

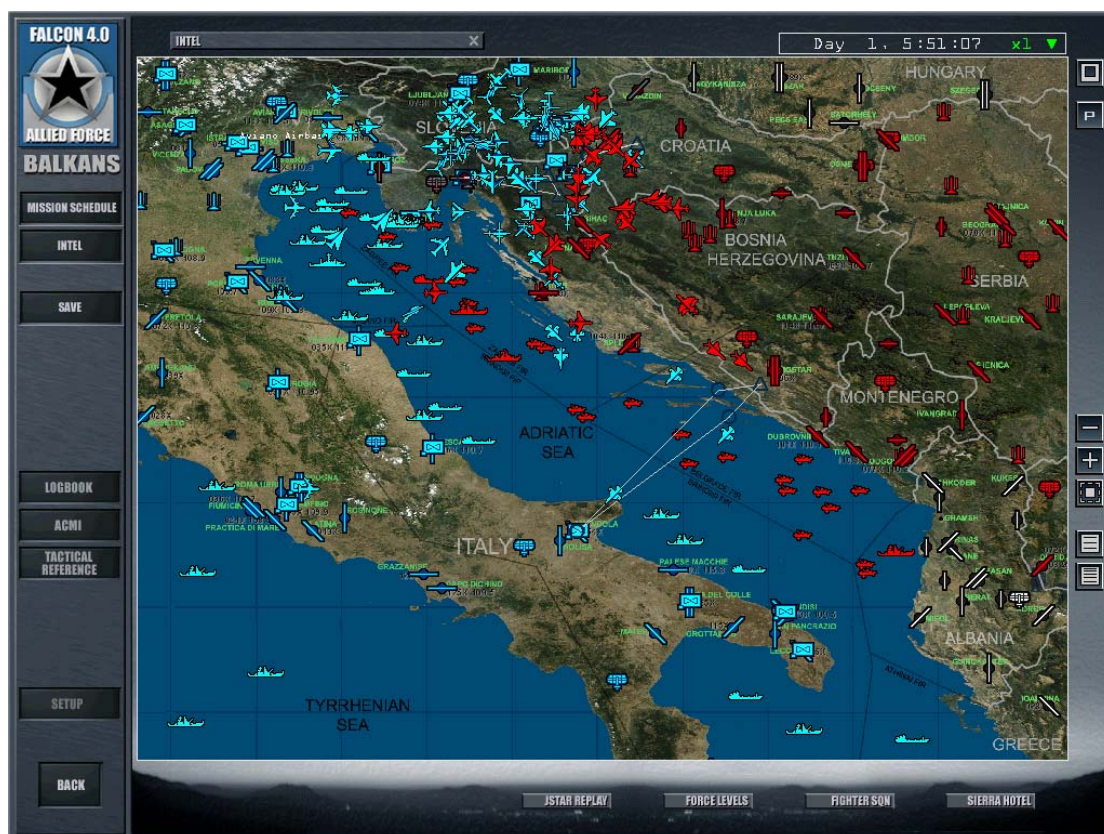
UNDERSTANDING THE CAMPAIGN

Introduction

If there was ever any single feature which set the Falcon series apart from other flight simulations, the dynamic campaign engine would rank top. It is a beast in every respect. Years of Falcon development has led to an extraordinarily complex *Virtual Universe*, where everything acts and reacts to everything else in a dynamic manner. In this virtual world, the campaign engine tracks what happens for players and computer-controlled entities alike. It is responsible for applying “real world” tactics and behaviour to an artificial situation, to give the player the most accurate perception of how the war would be prosecuted. This is the “holodeck” in the world of military flight simulations for the home computer. In these development notes, Colin Morrow and Manfred Nelles detail the considerable improvements to the campaign in **Falcon 4.0: Allied Force**.

Campaign Development Notes

The first change is that **Falcon 4.0: Allied Force** has two Theaters of Operation: Korea and the Balkans. Our “showcase” theater is the Balkans, where players can fly campaigns from three different time periods: 1995-6 and hypothetical campaigns in 2005 and 2010. In each time period there are three campaign operations, totalling nine for each theater.



Additional Campaign Data Changes:

- Air defence network for all teams overhauled.
- Individual weather scheme for each campaign.
- Squadrons based on real-world information where available, but balanced for gameplay as necessary.
- Squadron strengths relate to real-world data where available.
- Specific skins to match squadrons used, where available.
- All ground objectives have full names.
- Reinforcements set for both air and ground units for all nations involved.
- Some flights already airborne when the campaign begins.
- Special Forces units are included that operate autonomously behind enemy lines.
- Helicopters at airbases are more active.
- Carrier-based squadrons won't desert the carrier.
- Weapon stores and fuel for units have been updated. Do not expect all units to have full complement of weapons at the beginning of a campaign.

