

F-4S & F-4J Phantom II



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MINIMUM SYSTEM REQUIREMENTS:

THIS PRODUCT REQUIRES FSX ACCELERATION, FSX SE, FSX SE SIDE X SIDE OR PREPAR3D V1.4. A SEPARATE INSTALLER IS AVAILABLE AND REQUIRED FOR P3D V2.5+ . IT IS ALSO DESIGNED FOR NEWER COMPUTER SYSTEMS WITH AT LEAST A 2.6 CORE 2 DUO, 4GB OF RAM, 1GB VIDEO CARD WITH DX10.1 OR GREATER AND 1.2GB OF FREE DISK SPACE. OPTIMAL REQUIREMENTS ARE AN I7 960 CPU, 8 GB RAM, 2 GB VIDEO CARD, OR GREATER.

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Special Thanks

Milviz would like to express their gratitude and thanks to those not listed in the credits above. Their artistic and technical contributions not only helped to make the Milviz Phantom II F4S & J possible, but undoubtedly, the most superior rendition available in the flight sim world to date.

TECHNICAL WRITER: RICH PETOCZ

The goal of this user guide is to familiarize the reader with the Milviz F-4 Phantom II as it relates to **FSX and Prepar3D** flight simulators. The *Milviz F-4S&J User Guide* intentionally avoids excessive technical terminology and leaves that aspect to the professionals who released the *official* McDonnell Douglas Phantom II manual. We've included one of several versions in this package, (file name "**MD F-4S&J**"), for those of you who want to really get 'inside' the Phantom II.

Alternatively, those of you new to flight simulation in general, and/or have little experience with official aviation procedures may find the Milviz F-4S&J user guide a bit more *palatable*.

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Installation:

[Turn Off your Anti-Virus!]

Please take a few moments to disable all your anti-virus and malware security software before beginning the Milviz Phantom II installation. Taking a moment to do that can avoid time-consuming troubleshoots and correspondences with the Milviz support team!

1. Download the **Milviz F-4S&J Phantom II** to your desktop or folder of your choice and unzip the file.
2. After disabling your anti-virus software, right-click on the installer and select “**Run As Administrator**”.
3. In the following screen, select your simulator version and then click “**Next**”.
4. The installer will locate the flight simulator you've selected and complete the installation. (If you have FSX & P3D and want to install the F-4S&J in each, simply re-run the installer after it completes the installation in the sim you've selected first).
5. Upon the completion of the installation, a short, separate, user guide focused on the installed *Desktop ACM*, (“**DT ACM**”), will open[†]. In addition, you'll find a **Milviz ACM** desktop icon. The **DT ACM** offer's many configuration options for the **F-4S&J** aircraft you've installed. If you already had a Milviz ACM menu Icon installed from previous Milviz product purchases, you'll find the **F-4S** and **F-4J** icons added to that selection. (*Please note that only a select few and not all Milviz products are included in the Milviz ACM menu shortcut*).
6. Re-enable your anti-virus and other security software.

In addition to this **F-4S&J User Guide**, you'll find the official **McDonnell Douglas F-4S&J Phantom II PDF** manual in the Documents folder as well.

[†] Please take a moment to read the **F4ACM** guide before opening your first flight in the F4. It covers how to profile your controls and specifics regarding the plane's *NWS Control* (ground-steering), and *Drag Chute* operations.

* The “**F4ACM**” user guide which opened after installation may be occasionally updated with new information as needed, so please check it with any F4 patch updates for revisions.

Some features simulated in the Milviz F-4S&J:

◇ KEYBOARD/JOYSTICK/HARDWARE *PROFILER* TO EASILY ASSIGN YOUR HOTAS BUTTONS TO THESE ACTIONS:

◇ Flaps	Pitch/Roll/Yaw SAS switches	◇ Auto Flight-plan waypoint sequencing toggle (retrieves waypoint data from FSX flight plan)
◇ Speed-brake	◇ Autopilot Master/Altitude Hold switches	◇ MIL/Afterburner threshold control
◇ Pitch/Roll/Yaw trim	◇ Nose-Wheel-Steering (NWS) control	◇ Afterburner can be engaged either by throttle position, or by throttle position combined with input command
◇ Afterburner control	◇ Drag Chute control	◇ Aircraft Carrier assisted landings, (APCS [†]).
◇ Engine Master switches	◇ Cold and Dark/Ready to Fly, (default), control	
◇ Engine start switch	◇ Radar Warmup toggle	
◇ Throttle idle/cutoff control	◇ Auto Present Position Update toggle	

IMPORTANT: The Milviz F-4S&J includes many accurately simulated features true to the real-word model such as performing simulated ILS assisted carrier landings (APCS[†])!

