Super 80

DC-9-81 (MD-81)

User Manual

By Coolsky, 2018 Version 2.0

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Introduction

First Things First

What is the name of this aircraft? There seems to be a bit of confusion about the name of the DC-9-80/MD-80 series of aircraft. Up through the years, different marketing names, series names and Type Certificate names have been used. And the fact that operators sometimes decorate their aircraft with an identification anomaly only adds to the confusion. Let's try to sort this out.

The MD-80 was not an entirely new aircraft. It was in effect an extension of the DC-9 line of aircraft. Therefore, the Type Certificate of the first aircraft appeared as DC-9-81, DC-9-82 and DC-9-83. The names Super 80 and DC-9 Super 80 were simply marketing names used to sell the aircraft. The name DC-9-80 was used to describe the whole series of DC-9-8x aircraft.

In 1983, the McDonnell Douglas Corporation decided that the DC-9-80 series would be designated MD-80. Again, the name MD-80 is used to describe the whole series of MD-8x aircraft. No aircraft has ever been certificated as DC-9-80 or MD-80. The Type Certificates were amended with the new MD designator in parenthesis, appearing as DC-9-81 (MD-81). Now you had aircraft of the same type with name plates stamped as DC-9-81 and others as DC-9-81 (MD-81). The DC-9-81 (MD-81), DC-9-82 (MD-82) and DC-9-83 (MD-83) were now marketed as the MD-81, MD-82 and MD-83 respectively.

The MD-87, developed a bit after the first three models, was certificated as the DC-9-87 (MD-87). No aircraft were certificated as DC-9-87. For the MD-88, the application for Type Certificate amendment was made after the earlier changes. There never was a DC-9-88 or DC-9-88 (MD-88), only the MD-88.

Why the -80? The last DC-9 was the series 50. Why did they not name the new aircraft -60 or -70? There actually was a DC-9-60 proposal, but this design was rejected. The new aircraft was scheduled to enter service in 1980, and MDC saw the opportunity to market the new aircraft as the Series 80 or Super 80 – an aircraft for the 'eighties'.

Over the years the MD-80 has earned many nicknames from the pilots flying it. One of the most notable nicknames is Mad Dog.

DC-9 Family

The DC-9 series of aircraft was developed to meet the demand for a short-range jet airliner and to complement the larger long-range DC-8. The DC-9 was launched in the early 60's and became an instant success. The DC-9-10 entered service in December 1965 and by the end of 1966 total sales had reached 424 aircraft.

The DC-9 was designed from the outset with stretched larger capacity developments in mind. The DC-9-30, -40 and -50 were stretched and fitted with an enlarged wing to handle the larger fuselage. The DC-9-20 had the original -10 fuselage but was fitted with the new wing for increased hot and high performance.

Total sales of the DC-9 series reached 976 aircraft.

The Super 80

The DC-9 Super 80 is a stretched and improved development of the DC-9 series of aircraft made by the Douglas Aircraft Company. The aircraft was born out of a need for an aircraft that could carry more passengers and fly farther than the current DC-9 series aircraft. The new aircraft would also have to be quieter and have better fuel economy than the current lineup. It was decided that a stretched DC-9 with a larger wing paired up with the new Pratt & Whitney JT8D-209 engines would meet this requirement. The DC-9-80 program was launched in October 1977.

New Design

The largest aircraft in the DC-9 range is the series 50. The new Super 80 received a number of enhancements and improvements over the -50.

The wing root was enlarged to increase wing area and fuel capacity. The wing tip was extended by 2ft to increase wing aspect ration and improve performance. The wing's high-lift system was also improved. The trailing edge flaps were enlarged to lower stall speeds. The leading-edge slats were redesigned to lower drag on take-off and to improve climbout characteristics at higher gross weights.

New and better engines were required for the new aircraft. The Pratt & Whitney JT8D-209 engine, which at the time was under development, was selected to power the new aircraft. This engine would offer increased thrust and substantial reductions in noise and specific fuel consumption.

