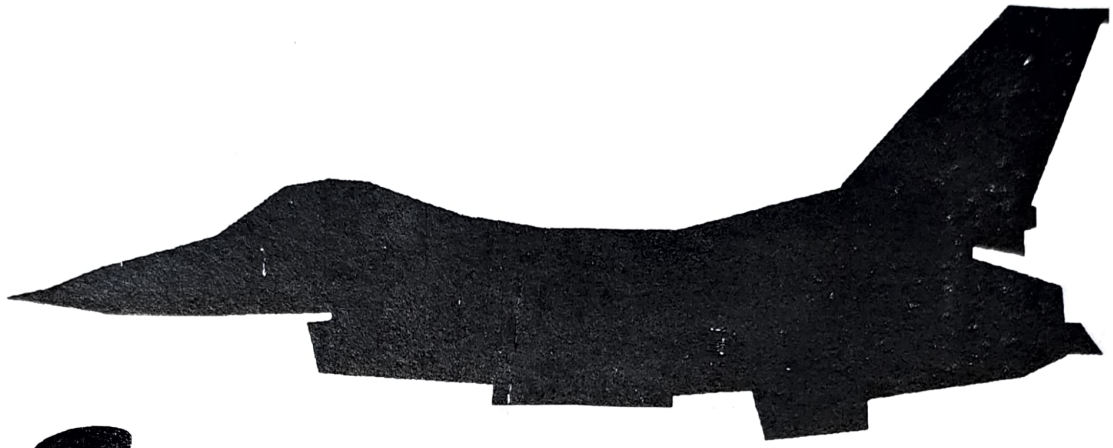


Strategic FALCON™

Software Manual: Mark-37/ALN-189 5-G AI CU "Strategic Falcon"
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Flying Muffin Enterprises

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Warning! Warning! Warning!

Using Strategic Falcon, IT IS EXTREMELY EASY TO ALTER A MISSION OR CAMPAIGN SO THAT IT BECOMES IMPOSSIBLE TO ACCOMPLISH! Strategic Falcon will allow you to change many aspects of a Falcon 3.0 campaign in ways not intended by Falcon 3.0's designers. It gives you incredible power, but it must not be misused.

Please read this documentation completely before diving into StratFalc! You're responsible for your own lost campaigns otherwise!

(Oh, all right. We both know you won't read this whole thing right now. Please *at least* read the following warnings.)

PRIMARY WARNINGS!!!

I. **IF A MISSION HAS BEEN ALTERED WITH STRATEGIC FALCON, THOU SHALT LOAD THE STRTSPRT.COM TSR BEFORE ENTERING FALCON 3.0. IT IS HIGHLY RECOMMENDED THAT YOU INVOKE STRTSPRT.COM IN YOUR AUTOEXEC.BAT.**

Otherwise, Falcon 3.0 will hang after the current mission is completed. Details of STRTSPRT.COM use are presented at the beginning of Section II. (You do not have to do this if you use Falcon version 3.01.1; it is only applicable to version 3.02 and above.)

II. **THOU SHALT NOT ASSIGN AN ALLIED FLIGHT TO ACCOMPLISH THE PRIMARY MISSION.**

The primary mission objectives must be accomplished by you or one of your wingmen, although that pilot does not have to be in an F-16.

III. **THOU SHALT NOT VIEW AN ALTERED AIRCRAFT IN THE FALCON 3.0 "LOAD ARMAMENT" SCREEN.**

If you change a wingman's aircraft from an F-16 to something else, and load it accordingly (you have him fly a B-52 and you load it with 24 Mk-84s, for instance), remember two things: those weapons come out of *your*

inventory, and you must *never* bring up that aircraft in Falcon 3.0's "Load Armament" screen! If you do, Falcon 3.0 will reload it to something an F-16 can handle; it doesn't know how to display 24 Mk-84s on a Viper!

IV. THOU SHALT NEITHER ADD NOR DELETE GROUND UNITS IN MISSIONS THAT SUPPLY THEIR OWN.

(These are normally any type of CAS mission.) You can move (a little) the units that Falcon 3.0 provides, or even change the units' type (perhaps eliminate those pesky SA-7s), but you should not try to use the units, for instance, to attack a site. This is because some (or all) the units are bound to be destroyed in such an attack, and their destruction will cause Falcon 3.0 to assume that you failed your mission. Save "Armor Assaults" for missions where you are assigned only air-to-air tasks, in which destruction of ground units is, for the most part, irrelevant.

V. THOU SHALT FORCE FALCON 3.0 TO CREATE A NEW *.MIS FILE FOR EACH NEW MISSION.

To make Falcon 3.0 do this, you have to hit the "Takeoff" button in the final mission planning screen at least once for every mission. Then you can either (a) exit to DOS from Falcon 3.0 by either pulling down the menu and quitting that way (hit <ESC> <F> <Q>) or by using the <ALT-X> key combination, or (b) you can return to the mission planning screens by aborting through the menu (<ESC> <F> <A>).

And two final, half-warnings:

First, if you abandon a campaign (disband a squadron or change its theater), run the "CLEAR.BAT" batch file from either your Strategic Falcon or Falcon 3.0 subdirectory. This will ensure all MIS file read-only bits are cleared so Falcon can freely create new ones for future campaigns.

Second, Falcon 3.0's Tactical Options do not support the Kurile Islands' "Pregenerated" missions. There are several of these in any Kurile Islands' campaign. Strategic Falcon is intelligent enough to recognize these. It'll still boot, but several of the tactical options will be disabled.

Thanks for reading these warnings. Now we'll get to the real docs.

Introduction

Well, Colonel, it's come to this: we need someone to take over the entire control of the war. The Mark-37/ALN-189 fifth-generation AI control unit is not doing the job the contractors said it would. Its handling of the conflict has been less than adequate. Each day, hundreds of casualties are occurring. These could be largely eliminated if the leadership of our forces was improved. Assets are being blatantly mishandled, resupply is a mess, and the public is in an uproar.

The handling of your own squadron, however, has been exemplary. It has been raising eyebrows all the way up the chain of command. Your ability to accomplish the tasks assigned to you has been nothing less than stunning. The President himself believes you're the person to take over from the Mark-37/ALN-189 fifth-generation AI control unit, and your superiors readily agree. We're sure you'll accept the challenge. So sure, in fact, that your promotion has already been processed. If you'll have it, the theater is yours to command, *General*.

Your job will not be easy. The entire infrastructure of the theater has been compromised. Fortunately, there is one bright spot: while the Mark-37/ALN-189 fifth-generation AI control unit is not up to the job of command, it *is* up to the job of control. It can be employed from your squadron, in the field, to give you both up-to-the-minute situational analysis as well as absolute control of all units. Armed with this device you can give orders quickly and be confident that they will be carried out immediately. It is rather small for this incredible amount of power; as a matter of fact, it is disguised to look like an ordinary desktop PC. The contractors did a remarkable job of camouflage.

The software which runs the Mark-37/ALN-189 fifth-generation AI control unit is codenamed "Strategic Falcon." Take some time now to familiarize

yourself with its enclosed manual. Study it, memorize it. Then give em hell, sir—your country needs you.

Software Manual:	Mark-37/ALN-189 5-G AI CU "Strategic Falcon"
Source:	Flying Muffin Enterprises
Classification:	TOP SECRET
Classified by:	EWLW-DOP Classification Guide CG-WW Rev. C dated January, 1994
Declassify On:	"Originating Agency's Determination Required"

System Requirements

Strategic Falcon absolutely requires a mouse. If you don't have one, either get one or return the disk and get your money back. (If you're playing Falcon 3.0, you probably have a mouse anyway.) On top of that, it requires a 640x480-capable VGA screen. The software uses internal overlays and will take advantage of expanded or extended memory to store these overlays. You can tell if StratFalc is using this memory by reading the opening screen (or the "About" box—right-click the mouse on the leftmost part of the screen).

About this documentation: The first section deals with how to get things done, how to actually use Strategic Falcon. The second section delves into the implications and consequences of any changes you make.

Also, the name of this terrifically awesome software, "Strategic Falcon," will frequently be abbreviated to "StratFalc." And the word for a strategic theater location will be either "site" or "node"; the terms are used interchangeably.

Section I:

The General Idea.

Strategic Falcon has three "General Modes" of operation. Each of these modes has five "Submodes." The General Modes are "Tactical," "Strategic," and "Other." They are each discussed in their own section below. As a rule, "Tactical" applies to aspects of your current mission, "Strategic" applies to your overall campaign, and "Other" picks up the slack. The general mode is set by selecting the proper icon in the bottom right corner of the screen.

In addition, positioned across the bottom of the screen are command buttons that are (almost) always available. On the left are the file commands "Open" and "Save," and then the "Exit" command. To their right you'll find the "Names" and "Nums" toggles (which activate site names and numbers in any map mode). Finally you'll find the map slew, zoom, and unzoom buttons.

To start the program, type "STRAT" from the command line. To properly implement the Autoload TSR command, Strategic Falcon is started from the batch file "STRAT.BAT." For this reason, if you want to load StratFalc from another batch file, the proper command is "CALL STRAT," rather than just "STRAT." This way, your batch file will resume when StratFalc is all done.

> If you use Craig Allen's terrific KCCMenu (from Keyboard Commander Corps. "Falcon Commander Utilities" 1-800-262-6066) to control your files, the proper command to enter there would also be "CALL STRAT," because KCCMenu performs its magic through batch files also.

After you get the program started, you press the "Open" button and select a campaign. If no campaigns are active, you won't be able to do much with StratFalc!

The Strategic Falcon mode controls are designed to be used from the bottom

up. That is, what you select at the base of the screen determines which set of submode icons appear immediately above. The submode you select dictates which control panel fills the screen's remainder.

As a general usage note: "±" buttons increase if you press the left mouse button and decrease if you press the right.

Tactical Mode

When you start StratFalc, this is the default mode. From here, you can do the following:

- ✓ Add, remove, or alter F-16 flights, much like in Falcon 3.0 itself, with some important additions.
- ✓ Add, remove, or alter Allied or Enemy flights,
- ✓ Change the types of aircraft for any flight in this mission. (Although your "personal plane" must always be an F-16 .)
- ✓ Change the waypoints of any flight—F-16, allied, or enemy—involved in this mission!
- ✓ Change the temperament and skill levels of any allied or enemy pilot. (Your own F-16 pilots' skill levels are determined by your choices in Falcon 3.0 itself, although you can change their temperament here.)
- ✓ Change the weapon loadout of any aircraft involved.
- ✓ Add or **remove** ground paths **and ground** units.
- ✓ Change the types of **any ground units.**
- ✓ **Change the waypoints of ground units.**
- ✓ **Change the** temperament **of ground units.**

You access all these options through the appropriate submode. These are F-16 Flights, Allied flights, Enemy Flights, Allied Ground, and Enemy Ground. (All flight modes have the jet silhouette; ground modes display a tank.) To change an aspect of a mission, simply select the icon for the proper submode.

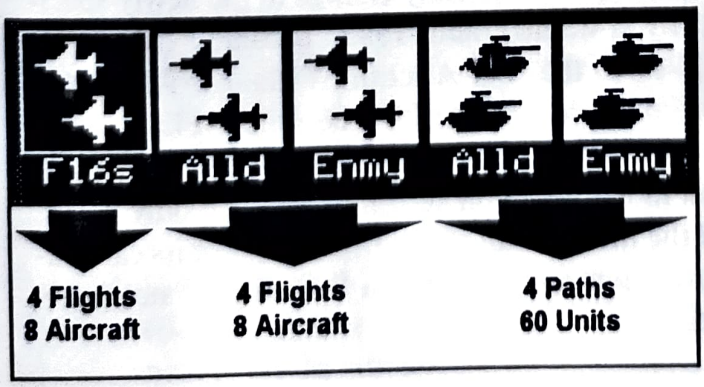
The upper area of the screen's right side will fill with the appropriate controls. Since you've worked with Falcon 3.0, you'll have an idea how to operate these. We'll talk about the flight submodes first.

Initial Mission Review: The Flight Submodes

When reviewing a mission for possible improvements, perhaps the first thing you should do is check which aircraft types Falcon 3.0 has preset for the mission. Press the "Set Aircraft..." button to do this. Observe the following:

- ✓ You may have no more than five different types of aircraft on any mission. Since the F-16 (or FSX, if appropriate) is always one of the types, the choice of the remaining four is up to you. The five-type total includes enemy aircraft.

- ✓ There must be at least one enemy aircraft type in each mission. Also, if there are any allied flights, there must be one allied aircraft type *in addition to* the F-16.



In general, you should have a good reason for making changes. The great majority of the time, you'll only want to change some aspect of one of the waypoints in an Allied Flight, such as to slow down a CAP flight or change the waypoints of planes you are assigned to escort. If you start adding and deleting flights, more rules come into play:

✓ There are only sixteen total aircraft assignable to the theater in any mission, including F-16s. How these aircraft are distributed among the F-16s and "StratFalc Aircraft" (meaning those that are only controllable in StratFalc, not Falcon 3.0 itself) is sometimes predetermined. You will be told if you exceed any parameters.