However, the “Autoland” system in the real-word aircraft is **NOT** simulated in the Milviz F-4S&J models.

At the time of the Milviz F-4S&J release, the accompanying user guides are incomplete. However, the F-4S&J package includes a complete, McDonnell Douglas “official” F-4S&J NATOPS PDF manual.

The accuracy of the Milviz F-4 system simulations are such that you can follow the steps as outlined in the MD F-4 PDF manual to operate any of the systems actively simulated in our F-4.

The Milviz F-4S&J User Guide and the F4ACM guide will be updated soon and your patience is appreciated.

[†]Simulated “**APCS**” landings require the “TacPack[®]” software by VR Simulations, (<http://www.vrsimulations.com/tacpack.htm>). Please note that Military Visualizations Inc. does not support, endorse, or promote any third party software, and will not accept responsibility for those products outside the Milviz inventory.

Please note that the Desktop & In-Game ACM options are subjected to changes and additional functions with product updates. Therefore, this user guide may not reflect all available options beyond this revision date.

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PHANTOM II F-4S&J

BASIC DIMENSIONS

McDonnell Douglas did not include their more typical “basic specs” table usually found near the beginning of their manual for the F-4S&J Phantom II. This is probably because there are a wide variety of configurations and other factors to consider making a table of that kind of pointless.

Instead, they refer to operating weights taking all these factors and configurations in a more specific detailed fashion throughout the manual. Please refer to their manual for those specific minimum/maximum weights of various armament configurations on pages such as 507, and a good bit of coverage that begins on page 495.



Wingspan	38.5 ft. [27.7 ft. when folded]
Length	58.3 ft.
Height	16.6 ft.
Max Speed	Mach 2.2

The Phantom II doesn't have a “Parking Brake”! The flight sim's default key assignment for the parking brake will not work. The Phantom II has a “Emergency Brake” and is never used for anything but...well, emergencies.

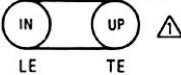
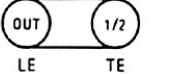
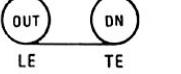

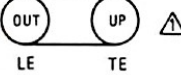

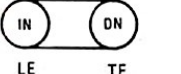
However, selecting “Chocks” in the Load-Out manager may, (or may not), turn on the flight sim's default “Parking Brakes” indicator in the lower left corner of the monitor.

The MD F4S&J PDF manual, (page's 87-90 and more), explains the F4's brake system. In short, it's used under emergency conditions along with the differential toe-brakes. The bad news is that it depletes the hydraulic accumulator each time the pedals are applied or released.

Therefore, it has a limited number of uses before the accumulator is drained and that pretty much means you shouldn't use it to keep your parking place 😏

FLAPS AND SLATS

SPECIFICATIONS

FLAPS/SLATS NORMAL CONTROL SYSTEM OPERATION					
FLAPS/SLATS CONTROL SWITCH POSITION	SLATS OVERRIDE SWITCH	TRAILING EDGE FLAP POSITION	LEADING EDGE SLATS	AILERON POSITION (STICK NEUTRAL)	FLAPS/SLATS POSITION INDICATOR INDICATION
UP-NORM	NORM	FULL UP	IN	UP	
1/2-OUT	NORM	1/2 DOWN	OUT	BOTH AILERONS DOWN 16 1/2°	
DN-OUT	NORM	FULL DOWN	OUT	BOTH AILERONS DOWN 16 1/2°	
UP-NORM	OUT 	FULL UP	OUT	UP	
DN-OUT	IN 	FULL DOWN	IN	BOTH AILERONS DOWN 16 1/2°	

