eview: Falcon MC (Mac Color)

Reviewed by Christopher A. Myrick

Type: Modern fighter simulation.

Publisher: Spectrum HoloByte.

Mail Order:

\$39

Requires: 68020 or 68030 Mac with at least 4 MB or RAM, 4-bit color

System 6.0.5 or later, 32 bit QuickDraw

Protection: Manual (enter password just once, then disappears).

IMG Rating: $\sqrt{\sqrt{1/2}}$

It's Simple, Really! First, you have your F-16, one of the best multi-role day fighters around and capable of carrying a bewildering assortment of ordnance. A good thing too, because your arsenal contains such goodies as heat seeking Sidewinder air to air missiles, medium range radar guided missiles, anti-tank missiles and TV-guided bombs. You also get some support from an AWACS that you'll never see but will often hear as they warn you of inbound MiGs. A bunch of Forward Air Controllers provide you with vital information on the status of ground targets and lest we forget, your guardian angel will also get involved in the action.

nd what about your targets? Well, in Falcon MC you get the opportunity to engage (and hopefully neutralize) MiG-29 Fulcrums (a handful when it is 1 vs. 1, sheer terror when it is 3 to 1), SA-2 and SA-6 launch sites, Lebed amphibious assault hovercraft, trains, trucks, rampaging T-80 main battle tanks, bridges, factories, runways, arsenals and my favorite, a nuclear power plant. Now you can't attack all of these at once but they'll be handed to you during a your twelve mission campaign. Completion of these missions will remove any immediate threat to your base, paralyze the transportation system and achieve a complete industrial shutdown. It can be done in twelve days, it can be done in less (see the Falcon MC campaign strategies elsewhere in this magazine). Once you shutdown the enemy's industry, the campaign is over and you get hoisted on the shoulders of your fellow pilots, and everybody, except the enemy, goes home happy.

So as you can see, it really is simple. All you have to do is take a heavily loaded F-16, all by yourself, into the airspace of some people who really don't want you there, take out a few critical targets (and anything that gets in your way) and live happily every after.

Controls. Falcon MC gives players the option of flying using the keyboard (my favorite, but only because I am waiting for the release of Gravis' new MouseStick II), the mouse, a single joystick or a pair of joysticks (one for throttle and rudder control, the other as the regular joystick). Even without the two joysticks you now get some rudder control at speeds under 400 knots but the response is very slow. Still, tweaking the rudder can come in handy for lining up ground targets, if you're brave enough to fly that slow. The mouse controls are still bad - very bad. Although the mouse control isn't as bad as it was in 2.x, it still needs a major overhaul.

Ergonomics. Although most of the action takes place in the cockpit views, Spectrum

HoloByte has paid attention to the pre-mission and post-mission screens. Most of these screens are linked so that you can shuttle back and forth to check the enemy status, pilot awards and pilot availability. One feature that I'd like to see in the forthcoming update of Falcon MC is the ability to see what ordnance is available before you select your mission. You currently have to select your mission before you know what munitions are available, resulting in a high cancellation rate if you need a pair of GBU-15 smart bombs and all that are available are Mk-84 2000 LB "dumb" bombs. Two other changes that would enhance the campaign aspect would be (1) the ability to fly more than one mission per day or at least use multiple sorties to complete one mission and (2) the ability to select your next mission right after landing so that the ordnance guys can scrounge the appropriate weapons for your next flight.

Views. Back in the cockpit, Falcon MC provides you with the four standard views but Spectrum HoloByte seems to have forgotten that most pilots like to be able to look up out of their cockpit, especially when they aren't flying straight and level. They did include the four external views that are described below:

- Camera View: this view allows you to look at your plane and the rest of the world from a vantage point outside of your plane. It can be very useful for locating inbound missiles.
- Chase Plane View: this view places the camera behind your F-16, allowing you to see what it would look like from another plane flying in trail.
- Missile View: ever wonder what the world looks like from the front of a guided weapon? Well, the new missile view allows you to watch the missile or TV-guided bomb into its target. It is a lot of fun but remember that someone still has to fly the plane.
- Track View: Probably the most useful of the external views, the track view will do its best to keep you and an opposing MiG in sight. This lets you keep track of where the MiG is when you can't find him using the internal cockpit views. One has to wonder if Spectrum HoloByte included this view to make up for the lack of an "up" view.