✓ There are only eight TOTAL flights allowed: this includes up to four (normal) F-16 flights and up to four "StratFalc" flights. For example, if the following flights were already set up:

Flight 1-4	8 planes	Four F-16 flights using all eight F-16s (set up in Falcon 3.0 itself).
Flight 5	2 planes	An Allied flight of two F-15s.
Flight 6	2 planes	An Enemy flight of two MiG-29s.
Flight 7	2 planes	Another Enemy flight of two MiG-27s.
	(14 planes total)	

You will be able to set up one more "StratFalc" flight with up to two aircraft. The flight could be either Allied or Enemy, and it could use, depending on its "side," F-16s, F-15s, MiG-29s, or MiG-27s, or a fifth aircraft type that you could select in the "Set Aircraft..." dialog.

If you change the available aircraft types, any aircraft that had been set to a type you "discontinued" would automatically change to the newly specified type. (For example, if you wanted the F-15s to become F-14s, you'd deselect F-15 and select F-14 in the "Set Aircraft..." dialog. Any F-15s already placed in the mission would automatically become F-14s.)

✓ The "Fuel" approximation in the waypoint screen is valid for only F-16s, and uses the armament of the first aircraft in the flight to make its calculations. If you put another type of aircraft into an F-16 flight "slot," this figure will be out to lunch.

✓ The "Time" readout is a simple Time = Distance/Speed formula (just like FalcCalc). It adds this to your starting mission time to give it a better "simulation" feel, but it's up to you to anticipate any trouble en route

(meaning random aircraft or SAMs) and adjust accordingly. "How can I anticipate a random?" you ask. Well, a rule of thumb is to anticipate one pair of random enemy aircraft for every 60-80 nm. of flight path in which you are not in the vicinity of "preset" enemy planes. These could be AN-12s, or they could be MiG-29s!

- ✓ Allied flights cannot be changed to F-16s.

- ✓ For a rather obscure reason, the altitude setting for any StratFalc waypoint must be an even multiple of 300. You can still type in any number—StratFalc will enforce this rule automatically.

Teaching Your Wingmen to Fly BUFFs

One of the niftiest features of Strategic Falcon is its capability to change the types of aircraft piloted by your own wingmen. After you set the available types as explained above, you can put any of your own pilots into any of the available allied types (as mentioned before, *you* always have to fly an F-16). This means, for instance, that you can assign the SEAD duties to F-4s or CAS duties to A-10s, which seems a little more realistic than sending out F-16s for everything! Here are some pertinent notes:

- ✓ These planes count as F-16s as far as your inventory is concerned (as well as their armament). F3 Requisition will get that stuff back for you.

- ✓ Your wingmen will try to perform the actions dictated by the waypoint, no matter what type of plane they're actually flying. For instance, they'll dogfight if they are assigned to CAP, and if they're in a fully loaded B-52, they won't last too long trying to out turn a MiG, so be careful when assigning waypoint actions!

- ✓ Skill level and Temperament are entirely different qualities. Skill level tells how good a pilot will be if he puts his mind to it; temperament tells which way he will put his mind.

- ✓ When you assign pilots, you won't be able to change the skill attributes of

an F-16 pilot directly, no matter what type of plane he or she actually flying. This is because StratFalc has no way of knowing which pilot is going to be placed into which plane when you enter Falcon 3.0. (You will, however, be able to change the pilot's temperament.)

Here are the particular aircraft types and their available locations:

Enemy types	
MIR-2000	India, Korea
MiG-31	Kurile Islands
UMF	Kurile Islands
Q5	Korea
J7	Korea
Jaguar	India
Allied Types	
FSX	Kurile Islands
F-1	Pakistan, Korea
F-5	Pakistan, Korea
Q5	Pakistan
J7	Pakistan

✓ There is no safety feature in Strategic Falcon to prevent you from overloading an aircraft. From the boxes at the bottom of the armament dialog, you will know if you go over an aircraft's suggested maximum weight, but these weights are taken from the Falcon 3.0 manuals and have not been tested in every possible combination. It's tempting to do otherwise, but try to load the minimum amount of ordnance to get the job done.

✓ The "Set Aircraft..." dialog has some idiosyncrasies. Sometimes, certain plane types aren't available due to the theater in which you're battling (for instance, UMFs and FSXs are only available in Japan), so you won't be able to "X" the applicable box; it'll be grayed out.

And while in the subject: UMFs are a special case. To have them appear correctly in a mission, you must include TU-22s. This is because the UMFs are launched from the bombers. You must set up the flights as follows: each flight must be only two aircraft, and the leader must be a TU-22 and its one wingman a UMF.

You can tell a UMF has been launched when you see or hear: "From Russian TU-22: Do svidanija, stupid yankee!"

Initial Mission Review: The Ground Submodes

Most of the time, you won't need to concern yourself with the ground sub-

modes. They come into play in only two basic situations: CAS-type missions and Ground-to-Ground (or Combined Air/Ground) attacks on an enemy site. Attacks on an enemy site are covered in detail in the next section, so here we'll just talk about the CAS-type missions.

First, let's define what a CAS-type mission is. For our purposes, it is any mission that explicitly requires the destruction of enemy mobile ground units *or the active defense of friendly mobile ground units.*

These typically have the following type of briefings:

"Elements of the 69th Army Mobile Nuns have been pinned down by an enemy column near Holyoke. You have been assigned two F-16s to help them escape."

"The 22nd Army has trapped an enemy truck convoy near West Boonie. They have requested TAC Air to help finish off the drivers. You have been assigned two F-16s to destroy the trucks."

The Legend of Stalinov

In August of 1941 Sergei Stalinov, a Russian tank commander, was on his way to engage German units west of Leningrad. He missed a turn in the thick fog and was separated from his platoon. Just minutes later the remainder of his unit, along with dozens of others, was slaughtered in a fierce engagement. Sergei and his crew never arrived at the battle, but his tank—old number 476—was seen several times on that murky day, wandering lost over the bloody countryside outside Leningrad, until it was finally spotted by a column of six German tanks. The panzer unit chased the T-34 for over an hour, finally cornering it in a copse of pines at the base of a cliff.

The pursuers encircled the trees and cautiously closed in, ready to fire as soon as they could get a clear shot. But when they reached the cliff face, the Russian was not to be found. His tread marks mysteriously ended, perhaps a dozen feet from the rock wall.

Sergei's tank is still frequently seen in the trouble spots of the world, usually very close to the site of an impending battle, and it often shows up in Falcon 3.0 as well. His equipment has been updated; he now usually commands a T-72. You'll sometimes come upon him, all alone, in a theater near a battle. If you do spot his tank, you can remove (or move) it at will—nothing you do to it will have any effect on your mission. Primary Warning IV doesn't apply to Sergei. Not much does.

Just don't be surprised if, after you shoo him from the theater, he pops up again before the next battle . . .

In these cases, the first thing you have to do is remember Primary Warning IV: THOU SHALT NEITHER ADD NOR DELETE GROUND UNITS IN MISSIONS THAT SUPPLY THEIR OWN. Don't try to mix a site attack with these types of missions.

"Well, that doesn't leave me much to do," you say. Sure it does! You can change waypoints, speeds, and types of enemy or friendly units. And while you may want to altogether avoid tampering with the ground units in these

missions, it is very tempting to either spice them up by switching some units to SAMs, or to water them down by changing some of the SA-7 squads into trucks (especially if you hate those detestable dead-aim buggers!).

There are some other limits and rules:

- ✓ You should try to limit your total units to thirty, and in no case will you be allowed to have more than sixty.
- ✓ Only four total ground paths are allowed.
- ✓ Don't allow your grandmother to drive a tank.
- ✓ The default speed of any column is 16 feet/second, which works out to be about 11 mph. You have to be careful about increasing this speed, because you may cause a battle to be joined too quickly. By the time your aircraft arrive, there won't be anything but burned-out enemy hulks to shoot at.
- ✓ When you create a new path, it will default to fifteen units, all Main Battle Tanks. If this would put you over 60 total units, then you won't get all fifteen. If you want to change the make-up of the force, you'll have to go into the "Types" dialog to do so.
- ✓ AAA and SAMs won't fire until they reach the end of their path and have a chance to set up (this has always been the case in Falcon 3.0). SA-7s and Stinger squads, however, will fire while on the move—as I'm sure you're already aware!

Experimentation has shown that columns with more than about fifteen units are inefficient. Ground forces in Falcon 3.0 tend to act as a group instead of individuals. What this means is that they'll all attack the same enemy unit (whatever's closest) at once, and after its destroyed, they'll go for the next one. That's one reason it's best to come at a site from as many different angles as you can manage: your units won't all gang up on one enemy unit at a time, and you'll destroy more in a given period.

Also, be sure to use the map scale when setting up attacks. Unless there are critical timing issues involved, mobile units should be a maximum of about a mile and a half from their objective when a mission begins. To use artillery

effectively, you should place it about three miles from the target area and place its end waypoint directly on top of its starting one (in other words, make it stationary).

Getting Complicated: Coordinating an Attack on an Enemy Site

Sooner or later, you'll want to attack a ground installation using flights and/or ground units that are completely unaffiliated with the primary mission objectives. For example, you may be tasked to fly a "defensive screen" thirty miles east of your home base. No big deal; you assign the routine four F-16s to a two flight mission.

But, forty-five miles northwest lies an enemy Army Base that's packed with SAMs and AAA. It's been giving you headaches for the past two days, and you know that it'll be giving you headaches again. You decide to attack. The question is: how?

With Strategic Falcon, you can launch three types of ground attack: pure air-to-ground, pure ground-to-ground, or a combination of the two. First, we'll discuss a pure air-to-ground attack.

Setting up an Air-to-Ground Strike

From various StratFalc screens, you glean that two enemy flights with a total of six planes (2 MiG-27s and 4 MiG-29s) have already been allocated in this mission (they're the enemy planes you'll be up against in the "defensive screen").

So the slots that have already been filled are two F-16 flights you've set up and these two "StratFalc" flights, for a total of ten planes (six StratFalc, four Falcon 3.0). These are all involved in the primary "Defensive Screen" mission. This means you've got two more StratFalc flights to play with, with a total of two planes, plus, if you need them, two more F-16 flights with up to four

plane slots there.

The first thing you have to realize is, even though we say "F-16 flight," what we really mean is that these are F-16 flight *slots. You can assign any available allied plane type to them, not just F-16s.*

You decide to use F-111s for the raid on the Army Base. (F-16s just don't carry the firepower to take out all those units!) So, how do you go about it?

First, you press the "Set Aircraft..." button. There you'll see that MiG-27, MiG-29, and (as always) F-16s are already checked. You want F-111s, so you check F-111 and click <OK>.

You have a decision to make: do you want to use F-16 slots or StratFalc flight slots to hold your attacking flights? Here, some of the finer points of StratFalc use come into play. One of the problems with StratFalc flights is that they sometimes vanish if you stop watching them or they fly out of the Falcon quadrant ("Kill Box") that your F-16 is in. (Kill boxes will be fully explained later.) For now, we'll set up both a StratFalc flight and an F-16 flight of F-111s, with two aircraft in each flight.

For the StratFalc flight, click on the "Alld" flight icon. There are no allied flights yet, so click on "Add Flight." Only one plane is initially allotted to the flight, so press "Add Plane." The planes will automatically be assigned as F-111s, since it's the only available Allied plane type other than F-16 and you're in the Allied Flight submode, but check the aircraft type dialog to confirm this.

Press the "Arm" button and give the lead plane a bunch of AGM-65s and Mk-82s, CBUs, or whatever you desire. Give it a jamming pod, too. Next, press the "±" button to get to plane two and press "Copy Prev." Press "OK." You now have two F-111s loaded for bear. We'll set their waypoints. We want everyone starting from the same place, so drag the "0" of the flight to your home base. (When moving waypoints, you know you've got a "grip" when the arrow cursor changes to a crosshair. If you ain't got a grip, it'll remain an arrow.) Place the second waypoint roughly over the objective. Add waypoints and set them just as you would in Falcon 3.0 itself.

F-16s one through four are already being used in the Defensive

Screen—don't change their types! F-111s would have a hard time with CAP duty! Click on the F-16 icon and add a flight. Add a plane. This time you *must* reset the plane types to F-111s, because StratFalc assumes you want F-16s in these slots, and you don't. Arm these planes just like the previous F-111s.

A "0" to "1" waypoint flight appears coincident with the "0" and "1" waypoint of F-16 Flight 1. Set it up just like the Strat Flight. Make sure you've armed the planes!

Please note: where you place the first waypoint (Waypoint "0") of a flight is very important! If you place it too close to an enemy site, it will probably do nothing but get shot down. You must give the pilots enough distance to set up their attacks. It is best to start the flights over allied territory.

Also note: when creating new Falcon flights, the formation defaults to "Wedge." If you want to change a formation, you'll have to do it from within Falcon after you're done with StratFalc. I simply didn't think the ability to change formations warranted the extra code here, simple as it would be to implement.