MD-80 Series

Five different models of the MD-80 series aircraft were made. The first aircraft was the DC-9-81 (MD-81). The second model was the DC-9-82 (MD-82) with up-rated engines for better performance at high density altitude operations. Then, the DC-9-83 (MD-83) followed with increased range and reduced fuel consumption. Contrary to the trend at MDC, the fuselage of the basic model was shortened to make the DC-9-87 (MD-87). The MD-87 had the fuselage length of the popular DC-9-30 and even longer range than that of the MD-83. The final model in the MD-80 series is the MD-88. This model had improved cockpit avionics with EFIS, flight management systems and other interior improvements.

In Service

Swissair and Austrian Airlines were the first operators to fly the Super 80 in service (1980). Pacific Southwest Airlines was the first US carrier to operate the Super 80.

Sales of the Super 80 were slow but steady the first few years. In 1984, American Airlines placed an order for 67 aircraft, with a further 100 on option. American Airlines became the largest operator of the MD-80 with a total of 260 aircraft in its fleet.

After the American Airlines order, the aircraft series went on to become a huge success. A total of 1191 MD-80 series aircraft were built.

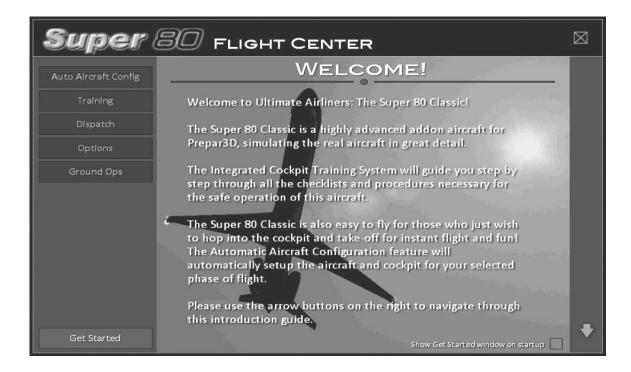
Public Opinion

The MD-80 aircraft was very well received by the flying public. Airline passengers around the world gave the MD-80 high scores on quietness, ride quality, personal roominess and cabin décor. In surveys, the MD-80 was compared to its main rivals, the Boeing 727 and 737. The surveys showed an MD-80 preference of 3-to-1 over the Boeing 727 and almost 8-to-1 over the Boeing 737.

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Get Started

The first window that pop-up when you start the Super 80 for the first time is the Get Started section of the Flight Center. The Get Started section of the Flight Center is a simple six step guide to get you started flying the Super 80.



Use the arrows on the lower right to step through the Get Started guide.

To prevent the Get Started Now! window from popping up every time you start the Super 80, simply check the box in the lower right-hand side corner. This window can later be enabled again in the Options section.

Super 80 - User Manual

View Menu

In the lower left-hand side corner of your screen is a small red arrow. Move the mouse cursor over this arrow to expand the View Menu. This menu allows you to easily access all the windows in the panel. Simply click the icon of the window you wish to open. This will close the View Menu and open the selected window. To close the View Menu without selecting a new window, simply move the mouse cursor over the arrow at the top of the menu.

	Close menu by moving the mouse cursor over the arrow.
PMS	Open the Performance Management System display unit.
ONS	Open the Omega Navigation System display unit.
FO's Side	Open instruments located on the First Officer's panel.
Captain's Side	Open the Captain's side panel.
+ill-select Autopilot	Open the Autopilot panel.
Lower Pedestal	Open the lower pedestal view.
Upper Pedestal	Open the upper pedestal view.
Upper Overhead	Open the upper overhead panel.
Overhead	Open the overhead panel.
Main Panel	Open the main forward panel view.
Speed Cards	Open the Speed Booklet.
Checklist	Open the Checklist.
Flight Center	Open the Super 80 Flight Center window.
Menu	Open the View Menu.

Super 80 – User Manual

Super 80 Flight Center

The Super 80 Flight Center is a resource center that houses five main sub sections; Automatic Aircraft Configuration, Training, Dispatch, Options and Ground Ops.

Auto Aircraft Config		
Training	Ready fo	
Dispatch	Engine	
Options	Clear/ Cliv	
Ground Ops	for landing rg it for the night	

Click the buttons on the left-hand side of the main window to access the sub sections.

Automatic Aircraft Configuration

The Automatic Aircraft Configuration feature is designed to automatically configure the aircraft for the flight phase of your choice. Simply select a flight phase and all the buttons, switches, levers and so on, will be positioned to suit the selected situation.