You can adjust the camera position, range and angle in most of these views. Unfortunately the game does not remember relative camera positions so you can't set the camera view to show you missiles closing from behind your three-nine line.

Performance. The most apparent difference between Falcon MC and previous Mac flight simulators from Spectrum Holobyte is that Falcon MC runs in color. The game currently requires 4-bit (16 color) displays and does not run at 256 colors. This restriction means that owners of black and white Macs cannot play the game, nor can owners of Mac with the ability to display more than 16 colors on-screen take advantage of that capability. Using only 16 colors forces Falcon MC to use dithering to achieve color blends so the clarity of some objects, like the sky, suffers. Another limitation is the window size. Spectrum Holobyte designed Falcon MC to fit on Apple's 12" RGB monitor and didn't design the game so that it could adjust to whatever screen size it was being displayed on. So if you happen to be one of the many owners of a screen larger than 12 inches, Falcon MC will run in a small window, surrounded by lots of black space. Falcon MC's design is also lacking when it comes to taking advantage of processor speed. The game apparently runs just as quickly on a Ilci as it does on an LC II, resulting in jerkier animation than necessary on faster Macs. Spectrum Holobyte would do well to redesign the game to push the system it is running on to its limits as far as screen size, number of colors and game speed are concerned.

Sound. Like its predecessor, Falcon MC makes extensive use of digitized sound. The big difference is that Falcon MC now outputs stereo sound. The sound quality is such that when

you connect your Mac to your stereo, dim the lights and start playing the game, you can almost forget that you are sitting safely in your home or office, and not in the cockpit of an F-16 with a Fulcrum on your six.

Instant Action. A common complaint about flight simulators is that they are either too complex for the average user or too simple for the hard core simulation junkie. Falcon MC deals with this problem in an intelligent manner. By selecting the difficulty screen you can customize the game to your heart's desire. Want three MiGs flown by expert pilots but no SAMs? Just click on the appropriate boxes and you're ready to rumble. There are some preset difficulty levels that can be used as standards but most people will probably want to customize the settings. I like leaving everything except the number of MiGs and the SAM intensity on the highest setting and then playing with those two options depending on how lucky I feel that night.

If used in combination with the Instant Action mode, the difficulty screen makes it easy to practice various aspects of the game, like engaging multiple MiGs (not for pilots without adequate life insurance and good parachutes) or engaging SAM sites while they simultaneously engage you. A future "Falcon MC Campaign Strategies" segment here in IMG will provide detailed information on how this can be done. The Instant Action mode also gives you the option of just going out and blowing away MiGs and ground targets at random, without having to worry about following the sequence of missions in a campaign. You have unlimited ammo and the enemy sends endless waves of adversaries. You could theoretically fly all night but the combination of MiGs and SAMs normally terminates you before you collapse onto your keyboard from exhaustion.

Black Box. One area that has not been improved from the original Mac Falcon is the black box. While theoretically very useful, the current implementation and interface is frustrating enough that most users will look at it once and leave it alone. Right now your F-16 and the MiG-29s are shown as gray or black lines moving on three 2-D screens whose combined display gives you an idea of what happened in 3-D. You can only guess when weapons are being fired (if you're lucky you kill something and the line representing that object stops being added to) and air-to-ground or ground-to-air engagements are not recorded. Spectrum Holobyte would do well to look at Graphic Simulations' Instant Replay mode and Dynamix's Mission Record option. A well designed "black box" should be able to replay the scene of interest, whether it be a neat maneuver, a well timed ambush on an unsuspecting MiG (all MiGs in Falcon MC are not unsuspecting) or the rather violent meeting of your F-16 and the SA-2 Guideline that your damaged Threat Warning Indicator didn't warn you about. Additionally, the black box ought to allow you to view the action from any angle. Spectrum Holobyte has shown that they know how to produce external views—now all they need to do is add a feature that records that information for later examination and even for saving as a separate file that can be distributed. Just think, you could take out the nuclear power plant while under fire, pull off a miraculous escape and then send a skeptical friend the proof!