And while on the subject, all StratFalc flights also default to "Wedge," and that can't be changed anywhere.

There. Four F-111s will be paying a surprise visit to the Army Base. They'll make a nice dent in the defenses there. Now you can fly your defensive screen mission and leave the F-111s alone to attack the Army Base by themselves, right?

WRONG! Unfortunately, it's not that easy. This is where the necessity of the "Where?" button (available in the ground unit modes) comes into play.

The Following Is Imperative To Proper Use Of Strategic Falcon's Site Attack Features!

When you begin a mission, all theater sites are on "standby." The units at standby sites only "exist" when *you* are nearby. This makes it tough to go

SAM hunting—the SAMs appear only after you get close to them. We'll have to get a little deeper into how Falcon 3.0 works to use this correctly.

Falcon 3.0 divides up each of its theaters into a 16 x 16 grid. This results in 256 discrete areas in each theater. I call these areas "Kill Boxes." Each kill box is a square, 20 nautical miles on a side. To activate a particular site, you have to enter its kill box.

You can see the kill boxes directly from within Falcon 3.0—just change the map screen to "STRAT 2." (I'll bet you always wondered if there was a use for that screen!) You can also see them in StratFalc if you "X" their checkbox in the map display controls (in the "Other" mode).

The problem with all this is that often a site is very close to the edge of a kill box, and if you fly into the kill box over that edge, the site will activate virtually right beneath you. You'll have no time to react to the SAMs that appear out of nowhere. But, if you understand how this works, you can adjust your flight path to avoid this problem. If you came at that same site from the opposite end of the kill box, instead of over its near edge, you'd have up to 20 miles to set up an attack. (If you came at it from an opposite corner, you could have up to 28 miles.)

Your own airfield and any other sites within your "home" kill box are activated as soon as you climb into the cockpit. All others wait for you to enter their boxes.

There are three ways to enter a kill box and activate its sites:

1) You pilot your F-16 into the site's kill box and have at it. This is the natural Falcon 3.0 way of doing things and is also the most dangerous method, but it has one advantage: you don't have to trust your plane to Otto (the autopilot). In the example we're using, you won't be getting close to the Army Base (it's forty-five miles northwest of your field, and you're heading thirty miles east to shoot up some MiGs), so this activation method is unacceptable. The other two methods require you to leave your plane.

2) The second method is to use the "Wingman View" to follow one of your pilots into a strike zone. Since *you're* viewing the area, it will come alive.

The advantage here is that it is relatively easy to do, and you only spend the time out of your plane that is absolutely necessary. As soon as the person you're watching goes winchester, you get back into your F-16 and continue your mission. (And consequently remove the ground threats from that wingman, if your own plane is out of the vicinity of the site.) The disadvantage is you can only consistently view a wingman assigned to an F-16 slot; allied flights will frequently become "unviewable."

But this method would work easily in our example: set the autopilot <A>, and issue "engage" commands to your wingmen <Shift-E>, then press the <7> (Wingman) key until one of your wingmen's F-111s appears. (Falcon 3.0 doesn't care what kind of plane he's in; he's assigned to an F-16 slot, so he's still one of your wingmen.) You can tell it's a wingman and not an allied flight by the caption at the bottom of the screen: a wingman view will have the wingman's call sign; an allied flight will say—surprise!—"Allied Aircraft."

3) The final method is to use the "Transporter Room" feature of the "Debug" screen. This requires the most effort, but it has two distinct advantages: it is the most effective and it is the most entertaining!

This is also the reason for the "Where?" button. Here's how it works:

A.) Enter the Strategic Falcon "Location Mode" by going to either of the Tactical/Ground modes and clicking on the "Where?" button. The cursor will change to a pointing finger and will zap itself to the middle of the map screen.

B.) Click on any point in the map that you plan to attack. In this example you'd click on the offending Army Base. The coordinates of this spot will appear in the "North:" and "East:" boxes on the right of the screen. Write these numbers down or turn on your printer and hit the "Print" key (the <P> key). The location data will be printed out.

C.) When you start your Falcon 3.0 mission, fly the mission and give your attack force (the F-111s) a little time to get close to its target.

D.) Issue the <Shift-E> (Engage) command to your wingmen and activate your autopilot <A>. Also, issue any other commands to your

wingmen that you desire. You're going to be incommunicado for a while, so make sure everything is set up. (This can't be stressed enough: **make sure you issue proper commands to your wingmen and set the autopilot before taking the next step!)**

E.) Press the <P> key to pause the simulation. After the word "PAUSE" stops flashing, press <TAB>. You are in "Debug" mode now. Press the <T> key to bring up the "Transporter Room" dialog. Enter the coordinates that you wrote down or printed out in Step B. Poof—instant Army Base!

F.) If you are not at ground level, press the <Pg Dn> key until you get there. See any units? Probably not. Here's the key(!). Hit the <`> key (at the upper left of most keyboards). This is the Debug Mode "Action" toggle. Hey, where'd all those bad guys come from? (If you don't see any, use the <F3> or <F4> key to rotate your view.) You can use the arrow keys to move around. It often helps to set the scale to 8X.

G.) Sit back and watch the show. Since *you* are nearby and watching, the units will stay visible for your planes (and/or ground units—this method is also used during a ground assault to attack). As soon as the fighting's over, hit the <`> key again to freeze the action, and then the <P> key. If Otto survived while you were gone, you'll be back in your F-16 again in "real time." (Note: it is important to hit the <`> key the second time because the action in "Debug Mode" is a toggle—Falcon 3.0 will immediately reenter Debug in the same action mode that you left it. Forget to do this a few times and you'll quickly see why it's undesirable!)

Another note: if your "DEBUG" view suddenly locks to a bearing (normally one of the cardinal points— 000, 090, 180 or 270), it means your F-16 has just been destroyed. Otto dropped the ball!

This sounds awfully complicated, doesn't it? Well, it really isn't; you'll get used to it quite quickly. Just remember to set Autopilot before leaving your F-16 or you *will* crash!

This is the most flexible solution for the "Inactive Sites" problem. The long and short of it is, one way or another, you have to get your computer monitor's "eye" (the "Falcon Focus") into the simulated world near the desired site. Understanding Kill Boxes is very important in using StratFalc (and Falcon 3.0—they've always been present!). Please read "Kill Boxes in Detail" in section II.

One thing has to be made clear: Kill Boxes are not a new development. They have existed in Falcon 3.0 from the beginning. And they affect you whether or not you use Strategic Falcon. This is the reason separate SEAD flights often fail to be effective in Falcon; your flights simply find no one to attack unless you're nearby to activate the sites.

HERE'S AN UNEXPECTED BENEFIT: If you have to take your F-16 over a particularly heavy SAM emplacement, you can keep the bad guys asleep by "Transporting" to a distant location while Otto takes the plane over their heads. Just give him enough time before you hop back in! Er, BTW, doing this is unadulterated cheating; you might as well just turn SAMs off in Falcon 3.0's configuration screen.

Setting up a Ground-to-Ground Attack

Perhaps you've decided it's time the grunts took the brunt of the risk and erased some of those ground units themselves. How do you do this?

By far the simplest way is to let StratFalc set up the attack itself. To do so, go to the Strategic Mode ("Now, wait a minute, we're talking about Tactical Options here," you say. Don't worry; we'll be right back.) Choose the "Attack Site" icon. Click the mouse on the map site you want to attack, and then set the options as desired. (The options *are* indeed explained in the Strategic section.) In the interest of realism, the site that you attack should be on or near the front lines, but if you're not too concerned with realism (sacrilege!), you can place forces anywhere in the theater that you choose. (Maybe we just paradropped those nasty ol' M-1s back there!) Press the "Issue Orders" button to finalize the plan.

StratFalc will automatically command your ground units into position and issue their leaders the correct orders to make the assault. To tweak these commands, however, you must return to the Tactical Mode screen and select the "Allied Ground" submode. Now you can fine-tune the speeds and the paths of the units. For instance, if you've ordered a mixed artillery/armor assault, you may want to increase the speed of the armor. You should move the artillery about three miles away from the target and place its waypoints one on top of the other. You may want to change a few unit types. You do these things from the Tactical/Allied Ground control panel.

When you've got it all to your liking, it's time to execute. As you've probably already guessed, it's not that easy. *You* have to be in the kill box of the enemy site or it will stay on standby, and your meticulously placed attackers will find nothing to fight!

Keeping in mind the limitations explained in "Initial Review: The Ground Submodes" section above, you can set up everything to your liking. Of course, you could do everything manually, and build each ground path by individually adding units, but since this option is available in StratFalc, why not make use of it?

You have the same three options explained above to activate the site, but in this case, the "Pause-Tab" method is overwhelmingly the most advantageous. It's fun to watch the action, anyway.

One of the best uses of ground attacks, and one that fits right in with the manner in which Falcon 3.0 utilizes Kill Boxes to wake up sites, is as a substitute SEAD method when you'll be overflying a site. Set up an attack on any site that's heavily guarded by SAMs and AAA and time the attack to reach the site just before you'll be flying over. When you reach its neighborhood, the site will activate—and the enemy will find itself under heavy fire from your units! (Remember, any units that *you* place with StratFalc always exist—they needn't be "awakened.")

This can be fascinating to watch as you scream over at low altitude—while you're en route to your main objective—and it takes no special view-changing at all!

Setting up a Combined Air-Ground Attack

Here's where some of the planning fun really starts, and this is also how you blast the hell out of a well-defended site. If you've read the previous two sections, how to go about this should be obvious: you simply set up an air attack as explained in the first section, then set up a ground attack as detailed in the second. Don't forget to use one of the site activation methods. The enemy will have so much ordnance coming his way he won't know who to shoot back at!

To top this off, use the Strategic "Occupy" option to claim the site after the attack, before the next mission. Otherwise, it just doesn't seem realistic; here you've blasted the site to kingdom come and don't get to call it your own!

We'll close this section with some final notes about attacking sites and eliminating their units. Falcon usually gives you "credit" for only about half of the units destroyed in a site battle. You could personally witness the destruction of twenty enemy tanks, but the strength of that site—say it previously held 60 units—might only drop to 48. Bear in mind that some of those units you saw attacked might have been only temporarily disabled! And don't expect to have the Falcon 3.0 mission debriefing mention any Site units destroyed in a StratFalc battle. A debriefing will only track the units set up in the *.MIS file, meaning it will tell you what happened to the assets you set up for the attack, but not what those assets destroyed.

Also you should be aware, regardless of the actual strength of a site, you'll never see more than about 34 units there at any one time. As you destroy these, they are replaced by others until the total strength falls below 34—then you'll see only the remaining units.

And finally, to throw a monkey wrench into this whole thing, a few sites will *never* wake up, no matter what. I haven't quite figured this one out yet. Stay tuned!

Strategic Mode

In the Strategic general mode, you can do the following:

- ✓ Change the occupation of any site, to instantly capture nodes or surrender them to the enemy.
- ✓ Change the current strength or capacity of any site.
- ✓ Change the rate of growth of any site.
- ✓ Change the quantity of specific unit types at a site.
- ✓ Change the node structure for the theater. You can cut any site off from resupply.
- ✓ Change which nodes mean victory and which spell defeat. You can even fully randomize victory/defeat sites!
- ✓ Launch an automatic, coordinated ground attack against any site.

To get to these options, click on the appropriate submode. These are Strength, Occupation, Lines, Victory, and Attack.

You should note that any changes you make using the Strategic options affect the current campaign only; you're not dealing with the actual Falcon 3.0 theater templates, only their copy for this campaign (stored in the *.CAM file, if you're interested). This means that any future campaigns in this theater will have their strengths, occupations, node lines, etc., returned to the default Falcon 3.0 configuration. (Unless you want to change them, that is. See "Strategic Falcon and F3Maps" in Section II for a detailed explanation of the associated data files and what you can do to them.)

Strength

Click on "Strength," then click on any site. The site name and type will be

displayed. Underneath, you'll see a listing of the site's capacity, strength (current quantity of units), and growth rate. You can set these directly.

Beneath this is a "Units" listing for the site. The important number is the actual "Curr Units" quantity. Sometimes Falcon 3.0 gets a little off in its calculations, particularly after a site attack. During its next 6 am "roll call" it will sort out the actual quantities of each type of unit again, or you can force StratFalc to do it now by clicking on the number in the "Curr Units" box.

If you want to eliminate all the SAMs and AAA at a position just set their numbers to zero. And if you're looking to eliminate the entire surface-to-air threat, don't forget about the infantry: they're usually armed with SA-7s!

As mentioned earlier, no matter what the total strength of a site, when flying you'll only find a maximum of about 34 units there at once. After the total strength falls below 34 you'll see only the remaining units.

See "Site Capacity, Strength, and Growth Rate," in Section II for more information about the meaning of these figures.

Occupation

Want to take over a site real bad? Have some SAMs that just won't leave you alone? Click on the site that interests you, then click the radio button "Allied." It's yours. If you want to surrender some sites, just click on them and press the "Enemy" radio button.