This feature is useful for both beginners, as well as the experienced simmer. Beginners may use the Automatic Aircraft Configuration feature for instant flight and fun! Experienced simmers may use this feature in part of their training. For example, to practice shooting ILS approaches, position the aircraft, hit "Cleared to Land", and off you go!

Super &	80 FLIGHT CENTER	\boxtimes
Auto Aircraft Config	Cold cockpit - All systems off]
Training	Ready for engine start	
Díspatch	Engines running - ready for push'n'taxi	
	Cleared for takeoff	
Options	Climbout	
Ground Ops	Cruising at FL	
	Descending	
	Cleared to land	
	Cleanup after landing	
	Parking it for the night	
Get Started		

Note for beginners:

You can use the Automatic Aircraft Configuration feature as a checklist help. Think of it as your First Officer doing all the administrative work of setting up the aircraft properly for the current flight situation. The auto configuration situations are setup to follow the order of the checklists. Simply select the next auto configuration as your flight progresses.

If you simply wish to take the aircraft up for a quick spin right away, select the "Cleared for Take-off" configuration and the aircraft will be ready for instant flight!

Available Automatic Aircraft Configuration situations

1. Cold Cockpit – All Systems Off

Select this situation to turn off all systems in the cockpit. All buttons, switches and levers are positioned where you would expect to find them on the first origination flight of the day.

2. Ready for Engine Start

The aircraft has been configured to be ready for engine start. All the pre-flight inspections have been done for you.

3. Engines Running – Ready for Push & Taxi

The engines have been started up for you, and you are ready to depart the gate and taxi out to the runway.

4. Cleared for Take-off

ATC has cleared you for take-off and you are ready for departure. Select this auto configuration and the aircraft will be ready to go.

5. Climbout

Select this configuration and the aircraft will automatically be cleaned up and set for cruise climb.

6. Cruising at FL...

It is time to sit back and get comfortable. You are at your cruising level and the aircraft will be configured accordingly.

7. Descending

Unfortunately, all good things must come to an end – it is time to get back to earth. Select this auto configuration to ready the aircraft for the descent into your destination.

8. Cleared to Land

You have received your final approach instructions and you are number one to land. Select this configuration just prior to passing the outer marker or final approach fix, and the aircraft will be ready for a stabilized approach.

9. Cleanup after Landing

You just made the smoothest landing ever! Or, at least you're down. Either way, select this configuration to have the aircraft cleaned up and ready for the taxi in to your assigned gate.

10. Parking if for the Night

When you have parked the aircraft safely at the gate and it is time to call it a day, select this configuration to turn off and shut down all systems.

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Training

The Training section is the starting point for all interactive training. You will find training guides for the checklists, various procedures/operations, and cockpit systems.

There are three main sub section in the Training section of the Flight Center:

- Checklist
- Procedure
- Systems

Super a	30 Fligi	HT CENTER	
Auto Aircraft Config	Checklist Procedure	01. BEFORE STARTING ENGINES 02. PRIOR TO ENGINE START OR PUSHBACK	
Training	Systems	03. TAXI 04. BEFORE TAKE-OFF	
Options		05. AFTER TAKE-OFF 06. CRUISE	
Ground Ops		07. DESCENT 08. BEFORE LANDING	
		09. AFTER LANDING 10. PARKING	
Get Started			

Checklist Guides

The Checklist Guides will show you step by step which procedures to carry out, which instruments to check, which switches to set, for each and every item in the checklist.

Super a	30 FLIGI	HT CENTER	
Auto Aircraft Config Training	Checklist Procedure Systems	01. BEFORE STARTING ENGINES 02. PRIOR TO ENGINE START OR PUSHBACK 03. TAXI	
Dispatch		04. BEFORE TAKE-OFF 05. AFTER TAKE-OFF	
Options		06. CRUISE 07. DESCENT	
Ground Ops		07, DESCENT 08, BEFORE LANDING 09, AFTER LANDING 10, PARKING	
Get Started			

Available Checklist Guides

1. Before Starting Engines

This checklist is the first checklist performed. Normally you are still at the gate, maybe waiting for boarding to complete. Note that you should perform either the Origination Pre-flight Inspection or Cockpit Clean-up Inspection prior to executing the Before Starting Engines checklist.