Head-To-Head. One of Falcon MC's touted features is the Head to Head option. Anyone who has never flown a combat flight simulator against another human being has not experienced the full power of flight simulation. Human opponents are leagues ahead of their computer generated counterparts when it comes to innovation, tactics and sheer unpredictability. Computer generated opponents rarely, if ever, make mistakes at the higher skill levels but human opponents do, although they may fake a mistake in order to sucker you in for a devastating "Hovering Hawk" move. Falcon MC provides three methods of dogfighting against another person. You can connect your computers with an ImageWriter or AppleTalk cable, you can play over a network (and watch office productivity plummet) or you can connect via modem. The first two options have been reported to work well but the modem communications mode is rather shaky at best. Falcon MC supports speeds up to 9600 baud

(I guess adding 14,400 support was just too much work) but connecting at speeds above 2400 is an adventure in itself. If you can get a clear connection, then you're in for a thrilling time but be warned that you may be frustrated in your efforts. To their credit, Spectrum Holobyte has identified some of the problems and are hopefully rectifying those in the forthcoming update. One other improvement of the Head-to-Head feature would be an option where you fly with the other person as a wingman and not against them.

The twelve missions in the campaign are quite a handful and reaching a level of proficiency where you can complete all twelve missions without losing your pilot on the highest difficulty settings will take some time. It can be done and a pilot can live long enough that he or she will reach the rank of General and beyond. Evidently the programmers did not plan for many people to pass the rank of General so once you reach that rank you can get promoted once again, this time to civilian? It would have been nice if Spectrum HoloByte had included a mission editor or better still, provided us with a steady stream of mission disks, much as Graphic Simulations is doing with Hellcats Over the Pacific.

Realism. A game of daunting complexity, Falcon MC can have a steep learning curve. Previous combat flight simulator experience helps, owning the manual helps even more. Falcon MC's manual is well written, informative and goes a long way towards reducing the gradient of the learning curve. The one area that could be improved or enlarged is the section on aerial combat maneuvers. The MiG-29 Fulcrums are an even match for the F-16 and more advanced tactics are required to deal with them than were necessary for the agile but less deadly MiG-21 Fishbeds. Some tactics will be covered in future installments of "Falcon MC Campaign Strategies" here in IMG.

One reason Falcon MC is so complex is that it has a high level of realism. The performance envelopes for the aircraft, electronic systems and weapons have been modeled fairly realistically. However, there are three major exceptions, which are discussed below:

- The AWACS, supposedly the premier airborne early warning system with detection ranges in excess of 200 miles, only warns you of inbound bandits when they are already in missile range (normally within 5 or 6 miles). Why even carry AMRAAMs with their 18 mile range if all your engagements are going to be at knife fighting range anyway?
- The flight model will not let you pull out of vertical climbs or dives on a different heading. Spectrum Holobyte is aware of these last two exceptions and will hopefully fix them in a future update of Falcon MC.
- The ACES II ejection seat used in the F-16 is an amazing piece of equipment. In real F-16s you can eject while flying inverted at 1000 feet and the seat will still get you out safely. The seat in Falcon MC is not as forgiving and will sometimes kill you even when you eject while flying right side up, straight and level. Perhaps if Spectrum Holobyte cannot fix this problem, they could at least include the "safe" ejection parameters in the manual.

Summary. My final recommendation? Well, if you are looking for the best modern air combat simulator available today for the Macintosh, then this is the game for you. Some stiff competition is expected from Graphic Simulations' upcoming F/A-18 simulator (see this issue of Inside Mac Games for an exclusive preview of this awesome game) but right now Falcon MC is truly "The most awesome F-16 fighter simulation for the color Macintosh." Most hard core simulation players will want to add Falcon MC to their libraries, if only to replace the prehistoric Falcon 2.2.x.. People who don't want to deal with the steep learning curve may want to try Hellcats Over the Pacific, which is an excellent flight simulator with a much shorter learning curve. And if you happen to be an owner of a black and white Mac, don't despair—Spectrum Holobyte is reported to be working on Falcon 2.5, a black and white

update of the venerable Falcon 2.2.x. :-|

Pros:

- Multiple views including four external views.Wide assortment of ordnance.
- Extensive customization options.
- Well written manual.
- Linked missions .
- Stereo sound.
- Color.

Cons:

- Only 4-bit color is supported.
- Limited screen size.
- Poorly designed communications module.
- No mission editor.
- No wingmen .
- Realism is lacking in some areas.