This option can be used to set up some very interesting campaigns. For instance, in Korea you can see what happens if the enemy invades from the south instead of the north; just give him some of the sites around Pusan. But if you do something like this, be sure to review the victory/defeat nodes (explained below) before you exit StratFalc, because you may have just handed the bad guys everything on their "To-Do" list! For your convenience, the victory/defeat sites are viewable here. Change them if necessary.

Lines

This shows the network of nodes, otherwise known as the supply lines, for the entire theater. From here, you can ensure a knocked-out bridge really *is* knocked out, or see if an enemy SAM site could be easily sealed off from reinforcements.

To make or break connections, left-click on the site with which you want to work. It'll brighten and all its attached neighbors will be displayed at the opposite end of yellow lines. To break a connection, *right-click* on the appropriate neighbor; to make one, right-click on an unattached neighbor. If you break the last connection to a particular site, you will be warned.

Bear in mind that most connections go both ways, which means that the neighbor usually has the original site as one of *its* assigned neighbors. To entirely sever two sites, you must left click on that neighbor to select it, then right-click on the original site to break its connection there.

Each site can have up to eight neighbors, and there is no distance limitation. You can set up "secret passages" for sites, if you wish, and make a surprising advance in the enemy's rear!

As you make or break connections, the appropriate listing in the control panel is updated.

Victory

Why does the outcome of a Kuwait campaign hinge so much on the sites around Baghdad, anyway? It's not very realistic; the coalition undoubtedly won the Gulf War, but never took Baghdad. Wouldn't it be nice if you could adjust the victory sites in a campaign more to your liking?

Well, of course you can. In the Victory submode, you can set any victory conditions you like. Each theater has up to fifteen victory nodes and up to fifteen defeat nodes. If you occupy all of the victory nodes, you satisfy one of the basic requirements for winning the campaign (the full requirements will be discussed in section II). Conversely, if you lose all of the defeat nodes to

the enemy, he's poised to win.

To add or remove a node from either list, simply click on it on the map. Bear in mind that fifteen is the limit, so you must make room for new sites on the list by removing old ones first.

StratFalc also has a "hidden feature" (now aren't you glad you read so far into this tome?). You can automatically randomize all of the victory and/or defeat nodes by right-clicking anywhere on the node list while in the Victory sub-mode.

Attack

As mentioned in the "Tactical" section, this option lets you quickly set up a ground assault on any enemy site. Click the mouse on the map site you want to attack, and then set the options as desired. When you're all done, click on the "Issue Orders!" button.

The "Attack Type" can be either "Frontal," "Two-Pronged," or "Three-Pronged." This dictates the actual layout of the units in relation to the site being attacked. The names are pretty much self-explanatory.

- ✓ In a "Frontal Assault," your units will approach the site in an echelon formation, smashing and blasting along the way. This is a no-tricks, simple attack, good for an all-armor assault.

- ✓ A "Two-Pronged" attack separates your forces evenly among two fronts, 120 degrees apart (we can't have them diametrically opposed—they'd get in each other's field of fire!). This is good for a mixed armor/artillery assault, because your units will automatically be divided: one assault path will be all armor, and the other will be all artillery. This makes it easier to tweak the waypoint locations in the Tactical/Allied Ground submode.

- ✓ A "Three-Pronged" attack surrounds the site (fields of fire be damned!), each having 120 degree separation. It divides your units more or less evenly among the three columns. In a mixed armor/artillery assault it will

order one pure armor column, one pure artillery, and one half-and-half. In the actual Falcon 3.0 world, a three-pronged armor assault is the most effective attack simply because it covers the most ground.

The Unit Type can be "Armor," where all units will be M1 Tanks; "Artillery," where they'll all be M-198s; or "Mixed," where you get half tanks and half artillery.

The Normal speed is 11 mph. This is what Falcon 3.0 uses as a default and if it's good enough for Falcon 3.0's designers, it's good enough for me. The Blitz speed doubles this to 22 mph. "Cautious" creeps along at about 6 mph. All units will be assigned the same speed, so if you want to keep your M-198s from running through the site in hyperspace you'd better slip 'em some Valium in the Tactical/Allied Ground submode. Each column will begin its attack just over one and a half statute miles from the objective—if you've placed artillery, you should move it back a bit and overlap its waypoints. If everything goes well, they'll wipe out all of the opposition and make camp in the dead center of the site, just in time for tea.

The "Total Units" defaults to thirty. You can boost it as high as sixty if there are no other ground units active for that mission. Each column gets an even share of the total.

Please remember that setting up an attack is only half the battle (hah!). You must also activate the enemy site using one of the methods detailed above in the Tactical "Setting up an Air-to-Ground Strike" section. You have to do this from within Falcon 3.0 or your units won't find anyone to blow up!

Other Mode

In the Other general mode, the following features are available:

- ✓ Change the current weather, the predicted weather, and the altitude of the cloud cover.
- ✓ Change the home air base—you can continue a campaign from any allied-

occupied strip.

- ✓ Change the current day and time.
- ✓ Change the resupply and replacement days and times.
- ✓ Change the campaign momentum—turn the tide on the enemy.
- ✓ Access map features from one control panel.
- ✓ Reconfigure Strategic Falcon to your tastes.

You access these controls through the appropriate submode. These are Weather, Dates, Momentum, Map, and Configuration.

Weather/Home Base:

If it's been overcast for days and you just can't take it anymore, you can alter the weather for the theater using this option. Who says you can't play God? You can also threaten the squad meteorologist and make him change his prediction for tomorrow.

▮ Note: in Falcon 3.0, "Overcast" only applies on or after the 2300 hour mission on Day 1.

You can change the ceiling for operations on top of that (pardon the pun). This number is approximate—plus or minus five hundred feet. Any cloud layer is normally about 5000 feet thick. If the current weather is "clear," ceiling has no effect.

(Want to try something different? In a Bosnia campaign, set the weather to overcast and the ceiling to about 2000 feet. Try a dogfight in the mountains. It's an entirely new game! It's also interesting to put the clouds on the deck and try to land with instruments. It'll be fun to try fogged-in Carrier landings in Hornet when "Strategic Hornet" is ready. "Hook down, gear down, roger ball." "Ball? What ball?")

The lower half of this screen controls a more useful feature. Tired of flying

missions from the same old base, day in and day out? Or (this one really gets me) are you flying out of a base over a hundred miles behind the front lines, even though you've pushed the enemy into a corner? All the possible bases are highlighted in yellow; hit the "Cycle" button and you can rotate through them all and settle on the one you want. Press the "Issue Orders!" button to finalize your selection.

The new air base assignment will kick in with your *next* mission, although the icon for the new air base will now be highlighted when you reenter Falcon 3.0. (You'll understand better after you use the option.) If you want to fly the current mission from the new base, you'll have to manually move your F-16s' starting waypoints over to it. (You'll have to use StratFalc's Tactical/F-16 submode to do this; you won't be able to do it within Falcon 3.0 because the beginning and ending waypoints are locked.)

There is one thing you MUST be aware of and must observe if you use this option:

1) **Only Fly One Campaign At A Time In Any Given Theater! (If applicable, you will be warned about this when you start Strategic Falcon.)**

If you come upon a case where you want to fly perhaps only a single mission from a different base, you can safely move your F-16 Flight 1 starting waypoint to any airbase in the theater, even if it doesn't have an ILS (and even if it's enemy-occupied!). Strategic Falcon is smart enough to check your first F-16 flight and see which base it's starting at. If that base doesn't have an ILS, StratFalc will place one there.

On a similar note, if you ever have a problem getting your F-16 onto a strip (you start out above the runway or in the center of the theater away from all runways), you can force StratFalc to fix the situation: turn on the "Show ILSs" option and then move your F-16 Flight 1, Waypoint 0 to any airbase that *does not* have an ILS. Press "Save." Now move that waypoint back to the strip that you want to start from and press "Save" again.

Use this same routine to make StratFalc place an ILS at any strip you desire—maybe for "Bingo Field" purposes.

Also, Japan proves to be a problem child again in this submode. "Move Home Base" doesn't work in the Kuriles because the "Pregenerated Missions" so prevalent there keep everything under tighter control and override any changes you might make to the home base. In the Kuriles, you have to move manually, and on a mission-by-mission basis:

1. If the desired base doesn't yet have an ILS, select the desired home base in the normal manner—with the "Cycle" button. (This ensures that there is a ILS there.) Make sure you press "Issue Orders."

2. Move your starting & ending waypoints and place them on the base. (Don't worry that an ILS doesn't show up yet—StratFalc won't actually put one there until you save your changes.)

3. You'll have to do the same thing again for the ensuing missions.

A little more discussion on the consequences of moving your base is given in Section II, along with some essential nitty-gritty Falcon 3.0 data file information.

Dates

You set the current date and time, the resupply date and time, and the replacement date and time from here. There are no safeguards; you can easily set the replacement time in the past, for instance, so be careful.

The current date triggers Falcon 3.0's "Win/Lose" check and so is the second of the three elements of winning a campaign (the first being occupation of the victory sites). The first "Win/Lose" check occurs prior to the 6 am mission on Day Eight, and occurs prior to each following 6 am mission until Day Fifteen, when a stalemate is declared. Exceptions are explained in Section II. (Note: some campaign wins have been reported in Falcon 3.0 as early as day 2, but I've never been able to recreate this. It's not the way things are *supposed* to work.)

Resetting the current time can be handy if you get to day 13 or 14 of a cam-

paign and have the bad guys on the ropes, but need *just one more day* to finish them off. Warp yourself back to day eleven or so while keeping your current momentum and sites!

Momentum

Falcon 3.0 tracks momentum in two ways—it tracks how many missions you've won during the current day, and it tracks how many days you've "won" or "lost." (A day is won if you succeed in a majority of its four missions; ties go to the enemy.) The mission-to-mission tracking is called "Micro Momentum"; the term for how many days you've won is "Macro Momentum." Strategic Falcon allows you to set Micro Momentum from -3 to +3, depending on the time of day, and Macro Momentum from -4 to +4.

Momentum is the final element in the equation for winning or losing; the whole thing will be explained in Section II.

You can also change the quantity of missions accomplished from this screen, but doing so really has nothing to do with winning or losing the campaign. This feature is included to allow you to do so in case you're interested in keeping the campaign "internally consistent." If you change the current time or date, the number of missions flown is automatically changed to reflect it, and you can change how many of those missions have been successfully accomplished.

Map Display

This will allow you to view the map with any or all of its features juxtaposed. A few of the items here also affect how the map looks in the other submodes. The following check boxes have a "global" effect:

- ✓ Shoreline
- ✓ Compass
- ✓ Scale

- ✓ Kill Boxes
- ✓ F-16 Flights
- ✓ Allied Flights
- ✓ Enemy Flights
- ✓ Allied Ground
- ✓ Enemy Ground

If any of the flights or ground paths are left "on," you will see those items in dark gray in the other submodes. This allows you to better synchronize the various elements of your mission. For instance, if you turn on Allied Ground and Allied Flights (which happens to be the default), then in the F-16 submode you would see how F-16 flights interact with allied flights or ground troops.

In their respective tactical submodes, other flights of the same type will be shown in light gray. If you turn on F-16 flights here in the map display controls, then enter F-16 Tactical Flight mode, the active (current) F-16 flight will be shown in blue, and the inactive F-16 flights will be shown in light gray. If you've left any other type of flight or ground mode on, those will be visible in dark gray. In any tactical submode, you can make any light gray flight or path active by clicking on one of its waypoints, as well as by pressing the "±" button next to the flight/path number on the control panel.

If you find a setup that you particularly like, you can use the controls at the bottom of the screen to make it your default. The buttons have the following functions:

- ✓ "Set" makes the current setup of the map your personal user default. Please note that zoom levels and the map origin are not considered part of the map setup.

- ✓ "Display" causes the map to return to the layout you've previously selected with "Set," above.

- ✓ "Reset" returns the map to the hard-coded Strategic Defaults, namely all F-16 and allied flights and allied ground paths displayed, as well as the shoreline, compass, and scale, but nothing else.

Configuration

From here, you decide how StratFalc interacts with you.

Configuration

- ✓ Start in Previous Cmpn: (On by default.) If this box is checked, StratFalc will try to reload the most recently used campaign upon startup. If the campaign is no longer valid, then it will open to a blank screen.

- ✓ Disable Startup Screen: (Off by default.) "You paid for it, you shouldn't have to wait for it," so this option is included. It allows you to get right to business. If you want to see this screen at any time you can right click the mouse along the map's left edge.

- ✓ Enemy Views Lockout: (Off by default.) If you're a purist, this is for you. It keeps you from discovering what enemy flights are out there or where they are by disabling the "Tactical/Enemy Flight" and "Tactical/Enemy Ground" submodes. It will also disable the enemy plane type options in the "Set Aircraft..." dialog, as well as locking out any enemy views in the map display submode.