2. Prior to Engine Start or Push-out

All the passengers are now onboard and the gate has closed. All the cargo and fuel has been loaded, and you are basically ready to leave the gate. Before you contact your ground crew to request pushback and startup, you should go through the Prior to Engine Start or Push-out checklist.

3. Taxi

The first part of the Taxi checklist should be performed just prior to releasing the brakes for pushback or taxi. The second part of the Taxi checklist is normally performed while taxiing out to the runway or holding point.

4. Before Take-off

The Super 80 is equipped with a mechanical checklist. Use the top switch to select the Before Take-off checklist. Then flip each switch as you go through the checklist until all the lights are out. The Before Take-off checklist is normally performed at the holding point or just prior to entering the runway for take-off.

5. After Take-off – Climb

You are airborne, you have cleaned up the aircraft (gear, flaps and slats retracted), and you have established the aircraft in cruise climb. As soon as time and workload permits, go through the After Take-off – Climb checklist.

6. Cruise

Once you are established on your first cruising altitude, go through the Cruise checklist. This checklist includes some routine first flight of day checks, but you do not need to perform these checks on every flight.

7. Descent

The Descent checklist should be performed prior to reaching your Top of Descent (TOD) point.

8. Before Landing

Use the mechanical checklist to accomplish the items in the Before Takeoff checklist. The Before Landing checklist should be performed and completed before passing over the outer marker or final approach fix.

9. After Landing – Taxi

The After Landing – Taxi checklist should not be performed before the aircraft is completely clear of the runway. Normally items such as autopilot, autothrottle and ABS are turned off immediately after the aircraft has slowed down and while still on the runway. But the rest of the checklist should be done after leaving the runway.

10. Parking

As soon as you have pulled into the gate, set the parking brake and go through the Parking checklist immediately. The Seat Belt Sign switch is on the Parking checklist – and passengers do not like to wait!

Procedure Guides

The Procedure Guides will guide you through some of the more important procedures that you need to be familiar with in order to properly operate the aircraft. The Procedure Guides will also show you basic operation of some of the more complex cockpit systems.

Super	30 FLIGI	HT CENTER	
Auto Aircraft Config Training Dispatch Options Ground Ops	Checklist Procedure Systems	APU START COCKPIT CLEAN-UP INSPECTION ENGINE START LANDING ORIGINATION PRE-FLIGHT INSPECTION TAKE-OFF	
Get Started			

Available Procedure Guides

1. Origination Pre-Flight Inspection

The Origination Pre-Flight Inspection procedure is carried out before the first origination flight of the day. The aircraft has had an overnight stop and you are making the first flight of the day – that's when you perform this procedure. This procedure makes sure that all the switches are in the right positions and the aircraft is ready for flight. The Origination Pre-Flight Inspection procedure should also be performed whenever the condition of the cockpit or aircraft is in doubt.

2. Cockpit Clean-up Inspection

The Cockpit Clean-up Inspection is a short version of the Origination Pre-Flight Inspection and is performed before all flights other than the first origination flight of the day.

Note: There is no need to perform both the Origination Pre-Flight Inspection and the Cockpit Clean-up Inspection. Only one of them is required to prepare the aircraft.

3. APU Start

The APU Start procedure guide shows you how to start and operate the APU (Auxiliary Power Unit).

4. Engine Start

The Engine Start guide will show you how to start the engines. Note that the guide only goes through the procedure for starting the left engine. However, the procedure for starting the right engine is the same as for the left engine.

5. Take-off

Take-off is a critical phase of flight. You need to know what to do and when to do it. The Take-off procedure guide will take you through a take-off step by step. You will be shown what to do all the way from runway alignment through to cruise climb.

6. Landing

Landing is also one of the most critical phases of flight. The Landing procedure guide will show you what to do once the wheels touch down. You are not home free just because you are back on the ground. You need to slow the old gal down before you can start relaxing.

Systems Guides

The Systems Guides will guide you through basic operation of some of the more complex system in the aircraft and teach you how to operate them.