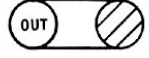
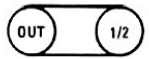


FLAPS/SLATS EMERGENCY CONTROL SYSTEM OPERATION					
FLAPS/SLATS EMERG CONTROL HANDLE POSITION	TRAILING EDGE FLAP POSITION	LEADING EDGE SLATS	AILERON POSITION (STICK NEUTRAL)	EMERGENCY AILERON DROOP SWITCH POSITION	FLAPS/SLATS POSITION INDICATOR INDICATION
FORWARD NORMAL POSITION	SHOULD AGREE WITH FLAPS/SLATS CONTROL SWITCH POSITION				
HANDLE PULLED AFT	1/2 DOWN	OUT	BOTH AILERONS NEUTRAL	OFF	
HANDLE PULLED AFT	1/2 DOWN	OUT	BOTH AILERONS DOWN 16 1/2°	ON	
<div> FLAPS UP LIGHT WILL COME ON</div> <div> SLATS MANUAL LIGHT WILL COME ON</div>					
N11/82 FDD-1-(425)					

Figure 2-21. Flaps/Slats Operation

F-4 FRONT & REAR COCKPIT LAYOUT:

The following four pages illustrate the front and rear cockpit configurations of the F-4S and F-4J respectively. The resolution of these four pages will offer you the ability to zoom up for a better look at what and where the systems are.



