

## Cain, Billy

**From:** Cain, Billy  
**Sent:** Monday, September 23, 1996 1:29 PM  
**To:** Cain, Billy; Potter, Ben; Guentzel, John; Shelton, Jeff; Merrell, Marcus; Wattenbarger, Phil; Mustakas, Sean  
**Cc:** Morone, Anthony; Downing, Dave; 'Roan, Frank'  
**Subject:** Where we are, where we're going - Meeting Tues @ 10:30am

As a few of you haven't worked with me before I thought I'd try to give you an idea of what I'm about. I believe in keeping objectives in front of the team, having a 'design philosophy' before we get started, and in meeting goals.

**[I would like to meet tomorrow (Tuesday) at 10:30 am to discuss this, so bring your missions (printed out), questions, and comments.]**

Here's our main goal: **Rough outlines of all missions by Oct.1st.**

Our secondary goals, due Oct 8th, are:

- 50 missions overall, with a minimum playthrough of 40 missions. If we need to modify this, let's talk.
- An Overall Series Tree, with winning and losing series. Who would like to help write it? Jeff?
- Complete Mission Trees within series.
- Add design ideas in a logical order, as we progress through the missions.
- Have missions in the simulator before these design ideas appear in the missions you'll have to take.
- Have all missions outlined, with these design ideas, on the wall in the War Room.

Here's a list of what we're already doing: Each designer is already in charge of one or more series.

- Phil Out until Oct 14th
- Ben C, D, one(?) losing series (how many should there be?) (L)
- Jeff ?? (H, I) → SERIES TREE
- Sean A (training - simple missions), G - REAR SHIP KILLER
- Marcus F, simulator missions
- John B, E TEMPLATES
- Unknown any others

Here's the overall design philosophy I think we should adhere to: **Entertain the player.** Teach them, test them, and build on previous knowledge. I think we're already doing this, but I wanted to be clear that what we're doing is entertaining a customer.

Here's how I think we can reach our goals:

- Document everything, and version control it.
- Check each other's work.
- Communicate.
- Use the exact text, with same font, from the beat outline, for the initial description of your missions.
- Weekly discussion of missions.
- Clear Overall Objectives for missions.
- Mission objectives at each nav point.
- Create fun, concise dialog for coms.
- List everything you can think of in the mission descriptions. (i.e. really think them out.)
- Those of you that are doing mission series that are near each other, please communicate so we can have missions that build upon each other. (i.e. shoot down one tough enemy in the end of one series, and begin the next series with a few of the same, etc.)

I will be holding you accountable for these objectives. You guys can help with establishing more objectives, and checking each other's work.

The reason I would like to be this thorough is because the writers are reading these things, and it really will help them to understand how the missions work. They will be better able to write dialog, etc if they 'get a clue' as to how we're trying to develop characters in spaceflight.

A note from Phil:

A couple of things that came up Saturday.

The writer's (and me) were completely impressed by the amount of thought everyone had put into the mission design. Good work.

For next week, and all future revisions. Everyone will need to add a coversheet to their series. This coversheet should include...

**Series Objectives/Description**

A couple of simple sentences describing the series.

**Mission # Objective**

A simple description of the mission objectives (like they would appear in in-flight text).

**Mission # Objective ...**

same, for each mission.

**Series Losing Path**

How can you lose this series. What happens when you lose this series.

EX. Series E: If you fail to recover the SpyEye buoy, you'll jump to losing Series X where the midway must defend a spacestation in Confed space.

<I'm adding>

**What's New in this Series (Springboards)**

What new elements of game design are introduced in these missions. (For example: This mission, the player flies the ship with the detachable pod [Shrike] for the first time.)

<I'm adding>

**What's Being Built on in this Series**

Explain what is being carried over in this series, from the previous series. Just from the last series. (For instance, Enemy Probes were in a mission in the last series, and I know the player has encountered them. There will be two enemy probes in the mission, if X happens).

Also,

Could you ask Ben to write up the losing series.

Thanks, Good luck, and

See you October 14,

-Phil

## Cain, Billy

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**From:** Foshko, Adam  
**Sent:** Friday, September 20, 1996 3:13 PM  
**To:** Hilleman, Richard; Downing, Dave  
**Cc:** Day, Mark; Morone, Anthony; Cain, Billy; Roan, Frank; Vearrier, Mark; Isaac, Paul; Wattenbarger, Phil; Williams, Stretch  
**Subject:** RE: Draft Preproduction for WCV comments

To quickly respond to:

### "Adam/Phil

The current script implies a larger number of practical locations than we can afford."

**This has been ratified greatly;** Not only have scenes been combined to give us greater use of the sets that we will use, but moreover, we have worked hard to be more specific about how we are going to shoot out these sets (--and even objects) with Mark V. and Chris Douglas.

-Adam

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**From: Hilleman, Richard**

**Sent:** Friday, September 20, 1996 12:56 PM  
**To:** Downing, Dave  
**Cc:** Roan, Frank; Foshko, Adam; Williams, Stretch; Wattenbarger, Phil; Vearrier, Mark; Cain, Billy; Morone, Anthony; Isaac, Paul  
**Subject:** Draft Preproduction for WCV comments

### **Frank, Tony and Paul**

We are missing specifications for a number of tools, systems and data structures. Although your architecture may seem obvious to you, it isn't to me, and I want to understand it before we start. From what I have read I would put the core of the product as being built around three major systems: Gameplay, Gameflow, and Installation. Installation may be of minimal importance on the Playstation, but is probably nearly as important as they other two on the Windows version.