Super	30 Fligi		\boxtimes
Auto Aircraft Config Training Dispatch Options Ground Ops	Checklist Procedure Systems	DFGS - AUTOLAND DFGS - BASIC OPERATION ONS - OMEGA NAVIGATION SYSTEM PMS - PERFORMANCE MANAGEMENT SYSTEM	
Get Started			

Available System Guides

1. DFGS – Autoland

A step-by-step guide on how to perform a fully automatic landing in the Super 80 using the Digital Flight Guidance System.

2. DFGS – Basic Operation

The Digital Flight Guidance System (autopilot) is a complex system, and operation is slightly different compared to the default P3D autopilot. This procedure guide will show you some basic DFGS operation.

3. ONS – Omega Navigation System

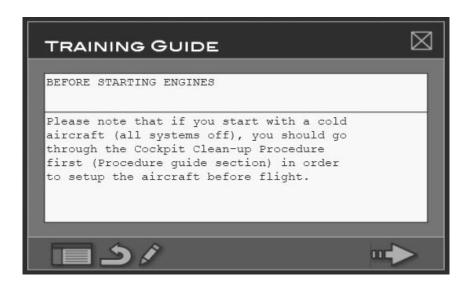
The Omega Navigation System was state of the art back when the Super 80 was launched. Today more modern and more accurate systems have replaced the Omega network of radio navigation stations. Old age aside, the ONS does a great job of getting you from A to B. This procedure guide will take you through basic operation.

4. PMS – Performance Management System

The Performance Management System controls the vertical profile of the flight and power setting for best fuel economy. This procedure guide will take you through basic operation.

Training Guide

The Training Guide takes you step by step through all the checklists and procedures required to properly operate the Super 80. The Training Guide will explain to you in detail exactly what to do.



The Training Guide box is divided into two main text areas. The upper text area tells you which checklist item or procedure step that is currently being explained. The lower text area tells you exactly what to do in order to accomplish the current checklist item or procedure step.

At the bottom of the Training Guide box are a number of buttons which allow you to navigate through the checklist/procedure.

- Close the Training Guide.
- \exists Go back to the Training section of the Flight Center.
- Restart the current checklist/procedure/systems guide.
- Open the ICTS Editor.
- Go back to the previous checklist item or procedure step.
 - Go to the next checklist item or procedure step.

When you select a checklist or procedure in the Training section, the Training Guide box will appear in the lower right-hand side corner of your screen.

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The Training Guide is accompanied by yellow arrows and boxes to help you located the various switches, buttons, levers and instruments described in the Training Guide text box. The Training Guide will also automatically open the appropriate panel view where the switch, gauge or system described is located.

Screenshot showing an example of the training arrow and box:



Dispatch

In the Dispatch section you can setup the loading of the aircraft. You can setup the number of passenger and amount of cargo you will be transporting, as well as the fuel load needed for the planned flight. In the Dispatch section you can also print out a departure plan with a complete loadout summary.

Super (30 FLIGHT CENTER	\boxtimes
Auto Aircraft Config Training Dispatch	PAX & Cargo	
Options Ground Ops	Fuel 34210005 - 804	
	Summary PTOW 58,200 ATOW 59,200 11 **** DC-9-83 JT8D-217 ENC *** 0/ 0/ MM< MAX 13 **** DC-9-83 JT8D-217 ENC *** 0/ 0/ MM MAX 15 **** DC-9-83 JT8D-217 ENC *** 0/ 0/ MM MAX 13 **** DC-9-83 JT8D-217 ENC *** 0/ 0/ MM MAX 13 **** DC-9-83 JT8D-217 ENC *** 0/ 0/ MM MAX 13 **** DC-9-124 141 1170 185 207 PWR - 59 42 134 141 170 185 207 PWR - 59 56 57 57 57 57 57 57 57 57 57 57 57 57 57 57 57	
Get Started	BALLAST 0 TXI 417 A1 1506 821 TOW 57783 MTOW 67812	

PAX & Cargo

Use the Plus, Minus, Empty, Full and Random buttons to set the passenger and cargo load. Note that while only the number of passengers is displayed, cargo is added in relation to how many passengers are onboard.

Click the upper right corner tab to access a more detailed view of the passenger and cargo loading. In this detailed view you can you can specify your passenger and cargo load in detail. Click the various plus and minus buttons to set the cargo.

