SVGA with certain video cards.

Suggestions for Future Wing Commanders

The Post Game Release Information (*see previous section*) included many items customers [as well as QA] had complaints about. That list should be reviewed for possible suggestions.

In addition to the list we have below, I would recommend screening the Wing Commander IV Killed Bug List, an excellent breeding ground for new suggestions and creative feedback.

Also, an extensive list of AI maneuvers was created for use in Wing Commander IV, however, due to time constraints, they were not implemented. This list will be mailed to the Development Team upon request.

Graphics

- ☞ Colored shields based on intensity and strength!
- ☞ Damaged textures on fighters!
- ☞ Bring back the cockpit [or at least the option]!
- ☞ Similar to the Dragon, allow fighters to have moving components!
- ☞ Allow the ability to upgrade weapons, with a visible change to the object in spaceflight!

Sound

- ☞ The ability to turn off repetitive enemy taunts!
- ☞ More variety of enemy taunts!
- ☞ Recordable player taunts!

Storyline and Gameplay (Player Interaction and User Interface)

- ☞ Multiplayer Capabilities - Gamers want to be able to fly with a human pilot on their wing. Wing Commanders have always been story based, but the simulator would be an excellent location to add a multiplayer option!
- ☞ Even more mission complexity!
- ☞ More missions!
- ☞ Tutorial/Training missions!
- ☞ Bring back the simulator!
- ☞ Protagonist needs a love interest!

- ☞ More ships/weapons/missiles!
- ☞ Add a bulletin board system in gameflow for pure fiction, with story updates, e-mail messages, etc.
- ☞ More playability/ship functionality from the external cameras!
- ☞ An extensive damage system that would impair the players ability to fly the ship correctly!

As examples : Blown stabilizers, can't yaw normally.
 Damaged guns, only one gun barrel works.
 Damaged missile hardpoints, can't fire missiles!
 and much more!!!

- ☞ Bring back the object viewer with online stats that would be updated as the player encountered new enemy ships throughout the game!

AI

- ☞ More AI maneuvers for attack and avoidance. Chasing the same ship the same way wave after wave becomes monotonous!
- ☞ Consult the AI document!

Technical Issues

- ☞ Support for more input devices or more 'types' of input devices, such as the throttle or rudder pedals!
- ☞ If the game is to be Windows 95 only, support for 3D accelerator cards!
- ☞ Add VR headset support for spaceflight!

Documentation Issues

- ☞ Ensure the documentation is accurate, reviewed and signed off before being printed!

Miscellaneous Issues

- ☞ Have Marketing consult with QA on the box contents!
- ☞ Use hard-plastic jewel cases for the CDs. Consider multiple CD CD wallets!

QA/PD Relationship

- ☞ Involve certain members QA earlier in the development process to provide customer feedback on design issues!
- ☞ And lastly... Implement all suggestions in the Post Mortem!!!
- ☞



Conclusion

Tremendous online feedback, enormous response from fans via letters and faxes, and glowing magazine articles all help to validate the overwhelming opinion that Wing Commander IV is an excellent product. My goal is that this Post Mortem will help take the future Wing Commanders to the next level of interactive gaming.

Anthony L. Sommers
QA/CS Project Leader
Wing Commander IV
Origin Systems, Inc.

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Section

Post-Game Released Documents

WC4HELP.TXT - Internet Help File

This document was released on the online services approximately two weeks after Wing Commander IV hit the stores. Product Support continually updates this file to provide information to the customers on how to fix the most common problems.

README.TXT for WC4JOY.EXE - Alternate Joystick Routines Patch

README.TXT for WC4JOYNG.EXE - Notebook Gameport Patch

README.TXT for WC4_SV16.EXE - 16-bit SVGA Color Patch

Customer Feedback

Customers are an excellent source of feedback about our games, from great cheers and pats on the back to nit-picks and complaints.

The feedback is organized into two segments, Direct Comments, which support many of the issues outlined in Section 2 : Post Game Release Information, as well as General Online Comments, which contains a wealth of Customer feedback on the game.

Direct Comments

These comments represent selected messages from online customers commenting on key items either missing from or not working correctly in Wing Commander IV. These comments support many of the issues outlined in Section 2 : Post Game Release Information.

General Online Comments 2-13-96

**May 10, 1996
Comments)**

Wing Commander IV Post Mortem Customer Feedback (General Online

General Online Comments 2-17-96

**May 10, 1996
Comments)**

Wing Commander IV Post Mortem Customer Feedback (General Online

General Online Comments 2-23-96

**May 10, 1996
Comments)**

Wing Commander IV Post Mortem Customer Feedback (General Online

General Online Comments 2-26-96

May 10, 1996
Comments)

Wing Commander IV Post Mortem Customer Feedback (General Online

General Online Comments 2-28-96

**May 10, 1996
Comments)**

Wing Commander IV Post Mortem Customer Feedback (General Online

General Online Comments 3-4-96

**May 10, 1996
Comments)**

Wing Commander IV Post Mortem Customer Feedback (General Online

General Online Comments 3-8-96

May 10, 1996
Comments)

Wing Commander IV Post Mortem Customer Feedback (General Online

General Online Comments 3-26-96

May 10, 1996
Comments)

Wing Commander IV Post Mortem Customer Feedback (General Online

General Online Comments 3-29-96

May 10, 1996
Comments)

Wing Commander IV Post Mortem Customer Feedback (General Online

General Online Comments 4-8-96

**May 10, 1996
Comments)**

Wing Commander IV Post Mortem Customer Feedback (General Online

General Online Comments 4-19-96

May 10, 1996
Comments)

Wing Commander IV Post Mortem Customer Feedback (General Online

General Online Comments 4-25-96

May 10, 1996
Comments)

Wing Commander IV Post Mortem Customer Feedback (General Online

Section

Game Magazine Reviews

Killed Bug List

Killed bugs are often a source of great suggestions for future titles.