F-4S Front Cockpit

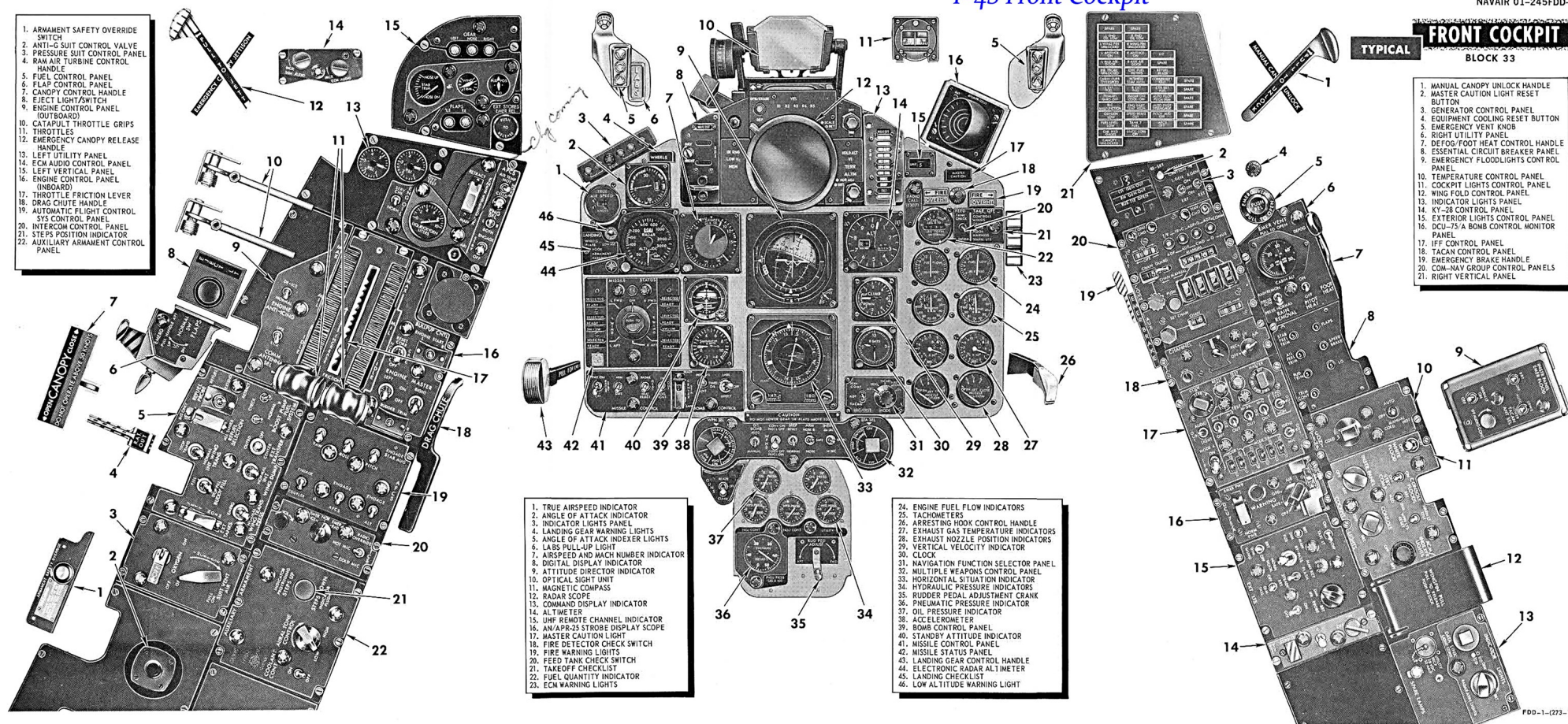


Figure A-1 (Sheet 1 of 2)

 Figure A-1
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F-4S FRONT COCKPIT