Fuel

Use the Plus, Minus, Empty, Full and Random buttons to set the fuel load. The two main wing tanks are always filled up before the center tank. This is due to the fact that the engines on the Super 80 are only able to gravity feed from the main tanks. If all fuel boost pumps fail, fuel in the center tank is no good.

Click the upper right corner tab to access a more detailed view of the fuel load. In this detailed view you can you can specify your fuel load in more detail. Click the various plus and minus buttons to set the fuel load.

Summary

The loadout summary is a compacted version of the departure plan where you will find all the relevant preflight data for your flight. The departure plan is described in detail later in this manual.

Bottom Buttons

At the bottom right of the Dispatch section are two buttons:

• Print DP

If you have a printer connected to your computer, you can press this button to print out a Departure Plan. A Departure Plan based on the numbers you have set in the Dispatch section will be saved to a text file and opened in Notepad for printing. The text file is saved in the "\Prepar3D v4\SimObjects\Airplanes\F1 Super 80 Pro" folder.

• Update P3D

Press this button to update the simulator with the passenger, cargo and fuel load you have selected. If you exit the Dispatch section without pressing the Update P3D button, the changes you made in the Dispatch section will not be reflected in the simulator.

Departure Plan

DEPARTURE PLAN STA FLT A/C FLAP DATE/TIME ХМҮR 00825 909 15 ТЕМР 59F FP 29.92 PA 1013 РТОМ 130,500 АТОМ 132,500 (129/0318z 3 (4) *** DC-9-83 JT8D-217 ENG *** 0/ 0/ MM MAX -RSV- 1.97 92.3 126 135 142 172 187 207 FW -RSV- 1.97 92.3 126 135 142 172 187 207 STD -MAX- 1.92 90.1 126 135 142 172 187 207 FW -STD- 1.84 86.8 126 135 142 172 187 207 98 AT (5) 98F 43C FUEL 23571 ZFW 106966 (6) TOW CG 9.1 STAB 8.0 ********************** * TOW FOB ZFW STAB \$e * FLAPS CG PSGRS W..... X..... (7) ste * A/C WINDS BALLAST FUEL \$e * NOTES: s_{ii} $\frac{1}{2}$ ***** -----LOAD-----TOTALS-----LIMITS----CMPT MAX--AS LDED--F1 3037 F2 3037 79686 ZFW 106966 MZFW 117000 20460 FUEL 23571 *** TOT *** 2273 EOW *** TOT *** PSGR WT 2273 RMP 130537 T×I 920 MRMP 150500 6075 CGO WT 6820 MB 0 2273 (8) BALLAST 0 A1 3322 TOW 129617 MTOW 149500
 FLAPS
 15
 TOW CG
 9.1
 CNFIG
 F12
 P
 0 C
 0 Y136

 TEMP
 59F
 STAB
 8.0
 PSGRS
 F12
 P
 0 C
 0 Y124
 W-0

 CRT
 ADDRESS
 L007
 AGENT
 TANJA
 PHONE
 555-4321
 ****** ste ----- LANDING ------\$4 * ALT SET.....AFL PRESS ALT.....FT CONV.....AFL TEMP....* * GATE..... LANDING WGT..... G/A EPR..... (9) ste* STA..... ELEV..... ATIS..... *

- 1. Departure station, Flight number, Aircraft number, Take-off FLAP setting plan is based on, date and time.
- 2. Temperature and pressure setting at field elevation.
- 3. Planned Take-off Weight (PTOW) is Take-off Weight (TOW) from load planning section rounded down to next whole hundred pounds. Assumed Take-off Weight (ATOW) is PTOW plus a 2,000 pound cushion. ATOW is used to calculate Standard Take-off Power.
- 4. Aircraft and engine type.
- 5. Runway Take-off Power Setting (TPS) Section. Power and V-speed setting for Reserve Take-off thrust, Maximum Take-off thrust and Standard Take-off thrust.
- 6. Quick summary of load closeout section. Take-off Weight Center of Gravity (TOW CG), total fuel, Zero Fuel Weight (ZFW) and stabilizer trim setting (STAB).
- 7. Manual Load Closeout data entry field.

