From: Shelus, Peter
Sent: Friday, May 03, 1996 9:59 AM
To: Wattenbarger, Phil
Subject: RE: Mission Editor meeting 2:00 p.m.

I suppose it would be most accurate to describe it as a (priority??) queue based macro instruction language with some simple conditionals. At least that's what the system you presented to me looks like.

Pete

From: Wattenbarger, Phil
To: Shelus, Peter
Subject: RE: Mission Editor meeting 2:00 p.m.
Date: 1996-05-03 09:55

That's cool. If you get a chance. How would you describe the system in your simplest programing terms? Object oriented stack based instructions?
-Phil

From: Shelus, Peter
Sent: Friday, May 03, 1996 9:50 AM
To: Wattenbarger, Phil
Subject: RE: Mission Editor meeting 2:00 p.m.

I won't be able to attend. I'll be at class from 1:00 to 3:30. Unless you
feel otherwise, I don't think we need to reschedule since you've already given me the run down.

Pete

- work on [Macro Language]

MACRO

- 3d map like WC4
= Context sensitive comands
= Memory
— Marcus => | Script Flow of missions |

Highest Difficulty

From:	Cain, Billy
Sent:	Tuesday, April 30, 1996 7:42 PM
To:	'Orzulak, Dan'; Guentzel, John; Shelton, Jeff; Merrell, Marcus; Wattenbarger, Phil; Wattenbarger, Phil; Shelton, Scott; 'Sean Mustakas'
Subject:	RE: mission editor doc

BILLY

Download button so we can download to PSX target ISA cards on PC to play PSX version of missions.

Other comments in blue.
bjc

PHIL

I want to be able to edit the game at these three levels:

Global Game control / Series control
You should be able to get the gist of the game from a glance, like reading a flow chart.
* Be able to have mission objectives affect gameflow (Global flags set in space flight effect who shows up in the bar). Excellent!
* Be able to trace which Global flags are used in what missions. How many flags will you need?
* Be able to set missions flow (if Series A failed -> run Series Loser)

Mission control
You should be able to get the gist of the mission from a glance.
* Be able to set player mission objectives Can change this during the mission on different "layers" of mission?
* Should be able to understand a mission at a glance
* View different 'layers' of mission (i.e. view only objects that appear in the first two minutes, view only enemy ships, etc.)
* Timer control to orchestrate the mission Sounds like you want miltiple timers, too. Ben's list below...
* Set group behavior for multiple objects (i.e. set A-wing to patrol all nav points) ~~Yes! I like Ben's comment about flying in formation, too.~~

Object control
* Set/override default behavior (patrol, attack, defend) Yes! This will need to be on the net as a permanent file. Right - so no one fucks it up and then has it affect everyone's missions. Someone needs to be Point Man on those object data files. Up front and serious. We had problems in Prowler due to this.
* Tweak AI. This means what? Add points to pilot's aggressiveness? Sounds great - need more info.
* Set/overide default communication messages Yes! Location based? If you are within 300 klicks of cap ship, jump point, etc...

The absolute #1 requirement:
* Simple, meaningful debugging tools

BEN

Wing Commander V mission editor - requirements and suggestions from design team.

Outline;
This document is being written to give the ACE programmers a guideline for creating the wc5 mission editor. We will assume the new editor is going to be a top down, 2D, or even 3D graphical interface. We will also assume that the editor will retain all of the functions and routines contained in the existing progcmds.inc used for wc4. Is someone responsible for compiling this to a useable list? Preferably the editor will run under Win95 or will be some kind of windows like click and drag interface. See Marcus' notes below.

Suggestions for improvement;

- A way to increase enemy numbers with harder difficulty levels, i.e. Doom, or Descent. EXCELLENT! EXCELLENT! EXCELLENT! EXCELLENT! Can't say enough about this for the Playstation version. EXCELLENT!
- More ability to manipulate camera positions during inflight cut scenes for each mission (autopilot, landing and takeoff cams) and using these cuts scenes in spaceflight for midgames instead of cutting to a canned flick. EXCELLENT! Less flicks, more gameplay. Less flicks, more room for less compressed video on Playstation version. This means HIGHER MOVIE QUALITY!! EXCELLENT!
- Multiple mission timers. In wc3 & 4 we had only one timer to count down for a wait seconds command. EXCELLENT! EXCELLENT! I would love to see this really make missions more intricate. More waves of fighters that react to something besides 'all the others are dead - launch wave two'.
- Better gameflow to mission and mission to mission communication. For example the wc4 gameflow recognized a register set to 0 as False and 1 True. Whereas the mission system considered -1 (or any negative number) False and 0 (or any positive number) True. I don't
- We need a way to bring up a list of global flags and there values in the mission editor.
- A way to run the mission and check for errors within the editor without actually having to fly it. EXCELLENT!
- More intricate AI commands. Set maneuver commands like wing-over's and emmelmen's instead of just go_to_point and destroy_object. EXCELLENT!
- An easier way of creating enemy and wingman formations. And a way to keep them in formation without breaking off and attacking the closest enemy. EXCELLENT! EXCELLENT! Keep them flying toward cap ships like kamikazes. Objective - destroy four of five fighters, or they will take out Confed cap ship. Perhaps this would give particular alien ships personalities of their own.
- A way to assign attributes to specific ships and daughter objects of capital ships. i.e. blinding a cap-ship by taking out its radar, bringing it to a stop by taking out its engines, or keep a carrier from launching more fighters by taking out its launch bay/tube. EXCELLENT! EXCELLENT! EXCELLENT! EXCELLENT! EXCELLENT! EXCELLENT!

