

# Debugging Jane's WWII Fighters Mission Scripts

- a Trouble Shooting Guide for Mission Designers (V1.3) -

by [=Ledersack=](#)

[current Version /patched 1.08F]



How often have you cursed wasting precious hours on debugging a newly generated mission (usually the one you spent most of your time on) that just refused to run and consistently crashed on you? Happened to me, almost up to the point where I was so fed up that I was considering to give up mission design in general - I felt *\*stuck\** and simply couldn't get to the ground of it! Hold it, cheer up and hang in there - it's not rocket science!! After all it's just about pulling the *\*right switches\** ... if you know where and what to look for! If you can relate, this one's for you!

-> When I'm referring to the built-in Mission Editor I'll abbreviate it "ME", same applies to the Dynamic Mission Editor "DME". The DME is activated using Ctrl-Alt-Y keys (Z if you're using a german keyboard layout) IN-FLIGHT ONLY!

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## THE CRASHES

Most common symptoms:

- System crash (computer hangs) => caused by mission script syntax errors
- Crash back to desktop without error prompt => false Identifiers/Actions/triggers. Overloaded missions, simultaneous HD/CD file access (audio files, etc)

- Crash back to desktop & error prompt or lock-up in the Museum screen: ==> usually hard- and/or software/driver-related.
- Known symptoms: Sound and/or Graphic errors. These problems are almost invariably caused by conflicting or out of date device drivers. As a general rule of thumb, ensure that you have the most up to date drivers for all devices in your system, particularly sound and video cards. Check the manufacturer's web site for driver information, including known conflicts with other devices. Before downloading any driver updates, check the current status of your DirectX installation. First, search (F3) for DXDIAG.EXE on your root partition/drive (mostly C:/) to verify your settings and go through the testing routine, thoroughly!



If you are positive about your hardware configuration but your custom missions still show strange behaviour, read on.

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## DEBUGGING

Missions won't load, crash midway through the plot? Planes and other objects acting strangely /like having a \*mind of their own\* and decide to detach themselves from your original mission layout?

What to do about it?

Let's assume you're going over/modifying an older version of your mission and have decided to (re)move a couple of objects.

Restarting the mission gives you a lot of pain as an unexpected crash occurs:

- Check triggers that are not implemented/accessible through the ME, first!

Here are a few oddities you may come across:

- Dead actions and references.
- Wrong, double or undefined tag identifiers:

Example: if you reference a .TagIdentifier (number) that doesn't exist (anymore), perhaps because the object/vehicle/flight has been deleted, this is most likely to cause the game to lock up. Another reason for a crash in the middle of a mission, for instance, is that an .AWAKEOBJ action references a .TagIdentifier that isn't defined. Another common one would be the TagID \*doppelganger\* - two objects by mistake possessing identical TagID numbers.

- Actions, distances or time triggers are (re-)set to 0 (zero) [an ME bug that can occur when reopening a mission i.e. in a different version of WW2F/ME and saving it from there]

- For Paratroop Missions: Don't assign any other planes than C47\_EMPTY (Allied) or HE111\_EMPTY (Axis)

- The use of exotic characters like: ~,&,©, etc. might corrupt the script/render it useless. GBA reported this odd phenomenon (related to the German language version, in particular) on several occasions: Example: mission summary contained a quote utilized the character "©" Removing the character "©" was all it required to get it up and running.

- Wrong spelling and syntax errors: Another major drawback is that the ME DOES NOT CHECK the mission script SYNTAX at loadup/save!! Minor errors in spelling may cause your box to lock up - going for another cold reboot (and sitting through the inevitable scandisk routine)

- Syntax - \*blanks\* are not easily defined at one glance - TAB und SPACE keys (both generating BLANK SPACES) don't look too different in a texteditor window and are easily overlooked. Don't mix up TAB and SPACE blanks! For instance if you like to keep the script clean & structured, you may prefer the use of plenty of TABs. Be careful not to tinker with the original syntax, though /i.e. replacing a SPACE with a TAB!!

- Untranslated triggers, actions or definitions (when using a non-english language version).

Example: using .Skill "ACE" (in the English version ME) to define pilot skill may be misinterpreted in another version (German /French) and the program will use instead a default setting which, in this case, would be "Veteran" thereby spoiling your carefully balanced pilot layouts. Further references on English/German mission script translations can be downloaded [here](http://members.xoom.com/ww2fa/downloads/Scripts_trans.zip) [http://members.xoom.com/ww2fa/downloads/Scripts\_trans.zip] or scroll down to the end of this document.