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NAVAIR 01-245FDD-1

F-4S Rear Cockpit

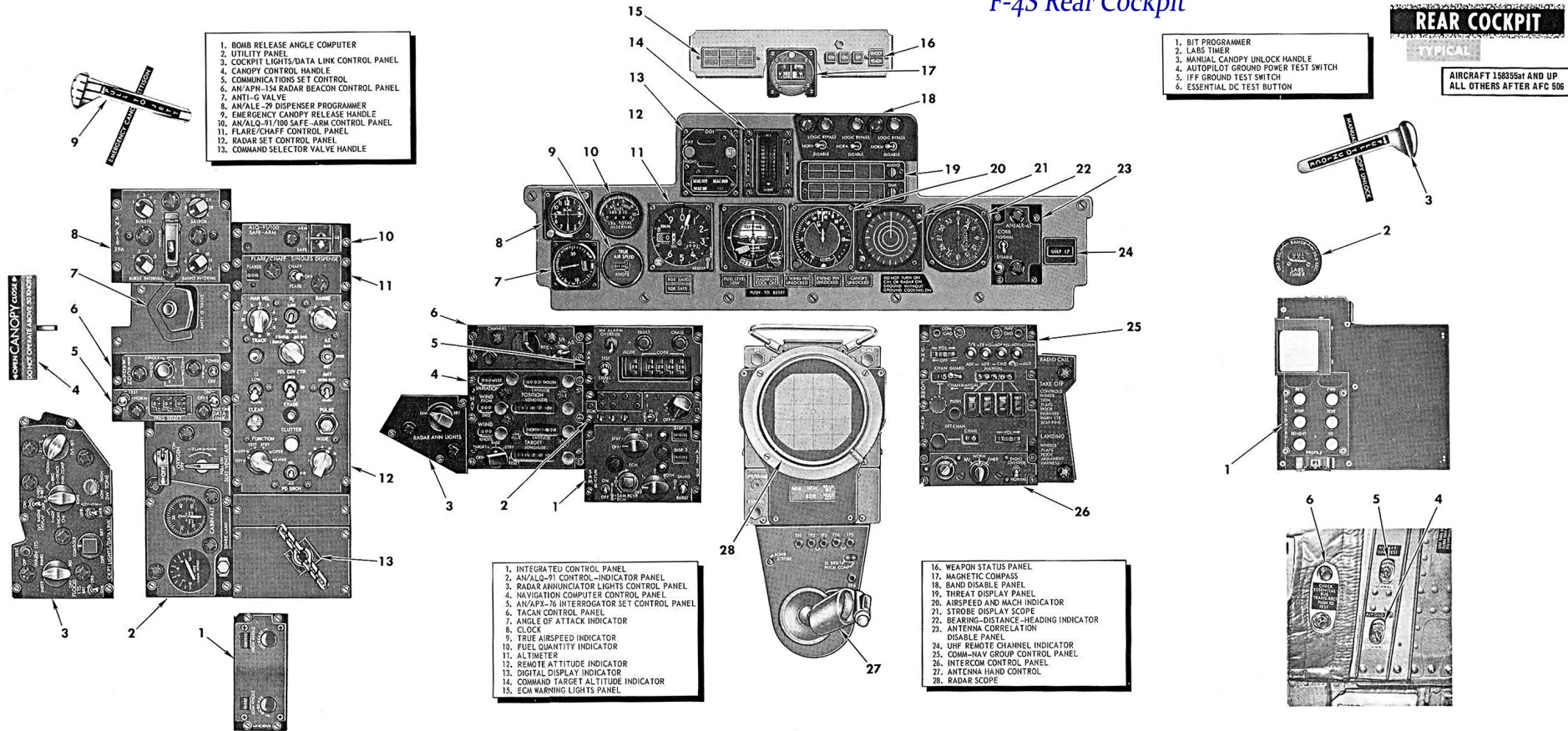


Figure A-2 (Sheet 2 of 2)