“Watch out for enemy reinforcements that may be triggered to provide the player with new challenges as the war progresses. These are designed to keep the conflict balanced for extended periods.

“There has been a tremendous effort to ensure that the action remains interesting and intense throughout the entire war, whether in single player or multi player mode.”

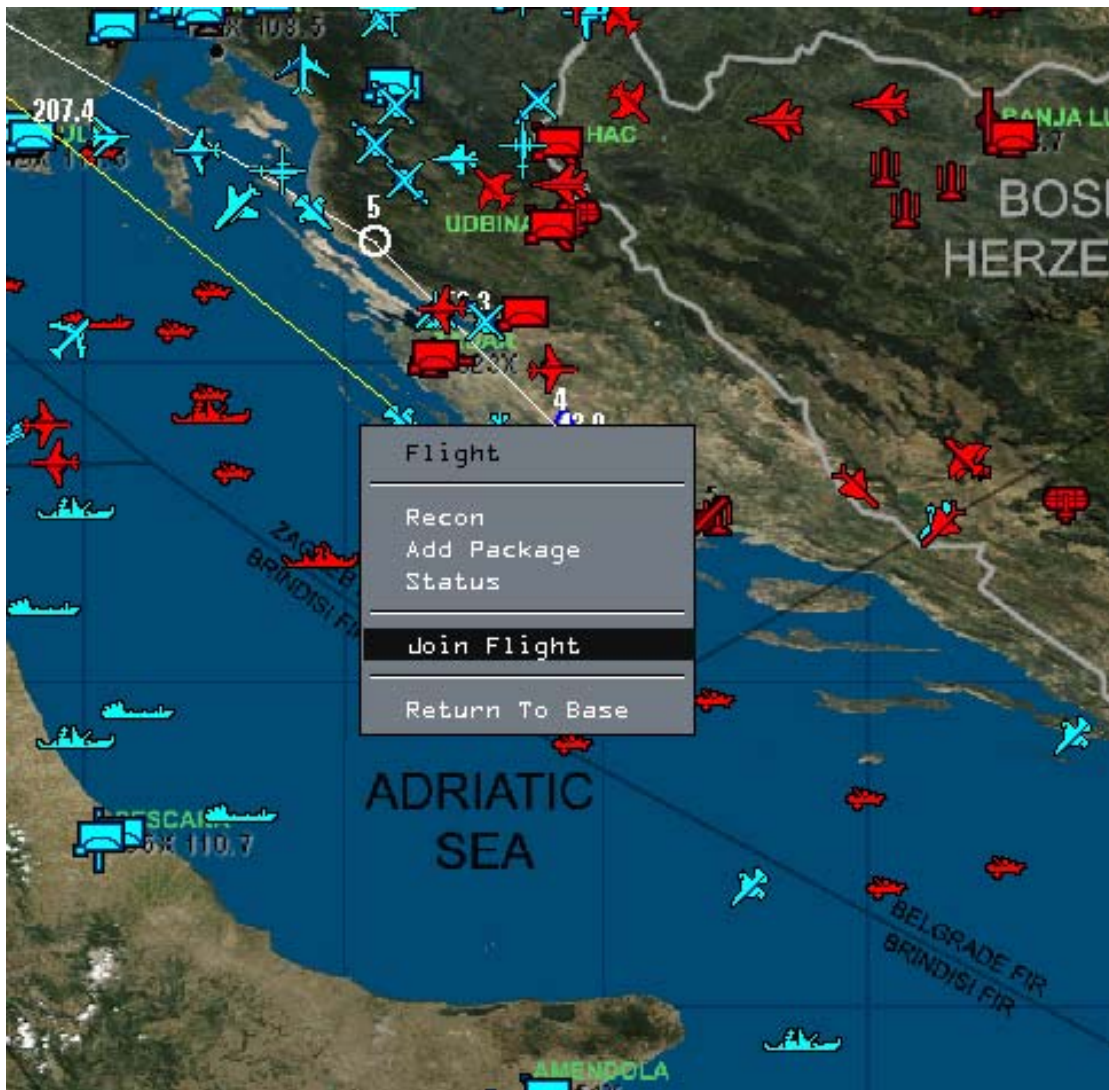
Core Campaign Engine

We have more *stability fixes* in the campaign than you can shake a stick at. To complement the database checks (see Julian Onion's *Testing Times* notes), there are more validation checks, bounds-checks and extra error protection. These have greatly contributed to the long term stability and playability of campaigns.