- ✓ Override Version Checks: (Off by default.) If StratFalc complains about the version of "FALCON3.EXE" that is on your disk, but you know that the version is acceptable, you can disable ALL version checking by "X" ing this box.

  You can tell if your version is acceptable if the "Backup Version Check" lets you into the program. The "Backup Version Check" is a feature designed into Strategic Falcon for your convenience and safety. StratFalc first checks the "FALCON3.EXE" file for known version-specific bytes; this is the primary version check. If it finds version 3.02 through 3.04 of the software, it starts up immediately. But if it does *not* find any of these versions, the "backup version check" kicks in. This routine looks on your disk for any valid campaign (*.CAM) file and its associated Squad (*.SQU) file. If it finds at least one of each, it performs some very sophisticated algorithms (they took me weeks to develop!) to verify that these data files can be worked with. If so, it starts the main program.

Please note: if you update/upgrade Falcon 3.0 in the future, you should enable checking again to make sure that your data files pass this backup check. If this check is again passed, you can confidently disable the version checking again.

You can also disable version checking by using the /NOCHECK switch to start StratFalc, i.e. "STRAT /NOCHECK."

If you use Falcon version 3.01.1, *never* disable version checking! You will cause Falcon to hang if you do, because the read-only bits will be set on your MIS files! In "3.01.1 Mode," StratFalc leaves all R-O bits alone. You can verify that StratFalc is running in 3.01.1 mode by looking at the opening screen (right-clicking the mouse along the left border of the map will bring up this screen). If you're in 3.01.1 mode, this screen will say so in the lower left corner.

✓ No Expanded Memory: (Off by default.) If for some reason you do not want StratFalc to use Expanded memory to hold its internal overlays, "X" this box. (You can also use the "NOEMS" switch from the command line to accomplish the same thing, i.e., "STRAT /NOEMS"—without the quotes.)

✓ No Extended Memory: (Off by default.) If for some reason you do not want StratFalc to use Extended memory to hold its internal overlays, "X" this box. (You can also use the command line switch "NOXMS" to do this, i.e., "STRAT /NOXMS"—again, without the quotes.)

(If you're interested, StratFalc will try to use expanded memory first, and if that's no go, it will try to use extended. It figures you're probably already set up for EMS because you're using Falcon 3.0, and Falcon uses EMS. But it's nothing if not flexible. You can use this box or the "No EMS" to force it to use one or the other, or neither.)

Confirmations

✓ Save without Asking: (Off by default.) You may want to think long and hard before you enable this option; it is strongly recommended that you never turn it on. What it does is automatically save any changes you've

made to your data files whenever (a) you open another Campaign file (or try to reopen the same one!!!) or (b) exit Strategic Falcon. You will not be given any choice.

(Normally StratFalc will pay attention to your actions and note when you've changed its RAM image of your data files. It doesn't actually write anything to disk, though, until you either press the save button or "OK" it in the "Save Changes?" dialog box. This gives you a chance to throw out your changes. You will *not* be given a chance to throw out your changes if the "Save without Asking " option is enabled.)

You can disable this option at any time, so if you realize things are totally screwed up, you can turn it off and then exit StratFalc, pressing "No" in the "Save Changes?" dialog box.

A final word on this subject: I'd never leave you swinging without a net. Even if you do exit StratFalc and *then* decide your files are totally hosed, the old ones still exist in your Falcon 3.0 subdirectory. When you saved your changes, the original campaign files were renamed to "SQU?CAM.BAK," "SQU?MIS.BAK," and "SQU?WAR.BAK," where "?" is the appropriate squad number. To get back to where you were, just copy these files to "SQUAD?.CAM," "SQUAD?.MIS," "SQUAD?.WAR," respectively.

There's a "Twenty-Minute Delay" feature built in—if the existing backups are less than twenty minutes old, they won't be overwritten when you press "Save." This ensures that, even if you save your changes several times during a session, you'll still have the original campaign files available. It's just another safety feature from your Uncle Bill.

✓ Right Button AutoZoom: (Off by default.) If this is on, clicking the right mouse button zooms the map as well as centers it around the clicked point.

✓ No Warning: Move Locked Waypoints: In Falcon 3.0, the waypoints associated with your home base, "Takeoff" and "Land," are always location-locked. This is why you can't click and drag them, although you can change the altitudes and speeds of your wingmen. Strategic Falcon is aware of this, and, while it will certainly allow you to move a locked waypoint, it'll normally ask you if you're sure you want to do so. Sometimes

you'll grab onto and try to move a locked waypoint unintentionally, so this warning also helps you avoid mistakes. But, like everything else, I'll let you decide.

Be aware, however, that the starting waypoint of the first F-16 flight must always have "TAKEOFF" as its action. This is a hard and fast Falcon 3.0 rule: your plane must always start its mission from a runway. If you move your starting waypoint, Falcon will place you on the closest runway with an ILS. If there are none close enough, it will start you in the dead center of the theater. For this reason, it's always best to leave F-16 Flight 1, Waypoint 0 alone and use the "Move Home Base" feature to move around the theater—the runway you choose will then always have an ILS.

Moving locked waypoints can be used to set up some intriguing "critical timing" missions where various flights come at an objective from different directions: it's relatively easy to time an attack when you're all flying together, but how about when your flights start at bases separated by a couple hundred miles? This is also an excellent way to draw the enemy CAP flight away from your strike package: have your own CAP start out from the other side and watch the enemy go for them while you sneak in underneath!

✓ No Warning: Isolated Site: Normally, when you break the last tie of a site to any of its neighbors, StratFalc will try to second-guess you, and will confirm that this is what you really want to do. You have to remember: if such a site is a victory node, and you have not already occupied it, you'll never be able to get it. This box disables that warning.

Information

✓ Path to Falcon 3.0: In this block, you can adjust the DOS path to FALCON3.EXE. If you've installed Falcon on drive c:, the path would normally be "C:\FALCON3" (without the quotes). If you need more help discovering what a "path" is, please see your DOS documentation.

If your path is too long to fit in this box, you need a new path. You can do this one of two ways: either move your Falcon system into a directory whose path *will* fit in this box, or use the DOS SUBST command to teach StratFalc where FALCON3.EXE is.

✓ Load TSR command: On startup, StratFalc checks your computer's memory and discovers whether the STRTSPRT.COM Terminate-and-Stay-Resident (TSR) program has already been loaded into memory. If it hasn't, StratFalc will load it.

This box is where you enter the command line that is to be used to load STRTSPRT.COM, if you do not want the default "STRTSPRT" to be used. This feature is included so you can force the TSR to load high if you wish. The actual command you place here will vary depending on your memory manager. Type it in here just as you would enter it on the command line.

Please note: If you use Falcon version 3.01.1, you do not need to load the TSR. Enter the word "NONE" in this blank (no quotes).

Sometimes StratFalc has trouble verifying whether the TSR is in memory. This is especially true when other TSRs have been loaded after it. If you invoke STRTSPRT from your AUTOEXEC.BAT file (as is recommended), and if you have trouble with Strategic Falcon trying to RELOAD it after you've already installed it, try making it the last item in your AUTOEXEC.

If this doesn't help, and if Strategic Falcon still insists on trying to load the TSR after it's already in memory, you can tell Strategic Falcon to cut it out in one of two ways:

1) Enter the word "NONE" in this blank (no quotes).

2) Or start Strategic Falcon with the "NOTSR" switch, i.e., on the command line:

"STRAT /NOTSR"

The necessity for TSR itself is explained in detail in Section II.

Section II:

The Whys and Wherefores.

You now know the basics of using Strategic Falcon, as well as the risks associated with certain actions. This section goes into greater depth and discusses some of the implications and strategies you can employ with StratFalc. It's a mush of half-baked ideas and moronic schemes, so don't expect much coherence or organization.

STRTSPRT.COM TSR: Its Purpose and Necessity

During development of Strategic Falcon, a nasty problem cropped up.

In Falcon 3.0, essential data for the current mission is in a file with the extension MIS. For example, the current mission for SQUAD0 is kept in SQUAD0.MIS. To be able to change the current mission, the SQUAD0.MIS file (or whichever squadron number is appropriate) has to be altered. This is how Strategic Falcon does its work when dealing with many of the tactical aspects of Falcon 3.0.

Unfortunately, as of version 3.02, Falcon 3.0 generates a new SQUAD0.MIS file *every time* the "Takeoff" button is pressed in the final mission planning screen. What this means, of course, is that the altered MIS file which you've previously created with Strategic Falcon is overwritten, and Falcon 3.0 just goes back to the mission it generated before StratFalc was used.

As you can see, this makes it impossible to take control of the aircraft or ground troops, and the possibilities of altering a Falcon 3.0 mission are seemingly lost forever.

But further experimentation showed that if the SQUAD0.MIS "read-only" bit was set, Falcon 3.0 would neither overwrite nor choke on the altered mission: it would successfully load the mission that Strategic Falcon generated. So control of the *.MIS file for that mission was regained. Things were looking up.

They quickly looked down again. Come the *next* mission, Falcon 3.0 now would choke because it couldn't kill the old SQUAD0.MIS file (because it had been set to "Read-Only") and generate one to match the parameters of the new mission. The only way around this new problem was to exit Falcon 3.0 between missions, manually clear the read-only bit of the SQUAD0.MIS file, then reenter Falcon 3.0, make it generate a new mission, exit Falcon 3.0 to use Strategic Falcon, which will set the read-only bit for this new mission, enter Falcon 3.0 and fly the mission, exit again to clear the read-only bit, etc. As you can see, this solution was insufferable and completely unacceptable. It threatened to kill Strategic Falcon altogether.

The only ascertainable answer, without somehow making wholesale alterations to FALCON3.EXE itself, was to create a TSR that would clear the read-only bit of SQUAD0.MIS when either the "End Mission" button was pressed inside the simulation, or when a user was booted out of the mission because "All Friendly Aircraft Have Been Destroyed." In this way Falcon 3.0 would be free to write the next SQUAD0.MIS file, and a user would only have to exit Falcon 3.0 once between missions, which he/she already does now if he/she wants to use other Falcon 3.0 utilities.

There are very few people who have both the programming expertise and the knowledge of Falcon 3.0 itself to pull this off, and probably only one who is not a Falcon 3.0 programmer. Enter Ken "Stinger" Richardson. Stinger listened to the problem and soon had delivered what was needed: "STRTSPRT.COM." This highly-specialized little gem did exactly what was required.

You can see the purpose and necessity of the TSR. Its implementation has been kept as simple as possible:

1) If you're using Falcon version 3.02-3.04, StratFalc will automatically load the TSR if the TSR is not already in memory. If you want to load the TSR high (and we all do, we're talking about Falcon 3.0, after all!), you can configure how Strategic Falcon loads it in the appropriate field in the Config Screen. See "Configuration" in Section I.

2) The auto-load feature does no good, though, if you run Falcon 3.0 without running Strategic Falcon first. For this reason, **IT IS HIGHLY RECOMMENDED THAT YOU INVOKE STRTSPRT.COM IN YOUR AUTOEXEC.BAT**. You should add the following line to AUTOEXEC.BAT:

C:\STRAT\STRTSPRT.COM

(modify this to suit your memory manager if you want to load the TSR high).

3) Stinger wrote STRTSPRT so that it will be uninstalled from memory if it is run a second time. Strategic Falcon will test to see if the TSR is already in memory before it invokes it, just so it isn't inadvertently uninstalled. (By the way, the "read-only" bit doesn't bother Strategic Falcon itself—it knows enough to test any MIS files before it tries to alter them, and will clear the R-O attribute itself if need be.)

If you prefer to install STRTSPRT.COM by using another batch file than AUTOEXEC, I've included a separate batch file, "LOADTSR.BAT," that you can call from your own and it will check to see if STRTSPRT.COM is already in memory, and will automatically load it if it isn't. It is not required, but if you want to load STRTSPRT high, follow the LOADTSR invocation with the proper command you'd use to load the file high. For example:

"CALL LOADTSR LOADHI"

in a batch file will cause the TSR to be loaded the same as

"LOADHI STRTSPRT.COM"

with the added benefit of NOT uninstalling it if it is already installed.

Make sure LOADTSR.BAT and its companion file, LT.EXE, are in the current directory or in your path before you run the command.

You can ignore all this if you run Falcon version 3.01.1.

Changing Attitudes and Dealing with Temperament

Why would anyone want to turn a wingman into a traitor? What possible good could come of it?

In a word, none. But it is fun. (In the same vein, a feature was almost included that would allow you to make tanks and trucks fly (now that *was* funny, especially during a dogfight! "He got fragged by a humvee, sir, at thirty thousand feet."), but enough is enough.)

Why would you want to make a pilot overly aggressive? Sometimes you need someone who will go in with guns blazing, no matter what. Here are some other things to bear in mind:

- ✓ The other side will go after aggressive pilots first!
- ✓ A traitor will be attacked by his wingmen **immediately** upon mission startup (of course, he'll start his own attack then, as well, but they usually blast the hell out of him before he can spit).