FDD-1-(274-2)

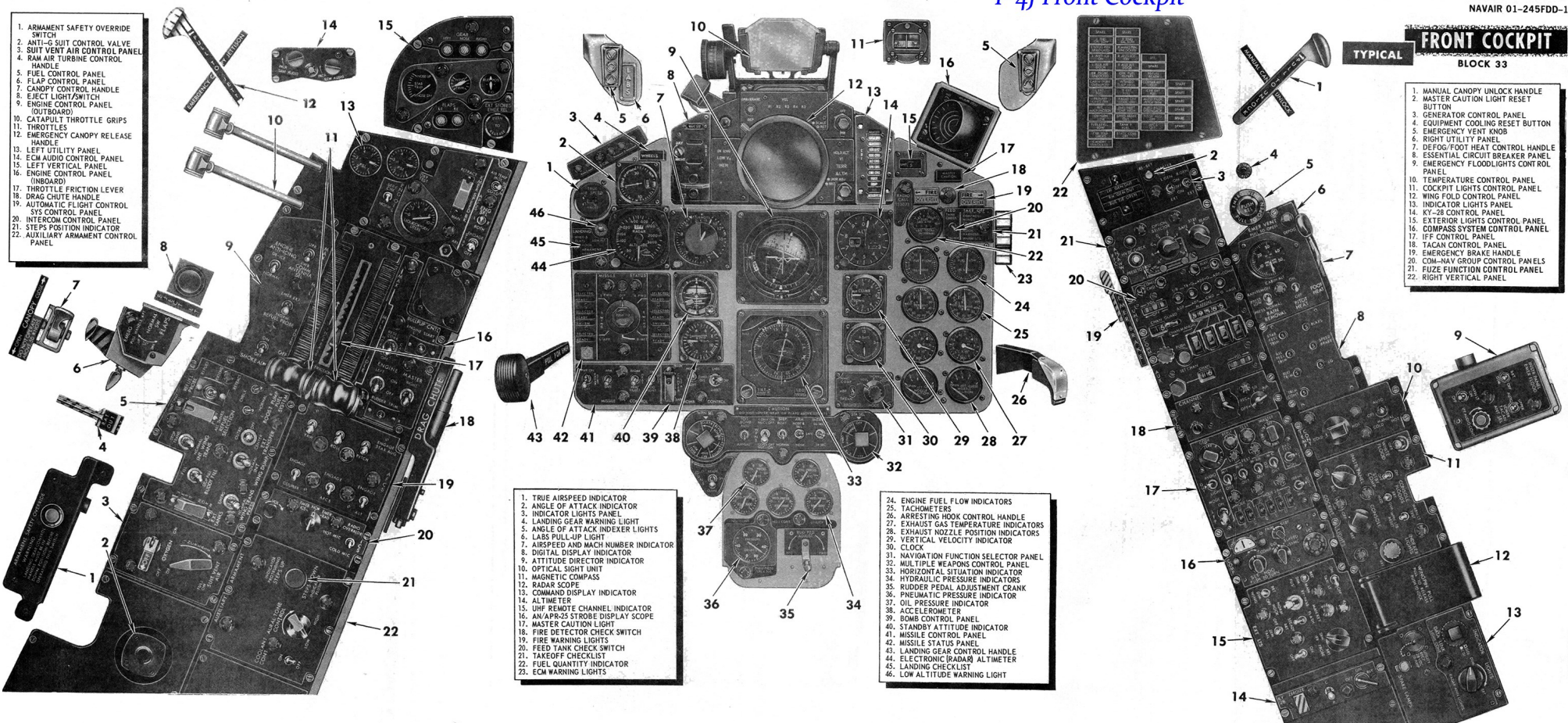
Figure A-2
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F-4S REAR COCKPIT