- Your carefully layed out ground structures have turned into a complete mess: Sorry there's no workaround other than switching to the DME (Ctrl-Alt-Y) and rearranging the lot...which may take quite some time... (if you don't have a backup!) Remember to save your alterations as \*testsave.mis\*!

This is why you should:

- Backup your file periodically or whenever you've made any modifications. In case your computer locks up or crashes you can usually scratch the mission you've been working on, it's likely to be

blank/destroyed. Also keep a copy of the old file - you can always go back and evaluate your most recent changes.

- Length of filenames: No more than 16 characters. Occasionally filenames longer than 16 characters may not be accessible through the Single Mission interface. Try to open them in the ME and re-save under a shorter name.

Here's a typical example for the infamous crash-back-to-desktop (CBD):

- Too many objects / structures / vehicles competing for CPU time: Particularly moving (ground) objects may cause performance & framerate to drop intolerably. A decent framerate however is the \*fuel\* for any exceptional Multiplayer mission.

Scroll down for hints on optimizing performance.

Unfortunately there is no rule of thumb: As a warning sign you may sometimes experience that (when using the ME) more than one object (ICON) is highlighted at a given time.

Try to delete the \*buggy\* objects as they will almost certainly cause trouble in the future. Don't forget to save under a different filename!

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## MULTIPLAYER HINTS

Courtesy of Yossarian the following aspects MUST be considered & addressed by the mission designer for multiplayer missions:

- Start missions in the Air. Starting the players on the ground causes big problems.
- Create separate flight groups for each player. Even then the game is kinda flaky, you'll get odd ships and the like.

As a rule: No more than two planes in each group.

Example: if you have a flight of four Mustangs and you want two of the players to fly in that flight, then you actually need to separate the 4 plane flight into two flights of two.

If you don't, you may get a 5 plane flight, and possibly one or both of the players will start "inside" each other, which means you crash and then have to revive immediately.

- Limit the number of objects: You have to keep it to a minimum or else the framerate will suffer. Attacking a Fluke built airbase for example will bring the game to a halt because there is too much going on.



- Create a trimmed down \*Lite\* version for MP: Your best bet is to make your normal version, and then a 'lite' version for online play that only has the basics needed for the mission.
  - Use lots of triggers to spawn aircraft: If you start all the planes off at the beginning you'll get bad framerates the whole way through. I know you've all seen this in SinglePlayer too, but you just have to remember that the effect is enhanced online, so only creating new planes once a few have been shot down is a must.
  - Time and EndMission triggers may be disfunctional under certain circumstances: Avoid basing the whole mission plot on timed triggers!
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## LOADING & SAVING THROUGH THE GAME INTERFACE

- Trouble accessing custom campaigns:

Check whether all the missions you've generated AND the campaign file (\*.cmp) that strings them together, reside in your WW2Fighters/Campaigns folder. It's always appreciated if you provide a separate Read.me (text-only file) that outlines the contents, conditions and objectives of your campaign/mission!

- Trouble accessing single missions: Check if missions reside in your WW2Fighters/missions folder.

- Some parts of the mission/triggers have been lost after saving the raw layout through ME.

Example: You've triggered an action precisely at 60 seconds, sharp. During a testrun you notice that the appropriate trigger doesn't time out alright or isn't activated at all. Now I wouldn't consider reopening in ME to sort out the bug - use a simple text editor, instead (Notepad.exe, for instance) Not only will you be able to make distinctively more precise alterations (i.e. like setting a time trigger to 48 seconds, exactly - which cannot be done through the ME) but you'll become familiar & proficient handling the syntax and won't spend half as much time looking for probable errors in the near future!

- Triggers that are undocumented and inaccessible in the ME. Some of the more unusual nevertheless useful triggers do not show and can therefore not be addressed using ME, at all!! You MUST use a text editor in order to manually activate the desired trigger. Note that a trigger(string) must be activated using the .Trigger/.EndTrigger commands.

- Fine-tune your mission before release using a simple text editor (or use Ivarb's Mission Builder)
- When done with it, I'd recommend write-protecting the file - this way you'll always get prompted for assigning a new/different name if you make any further changes to it.
- DO NOT REOPEN it in the ME, however (unless you enjoy another debugging session, of course)!

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## CINEMAS

Generally, the same rules may be applied to Cinemas, no matter whether integrated or stand-alone versions! If you want to make absolutely sure, that the cinema plays out and don't want it to interfere with the mission, itself; separate it from the mission script and provide it as a stand alone!