8.	Load Plan S	Section.
	EOW	Empty Operating Weight
	PSGR WT	Passenger weight
	CGO WT	Cargo weight
	BALLAST	Ballast weight
	ZFW	Zero Fuel Weight
	FUEL	Total fuel weight
	RMP	Ramp weight (Total weight of aircraft on the ramp)
	TXI	Taxi fuel weight (Estimated fuel used to taxi before takeoff)
	TOW	Take-off Weight (Total weight of aircraft at take-off)
	MZFW	Maximum Zero Fuel Weight
	MRMP	Maximum Ramp Weight
	MTOW	Maximum Take-off Weight
	F1	Forward Cargo Compartment 1
	F2	Forward Cargo Compartment 2
	MB	Main Ballast
	A1	Aft Cargo Compartment 1
	FLAPS	Take-off flaps setting
	TEMP	Current temperature
	TOW CG	Take-off Weight Center of Gravity
	STAB	Stabilizer trim setting
	CNFIG	Current aircraft configuration (max 136 passengers)
	PSGRS	Passengers on board (124 passengers)

9. Landing Data Section.

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Options

Various options to customize your cockpit environment and training are available in the Options section. Simply click the box to set the option. A green box will appear to indicate that the selected option has been set.

Super (a		R	
Auto Aircraft Config Training Dispatch Options Ground Ops	General Use spacebar to step through checklist Op-up annunciator panel Show View Menu Open Flight Orrector Crossbars Open Flight Center at startup Show Get Started window at startup Messages Show Dispatch Center Updated message Show Dispatch Center Not Updated message	Sound Panel sounds First Officer voice Click sounds Panel Sound Volume: Help Show all hotspots Show all click areas Use alternate training guide font	
Get Started			

Available options

1. Use Spacebar to go through the Checklist

With this option enabled, you can use the spacebar to step through the checklist. Simply press spacebar and you First Officer will read the next item on the checklist for you. Note that you do not need to have the checklist displayed on the screen for this to work.

2. Pop-up Annunciator Panel

If you check this option, the overhead Annunciator Panel will pop-up automatically every time a new caution or warning alert is issued. This allows you to instantly see which system triggered the caution or warning alert.

3. Show View Menu

Show the lower left-hand side corner View Menu.

4. Show FL in FMA Arm Window

Set this option to have the Flight Mode Annunciator arm window show the preselected altitude in place of the usual 'ALT' annunciation when Altitude Preselect is active.

5. Allow One NAV Unit Autoland

Normally the autoland procedure requires that both NAV radios be set to the same frequency and course. This option allows you to only use one NAV unit for automatic landings.

6. Flight Director Crossbars

In this panel the flat face type ADI has been simulated. This ADI is equipped with an inverted V Flight Director. Set this option to have a crossbar Flight Director instead of the inverted V.

7. Open Flight Center at startup

Check this option is you would like to have the Super 80 Flight Center show up every time you start the Super 80.

8. Show Get Started window at startup

Check this option is you would like to have the Get Started windows show up every time you start the Super 80 Pro.

9. Show Dispatch Section Updated message

Check this option to display a message confirming the aircraft has been updated with the data set in the Dispatch section of the Flight Center.

10. Show Dispatch Section Updated message

Check this option to display a warning message if you try to leave the Dispatch section of the Flight Center without having updated the aircraft first.

11. Panel sounds

Setting this option turns on all panel sounds, i.e. all sound directly related to the panel. Sounds like engine noise, gear rolling sounds, and such, are not turned off. These sounds will have to be turned off through the P3D menu. Note that the default P3D keyboard shortcut to turn off sound is the Q key on the keyboard.

12. First Officer voice

Select this option to turn on all the First Officer callouts.

13. Click sounds

Select this option to turn on click sounds when using switches and buttons in the cockpit.

14. Panel Sound Volume

Drag slider to adjust general panel sounds volume.

15. First Officer Sound Volume

Drag slider to adjust FO voice audio volume.

16. Show hotspots

A hotspot is a clickable area which, when clicked, will bring up a new panel or window. They are a sort of shortcut that makes panel and window navigation easier and faster. Hotspots are normally not visible. Select this option to have all the hotspots in the panel indicated to you by yellow boxes.

17. Show click areas

Select this option to have all the click areas in the panel indicated to you by magenta boxes.