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F-4J Front Cockpit



FDD-1-(273-110)

Figure A-1 (Sheet 1 of 2)

Figure A-1
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F-4J FRONT COCKPIT

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F-4J Rear Cockpit

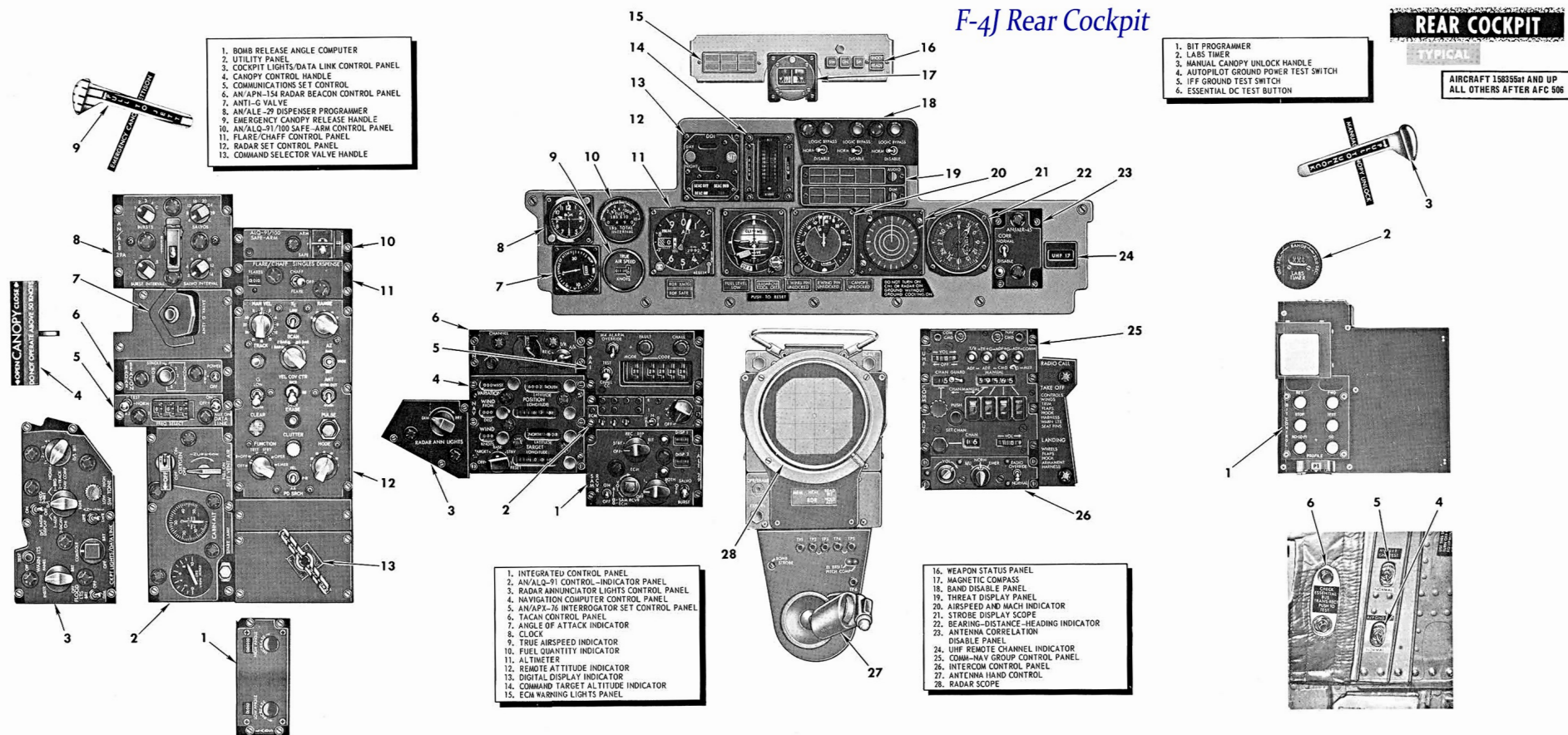


Figure A-2 (Sheet 2 of 2)

FDD-1-(274-2)

Figure A-2
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F-4J REAR COCKPIT

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F-4S&J *BASIC* SHUTDOWN PROCEDURE:

The engine shutdown procedure outlined here is based on the assumption that both engines were running, (as opposed to single engine taxiing options), and the “After Landing checklist”. Only those steps applicable to the flight simulator environment are covered. Seat or Oxygen adjustment steps for example, are not included in this outline.

- PLEASE REFER TO THE “F4ACM” GUIDE, (THE GUIDE THAT OPENED WHEN YOU COMPLETED THE INSTALLATION), FOR THE START-UP PROCEDURES

- 
1. WHEELS CHOCKED (PRESS SHIFT+I FOR THE ACM AND SELECT “CHOCKS”)*
 2. INERTIAL NAVIGATION POWER CONTROL KNOB (WSO COCKPIT) TO “OFF”
 3. NAVIGATION COMPUTER SELECTOR KNOB (WSO COCKPIT) TO “OFF”
 4. RIGHT THROTTLE, (FROM THE FRONT COCKPIT) LEFT-CLICK TO “CUT OFF” POSITION (FULL BACK)
 5. LEFT THROTTLE LEFT-CLICK TO “CUT OFF”
 6. ENGINE MASTER SWITCHES TO “OFF”
 7. RIGHT-CLICK THE LEFT AND RIGHT GENERATOR SWITCHES TO MOVE THEM TO THE CENTER POSITION
 8. ALL REMAINING SWITCHES IN THE WSO AND PILOT COCKPITS SHOULD BE PLACED IN THE “OFF” POSITION



The F4S&J do not have “Parking Brakes”. The flight sim’s default key assignment for the parking brake will not work.

The F4 has an “Emergency Brake” and is never used for anything but...well, emergencies.

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Drag Chute, Payload Penalties, & Joystick Profiler

Some quick points regarding the Drag Chute application, Payload vs. drag considerations, and Joystick key assignments. Milviz may very well be the first to achieve proper drag reduction via chute, slats, spoilers, and flaps in a fighter jet! Our F-4 will definitely be affected by the amount of weight you configured it to handle. In addition, the aircraft will behave differently while in flight as the weight is reduced, (such as fuel tank jettisons, weapon deployments, etc.).

The Milviz **F-4S&J Joystick Profiler** software is an exclusive, advanced, profile tool able to tie the F-4E events to your controller and/or keyboard. It's similar to FSUIPC capabilities but in a more streamlined sense and a detailed guide, (**F4ACM**), covering some of the features with examples is included with the F4E installation package.

The following page goes through a quick example of the assignment steps for the **Drag Chute** event but you may find it easy enough to figure out without even reading it! As previously stated, the additional "**F4ACM**" guide in this package expands on the subject.