A note about ground units—M1 and T-80 tanks are already as aggressive as they're going to get, so checking "Aggressive" for them has no effect. Conversely, trucks (both allied and enemy), are already the most timid ground unit, so assigning "Timid" makes no difference.

How To Win A Campaign In Three Easy Steps

So you've been playing Falcon 3.0 faithfully since 1991 and you've never seen the Victory screen? Want to see it? Backup your data files! Then do the

following:

- ✓ In the "Other" mode, set the day counter to a time between the seventh and the thirteenth day. Set the time counter to 2300 hours.

- ✓ Also in the "Other" mode, set the macro momentum to +4. Set the micro momentum to +3.

- ✓ In the "Strategic" mode, occupy all the Victory nodes; ensure the enemy *doesn't* own all the Defeat nodes.

Save these changes and exit StratFalc. Start Falcon 3.0, get into the cockpit, pull down the "File" menu, and hit "End Mission." Then break out the champagne!

This illustrates the three elements of victory in a Falcon 3.0 campaign. If you've got some time, experiment and get back to me; I'm sure there's more than one formula for victory—maybe a slight momentum advantage is enough as long as you have all the victory nodes, or heavy momentum and only a few nodes.

It seems a stalemate can also be declared if neither side has an overwhelming amount of its victory sites and/or if momentum is not tilted enough off center.

Moving Home Base: Common Sense and Data File Information:

You can move your home base to any allied-occupied air base. But if you move it to an air base which is too close to the front lines, you are in grave danger! The enemy can easily overrun you, and you'll instantly lose the war. Remember, even if you win all four missions on a given day, if the macro momentum is heavily against you, the enemy will make gains! Bear in mind that by moving your base you are overriding Falcon 3.0's own method of preventing an overrun; left to its own devices, Falcon 3.0 would move you successively away from the advancing enemy. When you move your own base, you could easily move too far forward for Falcon 3.0 to be able to find you a

safe haven.

Also, you should be aware of what Strategic Falcon is doing with your data files. To be able to place your plane correctly on a specific runway, Falcon 3.0 requires an air base to have an Instrument Landing System (ILS). The ILS tells Falcon 3.0 *exactly* where to place your F-16 on the strip (within seven inches!).

Unfortunately, in Falcon 3.0, each theater has a maximum of only ten ILSs, and hence, only ten possible air bases from which you can fly. These ten default bases aren't nearly as much fun as they could be: there are some mountain strips that are really interesting to launch from but don't have an ILS, and few of the default air bases are close enough to the forward line of troops to suit my taste (within reason, being closer to the action livens up the sim, even if it isn't the most realistic scenario). Also, as mentioned above, these default bases are mainly chosen to move you farther from the action in case of a retreat.

So some real, heavy changes were made. It took quite a while, but every airfield in the Falcon 3.0 world was mapped out and data files were created to hold the exact locations of their runways. Now, when you change your home base, the Falcon 3.0 ILS data file itself is updated to contain an ILS for the new base you've chosen, and one of the defaults is necessarily thrown out. So instead of just allowing you to start from any of the default bases, StratFalc will allow you to start from *any* allied-occupied runway, be it air base, airfield, or commercial airport! As your troops advance, any enemy air bases that fall under their control will become available to you: if desired, you can now stay in lock-step with the grunts for an entire campaign.

This method of implementation has a couple of obvious disadvantages. First, there's only one ILS file for any theater at any one time. Strategic Falcon cannot keep all the air bases required for all active campaigns inside the proper file, so if you're flying more than one campaign in a theater at a time, conflicts may arise. This is the reasons for the rule mentioned in section I and reiterated here:

1) Only Fly One Campaign At A Time In Any Given Theater!

Also, when you begin a new campaign, it is conceivable that the air base

where Falcon starts you out may have had its ILS removed by an earlier run of Strategic Falcon. If this happens, and you try to start the first mission only to find yourself already airborne, simply run Strategic Falcon, open the afflicted campaign, and press "Save." StratFalc will place the required ILS in the theater. Or you can run the program "ILSRESET" which is supplied with Strategic Falcon.

If you want to go back to the default bases manually, the files needed to do so are on your hard drive. During its installation, Strategic Falcon backs up the ILS data files before it installs its own. Here are the names:

Israel:	ILS.ISR is backed up as ILSISR.BAK
Panama:	ILS.PAN is backed up as ILSPAN.BAK
Kuwait:	ILS.IRQ is backed up as ILSIRQ.BAK
Kuriles:	ILS.HOK is backed up as ILSHOK.BAK
Korea:	ILS.KOR is backed up as ILSKOR.BAK
Pakistan:	ILS.PAK is backed up as ILSPAK.BAK
Bosnia:	ILS.BOS is backed up as ILSBOS.BAK

To return to the default settings, simply copy the file name on the right back to its original file name on the left.

Forcing an ILS: If you want to place an ILS at an airbase that doesn't have one, you can trick Strategic Falcon into placing one there. Just move the starting waypoint of your first F-16 flight to the desired strip and press the "Save" button (you'll probably have to unlock the waypoint to do this). Now move the same waypoint back to its original location and press "Save" again. To verify that the new ILS has been placed, change to the Other/Weather submode and check the "Show ILSs" box. It should show an ILS at the new site.

As a final benefit of the new ILSs: If you use Greg Prete's F3Maps to change your Red Flag theater, you'll discover that—after you've changed the defaults for a theater—planes will now land where you tell them to, instead of lining up on a runway only to peel off at the last minute and head for one of the ILS-default strips.

Missions: Impossible—Defensive Screen and Distant "Two-Column" CAS Missions

Here are some of the practical uses for "Unlocking" a start-up waypoint. Once in a while you'll draw a defensive screen mission; these can be either easy or impossible.

Briefly, in a defensive screen mission the enemy force usually consists of two flights—a high CAP flight (12,000 ft.) and a low CAS flight (3,300 ft.) You have to destroy all of these aircraft *before* they destroy *any* of your ground units.

A column of allied ground units is also set up by Falcon 3.0 as a target for the CAS units. If these were the only ground units in the theater, everything would be fine. But they're not; sites become activated as you fly through the kill boxes and perform your intercepts, and the enemy CAS flight will attack the units at these sites as well. In this case, unfortunately, these units count. Frequently, the mission is lost before you even get off the runway! It really is "Mission: Impossible."

One of my beliefs is that there is no such thing as an impossible mission (Kurile Island pregenerated flights notwithstanding). If Jim Kirk could cheat on the Kobayashi Maru test, then we can rig the odds a little here. Go ahead: position your wingmen right on the CAS flight's six and watch the fur fly!

The other "Impossible Mission" sometimes occurs when you're supposed to fly CAS for an allied column that's pinned down. You fly to the location only to find that the enemy column has been wiped out by the good guys (so much for needing your help!). You land to "Mission Failure" because you didn't destroy any enemy ground units—it's totally irrelevant that there were none to destroy.

Strategic Falcon gives you two ways out of this conundrum. Either you can use Tactical/F-16s to move one of your flights' starting waypoint to start in the air near your target, or you can use one of the ground modes to separate the columns. You decide. (This isn't exactly as impossible as the first example; there is a purely "Falcon 3.0" way out of this. Fly to any enemy site and blast as many units as possible. You'll get credit for these kills.)

You Cannot Change "BOMB" Waypoints: an Explanation

In Strategic Falcon, you are not allowed to assign (or "unassign") a "Bomb" waypoint anywhere.

There is a good reason for this: the fulfillment of these actions is imperative to the successful completion of the mission, and Falcon 3.0 has set you up right on top of the appropriate target.

Additionally, if you bomb other sites with impunity, their destruction may not be properly recorded by Falcon 3.0, and you can later be assigned a mission to destroy, say, a runway that is already toast, and that mission will come back a failure. For this reason you should not bomb fixed "targets of opportunity" in the theater. Go nuts on SAMs and mobile units, but leave the runways and bunkers alone.

Usage Suggestions

In case you were wondering, I do have a few suggestions on how to employ this software. The overwhelming rule would be to maintain realism in the sim world, and here are some ideas to that end.

First, make any sweeping Strategic changes at the very beginning of a campaign, after receiving the first mission on Day One, 0600 and before flying it, and copy the associated data files (SQUAD?.CAM, SQUAD?.WAR, SQUAD?.MIS, SQUAD?.MTV, and perhaps SQUAD?.SQU if you want the roster as well) into a safe place, onto backup disks perhaps, along with a description of what that campaign is all about, what you had in mind when you altered it.

(If you create a particularly interesting one, zip it up and put it online. Though if you do upload, don't put the SQUAD?.SQU file inside the zip—you could too easily destroy someone's prize roster when he/she unzipped your file into his/her \FALCON3 directory!)

The only Strategic changes to make, after these initial changes—during a

campaign proper—would be those you felt corrected shortcomings of Falcon 3.0 itself. If you destroyed a bridge, for instance, you might use the Site Lines feature to make sure that the route was indeed severed; or if you wiped out a site, you might go in and switch its occupation (as mentioned elsewhere).

Tactical flight changes, however, should be made freely at anytime. There should be no qualms about using allied planes as SEAD strikes anywhere, but ground-to-ground attacks should be used sparingly. The alternate SEAD method (mentioned in Section I, remember? using a synchronized ground attack on a SAM site that's in your flight path?) should be limited to sites near or on the front lines.

There is one thing you should always keep in mind: it is extremely easy to "over correct" a Falcon 3.0 mission and make it too simple. You often have to make an effort to keep a mission's difficulty balanced. Believe it or not, StratFalc is not intended to be a "cheat" program—that's the main reason for the enemy lockout feature. Just because the Falcon 3.0 mission generates only four enemy planes, there's no reason for you to use the other twelve as allied types to shoot the poor bastards down!

Other changes—well, changing dates and weather should be done for variety. Changing home base, for variety as well as realism. It's rather stunning how *different* a war feels when not flown from the same base all the time. And all those long distance flights at the end of a winning campaign—sheesh!

Of course, it's left to you to decide how StratFalc is actually used!

Strategy Unleashed

In the grand strategic scheme of things, Falcon 3.0 itself forces you to be a doer, not a thinker. Oh sure, you have to plan out the individual missions and time everything properly, study the weather and the enemy placement, but the real decisions are left to the higher-ups. Falcon 3.0 is refreshingly consistent in its handling of you as a squadron commander. You are given a particular job and (hopefully) the tools to do that job.

But this utility is called "Strategic Falcon," and its avowed purpose is to take Falcon 3.0 and increase its scope to include strategy, and to make you not just a squadron commander, but a top-level decision maker. To make it a strategic simulation, you are given utilities to change the original setups of the theaters, to change the resupply lines, site strengths and capacities, and the victory nodes. You can do this at any time. The following paragraphs will discuss some of the decisions you might make.

Choosing Victory Nodes (More on Winning)

Wanna know a secret? Falcon 3.0 theaters have pre-chosen sets of victory nodes. They also have pre-chosen sets of defeat nodes. Each theater has three sets of each, and each set usually contains 15 nodes, although a few sets have less. And the nodes in the sets overlap heavily; Kuwait City, for example, is a victory node in all three of the Kuwait sets.

What this means is, despite what you may have heard to the contrary, you will probably fly very similar campaigns in any given theater. That is, until now.

The victory nodes Falcon 3.0 uses seem to be chosen to meet one of two criteria. Either (first) they are the most sensible, strategic ones in the theater—Kuwait City in the Iraq theater, for instance, or Seoul in Korea. Or (second) they are at the farthest reaches of the theater, like the sites in the foothills of the Himalayas in India, which in the real world, in a real war, are of little significance (we're not talking guerrilla warfare here).

In the first case, having sites chosen for their strategic value makes sense from a wargamer's point of view; in the second, having them chosen for their remoteness is reasonable for a game design (and there's absolutely nothing wrong with that!). It's a thoughtful compromise, especially when you consider the designer's alternative: the random generation of a victory node list. Gameplay would be at best uneven, and at worst ridiculous. (Although this package will allow you to do that very thing.)

But (acknowledging that I'm using the term very loosely and not as it is understood in today's computer-entertainment lexicon) Falcon 3.0 is a wargame

and you're a wargamer. If you're like me, you want the goals of the war to be strategic, and gameplay be damned. So you want to choose sites that are strategic goals. What would best suit this criterion?

Virtually all standard wargames—and all standard wars—are concerned with the capture of cities. So the city nodes have to be the primary items on any "normal" victory list. After these are chosen, priorities become less clear, but I opt for military air bases, then civilian ones. Then the smaller towns and military ground bases, and finally political and economic targets. But this is just one person's opinion! For instance, I can see how political and economic targets could be much further up on your list.

(A special note: modern military strategy dictates early air superiority above all else (pardon the pun), and that concerns us deeply here, so the occupation of air bases could well be on the top of any list. "What if I were to just destroy them, but not occupy them?" you may ask. Personally, I think it's too easy to repair a runway—occupation is the key.)