MARCUS

here's my idea for the interface of the mission editor. I'm sure I left some things out, but this can at least be an idea for the look and feel of the thing.

This editor will give designers a tool from which they will be able to plan, create, map, edit, and run the game on the target engine. It will also serve as a standard to be used by designers over the span of many more games, with full customization options for the future. The intention is for designers to spend less time coding mission data and more time doing quality tweaking

Summary:
Here's the editor the way I see it:

The designer can put any object available in the game on the map window, while having the ability to change the object's attributes (AI skill level, heading, direction, timing information., etc.) at any time. Also included in this is the ability to insert wherever necessary mission-specific sounds and communications messages.

It will also allow the designers to watch the battle play itself out in two dimensions, from a number of different angles, before the space-flight engine is even complete. This may include a simple Asteroids-like interface where the player can assume the identity of each ship and make sure the proper flags and triggers are set even if one of the objects in the playfield is going awry (i.e. the player is trying to fly south instead of north).

Sounds great! Debugging within the missions and on the PC. No need to download crap to the target.

Windows:
Several windows will be needed, with the option to resize, close, reopen, minimize, and maximize each of them. Here's a list of the ones I've come up with:

Map Window
This is where you see the mission map's x,y,z layout. X and Y are laid out horizontally and vertically, while Z will be a simple re-sizing of the object's icon.

I don't see the use of this feature. If they're on top of each other, you won't be able to see the bottom one, therefore why even bother. If it's for objects that aren't on top of each other, what if they print the Z out on the screen? (Just an idea to reduce the number of routines the ACE team'll have to write.)

There should be hotkeys to zoom in and out on the field, as well as some buttons on somewhere on the map itself. BINGO! Perhaps the map window is both a map and an information screen, with a small area to the right side of the map showing the size of the map, the objects on the map, zoom buttons, and anything else as needed.

XYZ of cursor, for instance, like EOR.

Left-clicking on an object updates its information in the Object Information Window. Good. Double-clicking brings up a properties dialogue, allowing the user to change its values. Good. Right clicking opens a menu (allowing typical Win '95 stuff like New >, Delete, Trigger, Special, or Properties). Might make a bigger, more complete list. Copy, Paste, Select All, etc.

I moved this here from below. If he holds the Ctrl- key while dragging an object, the object will snap to an interval of 1,000 meters or so, to allow perfect and uniform placement. What if he holds down SHIFT in the map mode, does it copy it? What other hotkeys worked in Abuse? I liked the linking for sure. Maybe that kind of line would work for DEFEND, ATTACK, AVOID, etc.

Object Window
The Object Window should display a list of the current objects that are available to the mission, listed in a user-definable one-, two-, or three-column display. A button, perhaps? They should be in an intuitive order with good default values, and when they display more than one column, the additional columns should scroll independently of each other to cut back on time spent scrolling through the list. An interesting idea. Worth the prog time? With the right mouse button, the player should be able to drag an object to a different position on the list, and with the left button, he should be able to drag an object onto the Map Window and drop it where he wants. If he holds the Ctrl- key while dragging the object, the object will snap to an interval of 1,000 meters or so, to allow perfect and uniform placement. Another good idea. What if he holds down SHIFT in the map mode, does it copy it?

Variable Window
Variables are something we need to keep track of constantly, so they get their own window. It displays a list of pertinent variables (how many ships are dead, whether the princess was rescued), colored to identify their type (red for boolean, blue for integer), and their status constantly while the mission is playing out. Right-clicking here will allow new variables to be placed, default values to be assigned to variables, and variable properties and types to be changed. Expect the max # of variables to be...??? 256? 16 per mission? What? How many NEED to be displayed at once?

Object Information
The Object Information Window will display pertinent information for an object (location, loadout, AI personality, special flags, etc.) and will update itself dynamically when the user left-clicks on a ship in the Map Window. And will keep updating if the ship is moving? In the 2d gameplay test?

Others
Other possible windows include:
AI Status Couldn't this fit in the object information?
Hot Spots & Triggers For music, areas to avoid, etc? What about light sourcing? Seems to me we're gonna need some of that somewhere, somehow.
Mission Recorder/Playback device Would be great for the mission objective recording...

Pull-down Menus:
Done in true Windoze '95 tradition:

File
Typical File menu: New, New Series, Open, Open Series, Save, Save As, Properties, Import Map, Source Control, as well as the last three or four files the user has opened.

Edit
Typical Edit menu: Undo, Redo, Cut, Copy, Paste, Select All Objects, etc. What's this etc stuff?? C'mon give me data!!!

Variable

questions, comments?
This stuff looks great! Keep it up!
MM

From:	Guentzel, John
Sent:	Wednesday, May 08, 1996 11:14 AM
To:	'Potter, Ben'; Orzulak, Dan; Guentzel, John; 'Shelton, Jeff'; 'Merrell, Marcus'; 'Wattenbarger, Phil'; Mustakas, Sean; 'Shelton, Scott'
Cc:	'Brown, Axel'; 'David, Hugh'
Subject:	just some idea's

On mission commands/AI behaviors etc.. that I thought might come in handy..

after briefly looking at the commands doc that has been sent around
I realize that some of these not exactly what we were looking for
and some of them (most probably) already exist in one form or another

I just figured I'd spit 'em out there before our meeting today to see what Y'all thought...

Also sending to Hugh and Axel to get a Prog's input...

Aidoc.doc

Ps if the link doesn't work you can find the file (Aidoc.doc)
in my public folder on my computer: **Endeavor**
-JG

$$\frac{L3}{L4 \cdot A}$$