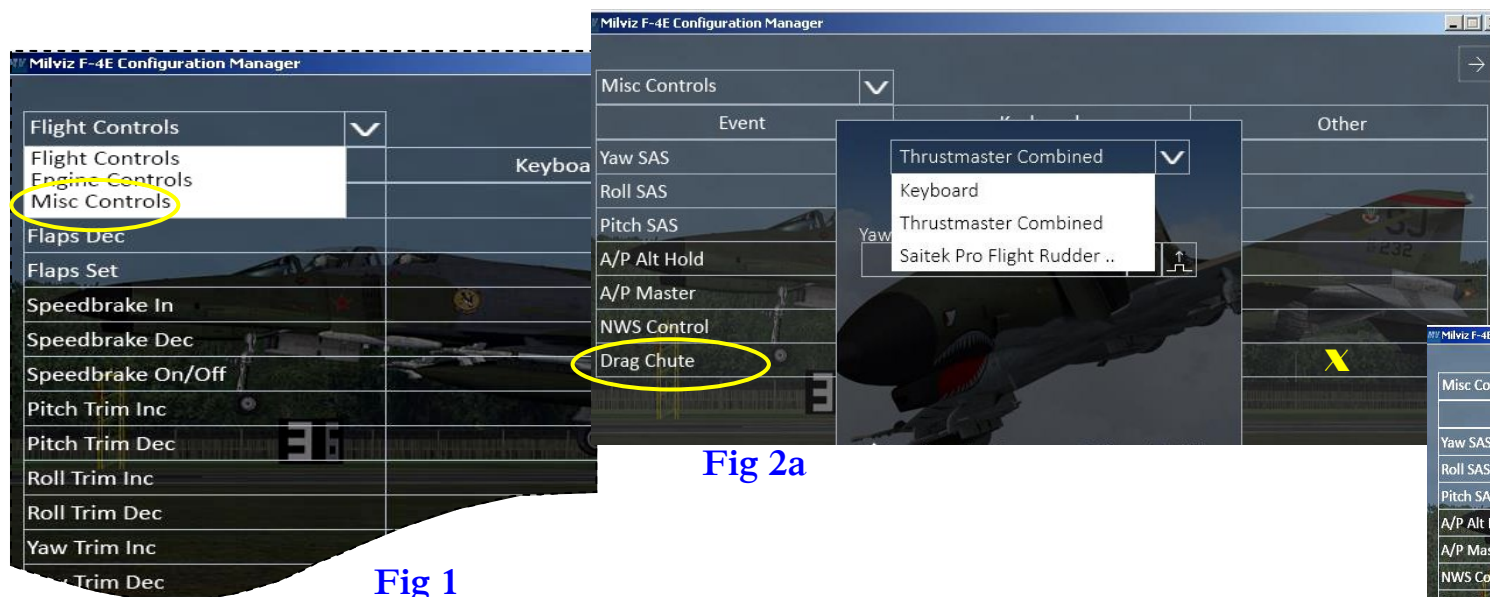
-The Following example; Assign the **Drag Chute** deployment/repack function directly to the Joystick button-

In the example ahead, we recommend selecting a single "momentary action" button on your stick that would respond much like a trigger pull. When the drag chute is profiled as shown, it will deploy when button is pressed. When the button is pressed again, it'll jettison/repack the chute.

⇒ Please note that your joystick must be connected to the computer before you begin following these steps:

Joystick button assignment for *Drag Chute deployment*

1. Open the Desktop ACM and click on the F-4 image
2. Click the “→” arrow and select “Misc Controls” (Fig 1)
3. Click in the row along side the “Drag Chute” event but under the “Other” column as indicated by the yellow ‘X’ in (Fig 2a), or under the “Keyboard” column for a keyboard selection, (the default is **Shift+M**[†]). In either case, a smaller panel opens (Fig 2b).
4. If you click the “→” arrow in the panel you can select from a list of all flight controls connected, (J-Stick and Rudder Pedals), but **Do NOT** select “Keyboard” from the list produced under the “Other” column. Alternatively, don’t select any of your connected controllers from the “Keyboard” column drop-down list.
5. Select the desired controller from the applicable drop-down list (Fig 2a) observing the cautions in **step 4**. Then press and release the button on your J-stick, (or key/key combo on the keyboard[†]), that you wish assigned to the **Drag Chute**.
6. At this point, click the “X” at the bottom (Fig 2b) to save your selection. If you made a mistake or want to change the event to a different button, click “Clear” and repeat steps 5 and 6.



[†] Please see **page 3** of the **F4ACM** guide for more details. If you prefer a different key combo than the preassigned defaults or no key command at all, you must first press “Clear” and then proceed as instructed.

Fig 2b





More info to come soon with next revision!