There is nothing that says you have to play a "normal" game—that's the beauty and the power here. Maybe those little towns in the hills are hiding forty-five billion rupees in gold bullion, or the president's daughter is one of forty-four hostages held in an oil refinery. Maybe the war has limited aims: you only have to knock his planes out of the air and keep them down, so air bases are the only targets. You decide, and then make sure you lead your squadron to enough victories to get the job done.

Site Capacity, Strength, and Growth Rate

How you might set up each site for capacity, strength and growth is heavily dependent upon your selection of victory and defeat nodes. You must deploy your forces sensibly to maximize their pressure on the proper sites and supply lines. And you must set up the enemy's forces to defend those lines (if you believe he has that much intelligence; otherwise, you may want to place his forces elsewhere, like at the rear of the theater).

The capacity of a site indicates how many units it can hold. You'd expect to

find the largest capacities in cities and the smallest capacities at bridges. Strength is how many units a site currently holds. Just because a site has a large capacity, it does not necessarily follow that it would have a large strength. You'd expect army bases to have both high strengths and capacities, while a city in the rear may have a large capacity and very few units.

The growth figure indicates roughly how many new units will appear at a site at 0600 each day. Growth only applies to sites that are "Combatant," or actively involved in the war effort. High growth areas would be cities or industrial complexes. Bridges would be zero.

Strategic Falcon and F3Maps

If you enjoy Greg Prete's F3Maps program as much as I do, you'll be glad to discover that Strategic Falcon and F3Maps mutually enhance each other (mutually enhance each other? "re-dun-dan-cy n., 1: see redundancy.") You have to do a little extra work to take advantage of this, though.

To make everything clear, a little background about how Falcon 3.0 works, and consequently what Strategic Falcon does to it, is needed. Please bear with me.

The "raw data" for the sites in a given theater are kept in a file with the extension ".THE". For instance, the data for all the sites in Israel are kept in "ISRAEL.THE." When you begin a campaign in Israel, say with SQUAD0, Falcon 3.0 copies ISRAEL.THE file (along with other pertinent data it creates) into the new SQUAD0.CAM file. As your missions change the properties of individual sites during the campaign, Falcon 3.0 keeps track of the changes in SQUAD0.CAM, and leaves the original ISRAEL.THE unchanged—so it can become raw data for the next Israel campaign. Strategic Falcon also alters data only in the CAM file; it never touches the original *.THE file.

When you change your default Red Flag theater with F3Maps, your Red Flag missions always take place in the new theater as it is stored in the original theater *.THE file. So, by default, you'll always fly over a theater in its origi-

nal state.

BUT, one of the "hidden" features of Strategic Falcon (and your reward for reading this far), is that any time you change the status of a theater in a campaign, a new file is generated in the original *.THE file format! This file will have a name of SQU?THE.NEW, where the "?" is the number of the squad which you've changed. (If you're not sure of your current squad number, just sort your Falcon 3.0 directory by date after you exit StratFalc—"DIR /OD"—and the proper SQU?THE.NEW file will be near, or at, the bottom.)

So, what do you do now? Most likely, you've already guessed it. First, BACK UP THE ORIGINAL *.THE FILE!!! Then rename (or copy) the SQU?THE.NEW file to the appropriate *.THE file. Hey guess what, you've changed the default setup for that theater, and any new campaigns that begin there will have the new setup, as well as any Red Flag missions (and Instant Action, for that matter)!

You cannot do this independent of a campaign, so if you just want to change the Red Flag theater setup, you'll have to begin a dummy campaign to get at the data. And bear in mind that, as far as Red Flag goes, strength is irrelevant. Site units never appear in Red Flag.

Of course, your Uncle Bill wouldn't leave you without a net here, either. When you installed Strategic Falcon, backups of your original theater files were automatically created without your say so (or, at least, it was attempted). The following files contain the backups:

Israel:	ISRAEL.THE is ISRTHE.BAK
Panama:	PANAMA.THE is PANTHE.BAK
Kuwait:	KUWAIT.THE is KUWTHE.BAK
Kuriles:	JAPAN.THE is JAPTHE.BAK
Korea:	KOREA.THE is KORTHE.BAK
Pakistan:	INDIA.THE is INDTHE.BAK
Bosnia:	BOSNIA.THE is BOSTHE.BAK

If you want the originals back, just copy the name on the right to the name on the left. If for any reason these backups have been deleted or not properly created (for instance, if you installed OFT or Hornet after Strategic Falcon),

you'll have to reinstall the Falcon 3.0 system to get these files back!

Multi-Player Considerations

Perhaps one of the biggest disappointments in the use of Strategic Falcon is its lack of support for comms. For versions 3.02 through 3.04 of Falcon 3.0, comms support is extremely limited.

If you play Falcon 3.0 Head-to-Head, Strategic Falcon can make things more interesting for you. Of course, in a classic two-player duel there's nothing much for this program to do: with the exceptions noted for F3Maps' Red Flag theater changes and Instant Action changes, StratFalc is strictly a Campaign modification tool. But if you play multi-player campaign mode, things can get interesting.

In brief, what you can change in a multi-player campaign depends on which version of Falcon 3.0 you're using.

In detail:

First of all, MiG-29/Hornet campaigns are not supported at all. Don't even try! The only comms supported are allied campaigns.

Falcon version 3.01.1 is much more forgiving and will be discussed separately. **THE FOLLOWING PARAGRAPHS ONLY APPLY TO FALCON VERSIONS 3.02 THROUGH 3.04:**

The changes you can make to a mission in StratFalc are the same as in Falcon 3.0. The only wrinkle is that you can move the beginning and ending waypoints of an F-16 flight. You can not change any aspect of any allied or enemy flight, nor can you change your wingmen's aircraft types.

Strategically, all options are open: you can move your home base, change the occupation and strength of the sites, change victory and defeat nodes, etc. To make these types of changes, Strategic Falcon must be present on at least the caller's system (oh, buy a copy for everybody anyway—I could use the sales!).

IMPORTANT NOTE: If, on the caller's system, SQUAD0 (the first squadron to come up when the word "SQUAD" is hit in the Falcon 3.0 War Room) is currently in use on a (single-player) campaign AND THE CURRENT MISSION FOR THAT CAMPAIGN HAS BEEN MODIFIED WITH STRATEGIC FALCON, you must run CLEAR.BAT from either the Falcon subdirectory or the Strategic Falcon subdirectory before entering Falcon to establish the communications campaign. You must do this because the current SQUAD0.MIS has had its read-only bit set by the earlier use of StratFalc, and you have to clear that bit. CLEAR.BAT will do that for you automatically.

a) Start a comms campaign in the normal manner, using a new campaign with the first Falcon 3.0 squadron to come up when you press "SQUAD" in the War Room. This ensures that you're dealing with the "SQUAD0" files and minimizes confusion later.

b) Go through the screens and get all players into their cockpits. (Everyone can hit "Escape" for the joystick calibration; no one will actually be flying anywhere at this time.)

c) After everyone's in a cockpit, the caller should press <ALT-X> to get to DOS. The other players should also exit to DOS—after the caller has done so.

You can try creating a mission in single player mode, modifying it in StratFalc and then entering comms to fly it. This way you can save considerable time by not having to get everyone online twice. However, there have been some strange results when doing this with Falcon 3.02-3.04. It seems to work more reliably in Falcon 3.01.1

d) The caller must copy his SQUAD6 files to SQUAD0 by issuing the following command from the DOS prompt (while in his Falcon subdirectory):

"Copy Squad6.* Squad0.* <Enter>"

e) Begin Strategic Falcon. Make any changes desired, bearing in mind the restrictions mentioned above. (You won't hurt anything by changing the tactical setup; the changes just won't "take" in Falcon 3.0—it will override them and reestablish its original mission.) Save the changes.

f) Run "CLEAR.BAT" again.

g) There is no need to copy SQUAD0 to SQUAD6; Falcon 3.0 will do that

for you automatically when you select SQUAD0 to enter comms.

h) Reestablish the comms campaign and your (limited) changes will be in effect. There is no need to copy SQUAD0 to SQUAD6; Falcon 3.0 will do that for you automatically when you select SQUAD0 to enter comms.

THE FOLLOWING PARAGRAPHS ONLY APPLY TO FALCON VERSION 3.01.1:

If you use Falcon version 3.01.1, life is a lot easier regarding Strategic Falcon. You don't need to install the Strtsprt TSR; you don't need to worry about read-only bits. And if you play Comms mode with version 3.01.1, you're in for some surprises.

Your wingmen (the "answerer(s)") can fly any type of allied aircraft AND THE FLIGHT MODEL WILL CHANGE ACCORDING TO THE AIRCRAFT THEY'RE FLYING! What this means is the F-16 will handle like a B-52 if that's what you turn it into (and it handles like a pig, by the way). To all outside appearances, it will be a B-52. Of course, your cockpit artwork won't change—it will appear from the inside to be an F-16.

First and foremost, a disclaimer. Please bear this in mind: we are pushing the envelope here. Do not expect everything to run smoothly if you go changing your wingmen's types. And DON'T blame Spectrum Holobyte for any shortcomings of flight models! These were never meant to be used in this way.

But, all that aside, say hello to the Electronic Battlefield™!

I will repeat the steps given above just so version 3.01.1 instructions are all in one place:

a) Start a comms campaign in the normal manner, using a new campaign with the first Falcon 3.0 squadron to come up when you press "SQUAD" in the War Room. This ensures that you're dealing with the "SQUAD0" files and minimizes confusion later.

b) Go through the screens and get all players into their cockpits. (Everyone can hit "Escape" for the joystick calibration; no one will actually be flying

anywhere at this time.)

c) After everyone's in a cockpit, the caller should press <ALT-X> to get to DOS. The other players should also exit to DOS—after the caller has done so.

> You can try creating a mission in single player mode, modifying it in StratFalc and then entering comms to fly it. This way you can save considerable time by not having to get everyone online twice.

e) The caller must copy his SQUAD6 files to SQUAD0 by issuing the following command from the DOS prompt (while in his Falcon subdirectory):

"Copy Squad6.*Squad0.* <Enter>".

e) Begin Strategic Falcon. Make any changes desired, without restriction. Save the changes.

f) There is no need to copy SQUAD0 to SQUAD6; Falcon 3.0 will do that for you automatically when you select SQUAD0 to enter comms.

g) Reestablish the comms campaign and your changes will be in effect. Nobody will want to be the caller anymore!

Personally, I believe any drawbacks of the Falcon 3.01.1 comms routines must be disregarded when it comes to comms multi-player mode, if you are looking for the type of flexibility Strategic Falcon can provide. If you've got the hard drive space, why not create a new subdirectory and reinstall Falcon 3.0, and just patch up to 3.01.1? Strategic Falcon will support multiple versions of Falcon 3.0—even in the same session. You only have to change the path in the Configuration submode.

One more note: armament loading for comms mode is at best an arcane science. It's been said elsewhere: load the minimum amount of weapons to get the job done. Load plenty of extra fuel. To get anywhere in a B-52 you'll have to be in AB5 just about all the time. Use F3 Requisition to keep your fuel supplies up.

Also, if through your experimentation you come up with some real maximum weights for the various aircraft types, I'd appreciate it if you'd send me the figures. I'll put them in the applicable Max Weight boxes when (er, I mean if) I issue a patch to StratFalc.

The implications of the ability to fly different plane types would require much more space than I plan to devote here—it would probably fill a second manual. If you delve into this "undocumented feature" of Falcon 3.0 (I'd call it the "King of the Easter Eggs"), you should always remember that you are in uncharted territory. Here are just a couple examples:

While flying the B-52, I discovered that I could not pull my joystick above the center of the screen. However, the autopilot could fly the plane normally. I turned off the joystick and tried again using only the keyboard cursor keys for movement. Now the plane was flyable.

So I recalibrated the joystick using only half of its vertical travel (that is, when it said "center," I pushed one-quarter forward, and when it said "lower right," I went to "center right"). After performing this calibration, I was able to fly the BUFF with my trusty old FCS.

Maybe your first question: "If comms is using the flight model of the substituted aircraft type, what about the helicopters? How do those fly?" The answer: they don't. The only apparent way to use an AH-64 effectively in Falcon 3.0 comms is to have the autopilot take it close to the target, then you take over for the attack. Yes, you can hover. If you want motion, though, you'll have to nose over and "slide" forward. But (for once) you'll actually be able to hit something with a LAUs!

These are just a couple of examples. I personally think the payoff is worth it—a B-52 can carry 24 Mk-84s, and an F-111 carries a pretty nice payload, too.

Kill Boxes in Detail

This all wouldn't be complete without more discussion of Kill Boxes and the

way they affect your play in Falcon 3.0 and your use of Strategic Falcon.