More information on cinemas can be obtained at [Jane's own site](http://www.janes.ea.com/) [http://www.janes.ea.com/] or following [this link](http://members.xoom.com/ww2f/docs/cinema.htm) [http://members.xoom.com/ww2f/docs/cinema.htm]

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## PERFORMANCE ISSUES

If you are having problems running WWII Fighters, first make sure that your video card drivers are current. Check our Driver Update page for links to current drivers for your hardware.

After you have done that, you can adjust settings in the 3D and Sound Options Screens (located in the Game Options menu). Access the Game Options menu by double-clicking on the "?" icon in the Museum, or through the Mission Map screen. Here you can make changes that will potentially improve frame rate and graphic display, particularly if your system just meets the minimum requirements for playing:

- Turn 3D Clouds 'OFF'.
- Set Cloudlayers to 'NO'
- Try turning Effect Detail, Object Detail and Terrain Detail down.
- Set Engine Sound to 'SIMPLE' (default to 'COMPLEX')

Here are a few other suggestions to help improve gameplay performance:

Speed up file access: Download the NO CD patch, copy music.elb from Disc 2 to your hard drive.

Be sure to put it in the WWII Fighters 'Data' folder. If you have a system with only 32 MB of RAM you can load missions faster by de-fragmenting hard drive, then setting the swap file to at least 50 MB, or not more than 10% of total hard drive space. Turn off the Cockpit in-flight (Backspace button toggles the cockpit on and off during flight; use the pop-up instruments).



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## TRIGGER & COMMAND REFERENCES

For trigger & command references I highly recommend [Ivarb's Mission Builder](#) or [Jane's Readme](#) - copies of these and other documentations may be downloaded at [World War 2 Fighters Online](#) [<http://members.xoom.com/ww2f>]

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## DISCLAIMER

This document is FREEWARE. Use at your own risk! I'm providing these tips and hints without any sort of guarantee! Aim is to give ambitious mission builders some clues and a quick reference on where to start investigating evident bugs before releasing a mission. I don't take any responsibility for any damage, mishap, crash, crisis or anything else that may happen/occur to you or your computer following these guidelines.

If you have any suggestions, corrections or additions to make, please feel free to attach them to this document /naming author & e-mail address for possible feedback and confirmation.

Please provide me with a copy as well.

Thanx in advance.

Check6!



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Thanklist: Fluke, GBA, Ivarb, Judge, JayJ, Katabatic Mike, Yossarian and anybody who has given input and assistance, so far ... you/we know who you are!

Visit [THE ULTIMATE WW2F SITE!](#) [<http://members.xoom.com/ww2f>]

Version 1.3

created: 12.01.2000

modified: 17.01.2000 converted to PDF /added **Script Translations** English -> German

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## Essential Syntax & Trigger-Translations for mission scripts.

/must be applied AFTER editing with the German Mission Editor using a simple TEXT EDITOR.  
Do not reopen the mission in the ME after fine tuning parameters as listed below/all translations could be overwritten!

Notwendige Syntax & Auslöser Übersetzungen für das Mission Script.  
/müssen NACH Verwendung des Deutschen Einsatzgestalters mit einem einfachen TEXTEDITOR durchgeführt werden.  
Die Mission sollte nach dem Übersetzen der unten aufgelisteten Parameter nicht mehr im Einsatzgestalter aufgerufen werden /alle Änderungen könnten wieder überschrieben werden!

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### .Nation

"Amerikaner" translates to "American"  
"Britten" translates to "British"  
"Deutsche" translates to "German"

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### .Type

"Ort" translates to "Location"  
"Flugplatz" translates to "Runway"  
"Struktur" translates to "Structure"  
"Division" no changes  
"Fahrzeug" translates to "Vehicle"  
"Schwarm" translates to "Flight"

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### .Action

"Transit" no changes  
"Landen" translates to "Land"  
"Patrouille" translates to "CAP"  
"Weiter" translates to "Continue"  
"Stop" no changes  
"Angriff" translates to "Strike"  
"Eskorte" translates to "Escort"  
"Aufklärung" translates to "Armed Recon"

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### .TargetClass

"All. Artillerie" translates to "Allied Artillery"  
"All. Panzer" translates to "Allied Armor"  
"All. Andere" translates to "Allied Misc"  
"All. Flak" translates to "Allied AA"  
"Dt. Artillerie" translates to "Axis Artillery"  
"Dt. Panzer" translates to "Axis Armor"  
"Dt. Andere" translates to "Axis Misc"  
"Dt. Flak" translates to "Axis AA"  
"Keine" translates to "Axis AA" or  
"Allied AA"