18. Use Alternative Training Guide Font

If the default text/font is invisible in the training guide, select this option to switch to an alternative font.

Ground Ops

In the Ground Ops section you have the option to select and initiate pushback from the gate or stand, startup of the engines, or both pushback and startup. Your First Officer will contact the ground crew and initiate the selected action.

You can also connect and disconnect the Ground Power Unit (GPU) in the Ground Ops section of the Flight Center.

Super &	30 FLIGHT CENTER	\boxtimes
Auto Aircraft Config Training Dispatch Options Ground Ops	Request Pushback Request Startup Request Pushback & Startup	
Get Started	External Power	

Checklist

A Checklist is available in the Windows Select Menu. This checklist covers normal procedures.

Available checklists are:

- Before Starting Engines
- Prior to Engine Start or Pushback
- Taxi
- Before Take-off
- After Take-off Climb
- Cruise
- Descent
- Before Landing
- After Landing Taxi
- Parking

In addition to the normal checklists, two procedure guides are also available in the checklist:

- Origination Pre-flight Inspection
- Cockpit Clean-up Inspection

MCDONNELL DOUGLAS DC-9-81 NORMAL CHECKLIST		
BEFORE STARTING ENGINES		
LOGBOOK RUDDER PEDALS AND SEATS A VINDOWS OZ PANELS/OZ PRESSURE EMERGENCY LIGHTS PROBE HEAT VINDSHIELD ANTI-ICE ANTI-SKID PROBE HEAT RUTOR PROBE HEAT PROBE HEAT STABLIZER TRIM STABLIZER TRIM STABLIZER TRIM STABLIZER TRIM STABLIZER TRIM STABLIZER TRIM STABLIZER TRIM STABLIZER TRIM PUEL LEVERS THROTTLES SHOLDER HARNESSES FLICHT FORMSSES FLICHT FORMSES FLICHT FORMSSES FLICHT FORMSSES	DJUSTED AND LOCKED C.CLOSED AND LOCKED SET AND CHECKED C.CHECKED AND CAPT C.CHECKED AND CAPT AUTO (UP) AND SET AUTO (UP) AND SET AND CHECKED SET AND CHECKED DOWN AND GREEN DOWN AND GREEN CROSSCHECKED DOWN AND GREEN COSSCHECKED DOWN AND GREEN COSSCHECKED DOWN AND GREEN CHECKED	

Click the main text area to flip through the various checklists. Click the bottom box marked 'Next Item' to step through the checklist.

As you advance through the checklist a green ball on the left hand side of the checklist will indicate the current item. Each item on the checklist is also read to you by your First Officer. You can also press the spacebar key on your keyboard to advance through the checklist.

Note that you do not need to have the checklist visible in order to advance through the checklist items with the spacebar key. Simply hit spacebar and your First Officer will read the items in the checklist out loud for you. This allows you to focus on performing the items in the checklist.

The spacebar feature can be disabled in the Options window if required.

Speed Booklet

A Speed Booklet is available in the Windows Select Menu. The Speed Booklet provides two sets of quick reference speed cards.

- Takeoff for takeoff and climbout speeds
- Maneuvering for approach and landing speeds

► TAKEOFF]	> MANEUV	
		FLAPS/SLATS	SPEED
Flaps 11 15		O/RET	223 <
V ₁ 125 120 <		0/EXT	174 <
V _R 131126		11	153
V ₂ 139 134 <		15	149 <
V _{Flup} 144 149 <		28	139
V _{sl up} 181 181 <		40 Vre	135 : <
V _{Clean} 225 225		28/EXT	130
		40/EXT	126
≥120,000 LBS		≥118,000	LBS
SET ASÍ BUGS TO 11 TO 15		≥ LND 28 LI	ND 40

Click the header to switch between the two sets of speed cards.

Click the weight to set the approximate weight of the aircraft. All speeds have a margin calculated into them – the nearest weight, rounding up or down, will suffice.

At the bottom of the speed cards are two boxes: TO11/TO15 and LND28/LND40. These indicate the flap setting. Select your flap setting and click the appropriate box to transfer the four speeds indicated by the black arrow heads on the right, to the four bugs on your Airspeed Indicator gauge for reference during landing and takeoff.