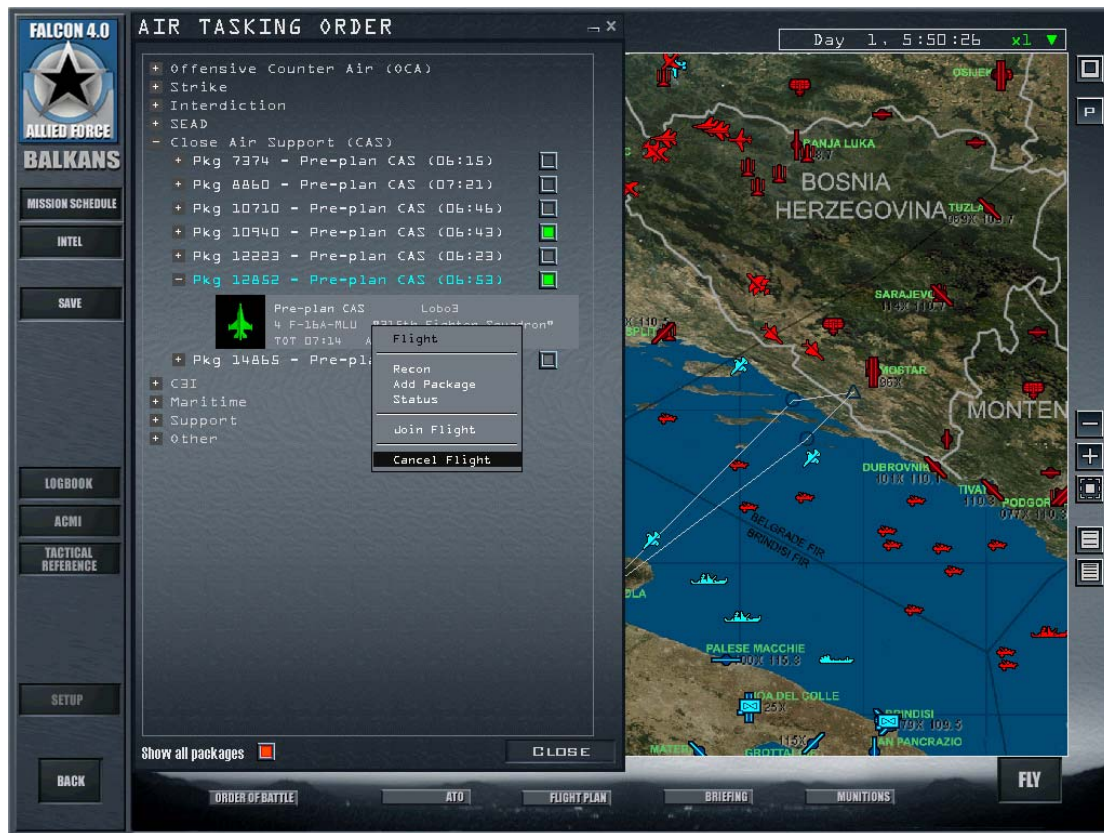
The player can now *switch squadrons* without having to exit and rejoin the campaign, further improving gameplay.



There's also the ability to join a flight from a different squadron directly for flyable aircraft (F-16s).



The Manual Air Tasking Order (ATO) adds a new dimension to the campaign. The player can choose their own targets as well as build their own packages and flights right along side those created by the dynamic campaign engine.



Strike packages are more complete and typically involve multiple elements for strikes and self defense. For all packages, there is much improved timing and co-ordination between packages plus effective management of stealth assets.

The *refuelling code* has been greatly enhanced for the AI and tasking for airborne control and in-flight refuelling assets improved.

Additional changes in brief:

- Placement of ground units in and around airbases is improved. No more columns of units across the runway, or driving across the airbase.
- Ground units don't cross a destroyed bridge anymore.
- Offensive ground action has been intensified.
- Attrition rates are more realistic.
- Damaged objectives are handled better.
- Squadron relocation is improved.
- Artillery support is more realistic.
- Targeting on the battlefield is improved.
- Reinforcement of units is more consistent.
- Fewer duplicate campaign information messages.
- Better handling of friendly and neutral nations in theater.
- Naval assets can enter, leave and dock at ports. Their supplies are incorporated into the logistics of the war.
- Better land avoidance by naval assets.
- Advanced use of weapon systems by naval assets.
- Better handling for isolated units and objectives.
- Activity of flights in and around airbases is more realistic.
- Weapon loadouts on specialist mission types is better.
- Objective processing is more efficient to improve speed.
- More realistic intelligence of enemy unit activity.
- Enhanced intelligence sharing between allies.
- The path-finding process for ground units has been improved.
- Better stores management.
- Waypoint timings and placement has been improved.
- Alternate landing bases are managed more effectively.
- Air defences at airbases are better managed.
- Greatly enhanced use of Engineer units on the battlefield.
- The player has the option to have much more control over ground unit tasking. Tasking is still left to the campaign engine by default.
- Aircraft scheduling is more realistic.
- Optional AWACS User Interface.

Summary

All these changes have dramatically improved the feel of the campaign. It is more stable, more dynamic, and more realistic. That feeling of something happening around you, and evolving around you is what has made the Falcon series so engaging. And this is what the development team has pushed even further in **Falcon 4.0: Allied Force**.