Here are the Major subsystems of Gameplay as I see them in no particular order:

Legend:

System Name (this means a significant Datastructure should be defined) [Question or comment]

User Input System-receives all input from the operating system

User Input Dynamics System-filters and interprets the os's inputs to optimize for game play [allows dpad or keyboard to operate as a limited analog device for instance]

Communications and Dialog system [How is this constructed to be more different from mission to mission in WCV than in the past?]

Craft Dynamics - (Models) [How will we edit and tune these? I have a separate question about this system and our ambitions below]

Damage System - (Models)

Power Management System

Mission Interpreter (Mission) [I believe that Mission designs are strategic frame work that initiate NPC activity in the play space and set the conditions for success or other exit from that play space]

NPC Tactical Reaction System (NPC pilot attributes) [This is the collection behaviors that the NPC ships are capable of. It includes both the interpretation of the goals from the mission, but the reaction to user actions toward the NPC or its goals]

Mission Recording and playback System

Damage System

Hud System

Sensor System

Lower level

Graphics Display System

Sound Effects System

Music System

## Video Playback system

Here are the major elements of Gameflow as I see them.

Graphic Adventure Interpreter (Datastructure) [How do we make this editable? How are we going to precache enough of each of the conversations to avoid 1/2 second dead time?]

Transition System

Videoplayback Systems

Game Save Console

User Options Console

Simulator (Missions)

Medal and Kill scoreboards

Debrief System (Datastructure) [We will want a data structure inspector for this structure if we are going to interpret gameplay recordings]

Conversation System (Datastructure) [How would we edit these trees and their byproducts?]

Display System

User Input System

Video Playback System [How are we going to be able to trim compressed clips?]

Sound FX system

Music System

We are also missing objective performance standards for display system in gameplay environment. I'd like to see an how you see these and the other pieces I'm sure I missing (like memory management and installation) go together in you plan. I also expect to see a name of responsibility placed next to each system.

### **Adam/Phil**

The current script implies a larger number of practical locations than we can afford.

I've seen little in the schedule besides our base investment in technology that indicates what we will be adding to game play that we believe with create the peak experience. I think that we will spend greater care on crafting missions and feel, but these are almost unsellable. What new special effects will we support? Where is that in the schedule? What other aspects of game play will be improved? Interface? New objects and environmental interactions?

I believe that we need to freshen and streamline our hud system. It has gotten more cluttered than the real thing, and the AirForce already thinks huds are too complex. This is what killed the virtual cockpit technology program more than technology limitations....

We should be tuning to two basic user input and output systems. Our expected most prevalent systems installed with our customers on ship day, and our best face that we wish every customer would experience. If we tune to both, we won't leave anyone behind.

### **Dave and Billy:**

Current High Concept isn't really a high concept. Have Patrick help. Billy is working on catching the Sony plan up to this.

I believe you have more MM's than you can afford. Looking at Designer and Programmer responsibilities when Frank and Tony has caught up. Programmers should be assigned to systems and TDA's should be assigned to the data structures they will be responsible for.

I believe our total budget for both sku's will be \$7Million, until I see better corp support. Costs are our biggest chip on our shoulder. We need to be more on top of this than anyone else.

I'm nervous that our new debriefing system risks costing more than it will return. Please make sure we understand its isolated cost.

Special Notes on Flight Dynamics. I'm having a problem imagining that building greater flight dynamics into the current interface system will be fun. I believe that a significant number of our customers experience with flight dynamics is related to flight simulators. Our control system is significantly different.

I'm going to use the terms Pitch, Bank and Yaw to describe the inputs we get from controls stick oriented

systems. Most winged aircraft the x axis on the stick controls the bank, the y axis controls the pitch and rudder pedals control the yaw.

In our current system the y axis still manages pitch while the x axis controls yaw. Bank or roll is an off the main stick control. I also don't believe that our interpretation of the yaw input is pure. We add some bank and accomplish more in turn rate from yaw input than an aircraft ever could.

I think there were good reasons for this that relate to the 2d days. Having to either rotate your shape data on the fly or carry the images prerotated in memory wasn't really available options when WC1 and WC2 were done. This control choice limited both your options, but most importantly your opponents display variations. We did similar things in Skyfox on the Apple for the same reasons. Unfortunately, our interface has a 2D hangover....

Besides adding mass induced momentum to the system and damping control inputs with that, I'm struggling to imagine why further extension of the existing control system wouldn't be a confusing contrast to the much more familiar aircraft model.

Is this the time to change the controls to work more like an Airplane? It would be much easier to get to what feels good in that system because we know what the right answer looks and feels like, and we have a base of expertise that we can draw from Andy and Paul Grace's groups. On the other hand, this is a significant difference from the status quo. I would like to see more discussion on this point with these customer facts in mind.

### **Wrapping Up**

Dave, I'd like to attend a meeting to get from here to the end. I'd like to hear how we plan to address these issues, as well as any others that we have surfaced. When would and how would that best be done?