In the best of all possible worlds, having these separate "activation areas" in Falcon wouldn't be necessary. I'm sure the designers pondered a long time before they implemented this system, trying to meet the needs of a theater that encompasses 102,400 square nautical miles! The debate must have gone something like this:

There are up to 80 strategic sites in one of these theaters; a site can hold 60 units. If you add the 76 more that could be introduced for some mission types, there are up to 3276 units battling in one theater at one time! Each unit has its own "brain," or behavior, so to track each unit requires CPU time and RAM. And we're talking DOS, with its 640K limit. The primary considerations have to be the flight model of the F-16 and the smoothness with which it flies. That leaves very little overhead for tracking 3200 of anything, be they independent tanks, artillery pieces, or Godzillas.

It's obvious what the trade-off would have to be: either put "dumb" units in the theater or put "intelligent" ones in there and somehow limit how many the computer had to track at any one time. If Falcon 3.0's designers had chosen the former method, using tanks that did no more than sit there and be Maverick-bait, a *lot* of the magic of the sim would be lost (and Strategic Falcon would never have been written!). But they chose the latter, and so had to break the theater down into more manageable pieces. They did this by keeping "only" 400 square nautical miles active at a time. In return they gave us trucks that are smart enough to scurry away from a battle, artillery that bravely holds the line, and M1s that madly fall upon their enemy and fight to a fiery death. They even gave us tank drivers who scramble from a damaged vehicle in those final seconds before it explodes!

The challenge with Strategic Falcon was to make the best of this trade-off. I had to decide whether to limit a commander (you) to attacking only those sites that would most likely be active during a mission—the ones in the general neighborhood of his/her own F-16—or to allow him or her to attack *anywhere* in the theater, and try to explain what must be done to make that attack "work" from a strategic and Falcon 3.0 standpoint. Obviously, I chose the latter, and so really I've left the choice up to you. Consequently, I've made StratFalc quite a bit harder to understand and to use effectively.

So the point here, then, is this: the responsibilities of command are manifold, and the decisions you have to make are both large and small. One of those decisions is how to best use the tools at your disposal, and Strategic Falcon is one of those tools. You can decide to use it in the manner I've just described, and minimize the negative side of Kill Box effects. What this means is that you keep any attacks or allied flights inside the box or boxes where your F-16 will be flying, so you get the best of both worlds: full control of your own plane at all times (Otto can be a real jerk), as well as a working ground or allied air attack going on somewhere around you. Or you can decide to employ the other methods of site activation and, at times, leave your jet on autopilot. In this manner you get full control over the strategic situation in the entire theater.

Personally, I believe the correct way to use Strategic Falcon is to do both. For most missions, I suggest looking for ways to keep things local. If, between you and the current mission's objective, there's a site that needs SEAD, set up the attack. But if a site elsewhere becomes too much to handle and it's obvious one coincidental strike won't keep it under control, go "out of plane" and hit it hard during a couple of missions.

What's really important is to understand what has to be done to make strikes be effective and to understand the trade-offs you're accepting when you do so. These trade-offs aren't my fault and they're not the fault of Falcon 3.0's programmers. They were made necessary because even a 486 has real limits and because DOS was implemented with a 640K barrier. All we can do now is make the best of it.

Software Support and Update & Upgrade Policy

There are several things I want to improve about Strategic Falcon. For example, I believe the screen redraws too slowly and that moving waypoints could be better implemented. (And I'm sure there are bugs lurking in here somewhere.) So there will be, at least, minor updates. Here's my update policy: all patches will be available on CIS and the SimNet BBSs (and other places). If you need me to *mail* you a patch, I have to charge you enough to cover the expense of the disk and postage (and, believe me, that's *all* I'll charge!).

The SimNet Bulletin Boards

The Trade Center	San Mateo CA	(415) 340-0197	Gabriel Turk
Check Six BBS	Orange Co CA	(714) 362-8299	Patrick Gost
The Fast Tracks	Sunnyvale CA	(408) 739-5781	Jedi
Beta	Los Osos CA	(805) 528-6829	Steve Parker
The Twilight Zone	Edwards CA	(805) 258-0413	Robert Ayers
Powerline BBS	Valdosta GA	(912) 249-9585	Robert Whitt
Modem CONNECTion	Atlanta GA	(404) 952-8981	Pat Coloney
Cyber Space BBS	Milwaukie OR	(503) 654-4645	Scott Johnson
Afterburner BBS	Ft Worth TX	(817) 292-4193	Jeff Herman
The Contrails	Euless TX	(817) 355-9242	Joe Richter
The Fox Den	N Britain CT	(203) 223-5217	Clyde Fox
Reverse Polarity	Plantsville CT	(203) 620-0001	Bill Arlofski
The Spacedock	Newington CT	(203) 666-4999	Jim Bills
32 Bit Bus BBS	Levittown PA	(215) 949-2701	Bob Bernstein
NM Railroad Conn.	Los Lunas NM	(505) 865-8412	Bill Castello
Silver Software	Albuquerque NM	(505) 268-8502	Sterling Moses
Fox One BBS	Broken Arrow OK	(918) 251-3160	Bill Rogers
Landing Approach	N Muskegon MI	(616) 744-0772	Tim Suckow

I realize that this isn't how most of the industry does updates—charging for mailing—but it's the best way for me to keep the cost of the software down. If I face the cost of mailing out additional disks, I'd have to up my price significantly.

If there is a major upgrade (meaning significant new features—we're talking version 2.0), it'll cost you some additional (small) upgrade price. As a registered user, you'll automatically be kept abreast of upgrades.

If you have questions, comments, or suggestions about Strategic Falcon, you can reach me through CompuServe or the Internet at the address given below in the "Registration" section. If you don't have access to either of these, you can mail your question to me at the registration address, but paper answers will take me *much* longer to handle!

How to Register

To be kept informed of upgrades, you have to let me know who you are and how to reach you. Please print out the simple form "REGISTER.DOC"

which can be found in your StratFalc subdirectory. Send it to me at the address indicated or you can e-mail it to me through CompuServe or Internet.

Mail form to:

Bill White
Flying Muffin Enterprises
P.O. Box 1297
New London, CT 06320 USA

or e-mail to:

Bill White
CIS: 74650,746
Internet: 74650.746@compuserve.com

Acknowledgments

A lot of people have helped bring Strategic Falcon into existence. Foremost, I'd like to thank the people at Spectrum Holobyte for creating such a wonderful and multi-faceted simulation with which to work. And Strategic Falcon certainly wouldn't have been finished if it hadn't been for the aid and professionalism of Ken "Stinger" Richardson, who provided the essential STRTSPRT.COM. Also, I'd like to thank Mark Shepler at Keyboard Commander Corp. for his aid in positioning and distributing the software. Thank you to all the people who helped test this thing (To find out who they are, exit StratFalc using the right mouse button). To the members of CompuServe's FSFORUM, Section 8: thanks for the suggestions (and the patience!).

Finally, Strategic Falcon is dedicated to my wife, Bridget. Through countless hours of hacking and frustration, she's borne with me, listened to me complain and rant, and has even—believe it or not—played Falcon head-to-head over the null modem to help with testing! (She's also maintained the FalcCalc users' database and so made it possible to offer StratFalc to those users directly, as well as proofread this manual to clarify the many spaghetti sentences, like this one.)

Legalese

Here's the obligatory mumbo-jumbo. If you do not agree to the following terms and conditions, return the disk to the place of purchase and your money will be refunded.

1. You have the right to use the files SF.EXE, STRTSPRT.COM, LT.EXE, and ILSRESET.EXE, along with their associated support files (which comprise the STRATEGIC FALCON program). This program can only be used on a single computer. You may physically transfer the program from one computer to another provided that the program is used on only one computer at a time.

   However, you may not:

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   - ✓ distribute copies of the program or documentation to others.
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No guarantees are made as to the utility of this program with Falcon 3.0. STRATEGIC FALCON will NOT work with any Falcon versions other than 3.01.1 through 3.04 and probably won't work with any future upgrade until it is modified.

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A Final Note (Or, "Geez, Bill, what took you so long?")

I've been working on Strategic Falcon in one capacity or another for well over a year now. It's come together in fits and starts, and just about everything has taken four times as long as I figured it would.

Take the "Move Home Base" feature, for example. When first conceived, it was a simple affair that changed the integer in the CAM file that dictated the home base. The code to do this, including the code to discover all the possible allied bases, took about 45 minutes to write.

But it turned out to be quite a bit more difficult: Falcon 3.0 had to know exactly where and how to put the plane on the tarmac. That wasn't unexpected; I was just blindly hoping that the necessary data was already in there

somewhere. Well, it wasn't, and I spent a few days translating the integer waypoint format for the bases into the necessary long integer format needed to find those bases in Debug mode, then transporting to each base and moving to the start of the airstrip, recording its exact location, then setting up a worksheet and entering each of the coordinates (plus heading and altitude), then writing a small program to read that worksheet and translate it into the necessary data files for StratFalc to use, and finally adding the new code to StratFalc itself that would read those data files and translate it into the proper Falcon 3.0 ILS data file so it would work with Falcon 3.0.

This took considerably longer than 45 minutes.

This is just one example. It seemed every feature fought back in some way or another and, on top of that, I'm just slow. Plus distractions such as FalcCalc updates, etc. All this is to explain why it's taken so long to get this out the door. I really do appreciate your patience! (And, oh yeah, thanks for the purchase!)

Now, what next: MiG-29 or Hornet? And more importantly, *when?*

Glossary

CAM file: The data file where Falcon 3.0 stores information about the current campaign, with a name such as SQUAD1.CAM. This information includes site data, F-16 flight data, and squadron armament levels, among other things. It is accessed directly by Strategic Falcon. A backup of this file is normally made by StratFalc and kept under the name SQU?CAM.BAK, where "?" is the number of the appropriate squadron. Compare "MIS file."

CAS Mission: Any Falcon 3.0 mission that requires the direct attack of enemy mobile units or the active defense of friendly mo-

bile units.

F-16 flight: By definition, a flight that uses the *.CAM file (as opposed to the *.MIS file) to store its waypoints and actions. The waypoints and actions of these flights can be manipulated directly from within Falcon 3.0 itself. With StratFalc, an F-16 flight can be altered to contain any currently available allied plane type (set with the "Set Aircraft..." dialog) and also can have its "Takeoff" and "Land" waypoints unlocked.

Focus: Where the computer monitor's "eye" is currently located in the Falcon 3.0 simulated world. This is normally inside the F-16 cockpit, but it may also be on a wingman's aircraft, an allied or enemy aircraft, or anywhere else (using Falcon 3.0's "Debug" mode). The current focus dictates the currently active Kill Box.

Kill Box: (Also called a "quadrant" or a "focus box.") One of 256 squares, twenty nautical miles on an edge (400 square miles) each, into which Falcon 3.0 divides its theaters. When the "focus" of the simulation is brought into a particular kill box, any sites in that box become active.

Locked Waypoint: A waypoint for an F-16 flight that is normally immovable, and is never moveable while inside Falcon itself. These are the waypoints for takeoff and landing. Strategic Falcon will allow you to move these waypoints, but will warn you first. Once a waypoint has been unlocked, it cannot be locked again during that mission.

MIS file: The data file where Falcon 3.0 stores information about the current mission, with a name such as SQUAD1.MIS. It is accessed directly by Strategic Falcon. A backup of this file is normally made by StratFalc and kept under the name SQU?MIS.BAK, where "?" is the number of the appropriate squadron. Compare "CAM file."

Momentum: The impetus of the war effort. Falcon 3.0 tracks momentum in two ways: that of the current day, or *micro* momentum, and that of the last several days, or *macro* momentum. Strategic Falcon allows you to directly change both of these quantities.

Skill Level: The attributes of a pilot that indicate how proficient he is. These are "Flying," "Dogfighting," and "Bombing." Fatigue is not a skill level but has a degrading effect upon those levels, and then only for F-16 (Falcon 3.0) flights, not StratFalc flights.

StratFalc flight: By definition, a flight that uses the *.MIS file (as opposed to the *.CAM file) to store its waypoints and actions. These flights cannot be altered from within Falcon 3.0, but can be altered from within Strategic Falcon.

Temperament: The tendency of a pilot or ground unit to act in a certain manner. For instance, an *aggressive* C-130 pilot often thinks he can outfly a MiG-29, while a *timid* one might bail out as soon as it painted him from 80 clicks away.

Theater template: The file Falcon 3.0 uses as "raw data" when creating a new campaign in a given theater. It has a ".THE" extension and holds the information on how the theater is set up at the beginning of a conflict, and can be altered, indirectly, through the use of Strategic Falcon.

ILS file: The data file that Falcon 3.0 uses to keep information about the user-accessible runways in a theater. It stores information on location, orientation, and altitude for ten runways. This file may be modified by Strategic Falcon when a user changes his or her home base.

Transporter Room: The "Debug Mode" feature that can be used to reach any location in a theater instantaneously. It is accessed by pressing the <T> while in Debug mode (which itself is accessed by pressing <P> then <Tab>).

WAR file: The data file where Falcon 3.0 stores information about the current campaign's objectives, with a name such as SQUAD1.WAR. It is accessed directly by Strategic Falcon. A backup of this file is normally made by StratFalc and kept under the name SQU?WAR.BAK, where "?" is the number of the appropriate squadron.

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