Miltech Simulations U-2

Quick Answers

The fastest way to do the everyday things. Each answer gives the easiest route in the cockpit; the linked page explains the alternatives and the details. Key names are the legends you see on the displays.

Navigation

How do I go direct to a destination point?

1. On any MFD press B1 FLT, T2 MAP.
2. Press L2 DS. Turn the **right** rocker until the DP number you want shows - the cyan line on the map is the track you will fly.
3. Press R1 ENT. The aircraft turns towards it at once and the route continues from that DP.

Also: MFD NAV → DPS, L3 DS, pick the DP with INC/DEC, R1 YES. Or the UFCD HOM page: box the TO number on the F/T line, type the DP number, ENT. See Navigation System.

How do I load a flight plan from SimBrief?

1. Plan the flight in **SimBrief**. In the U-2 EFB, **Flight plan** tab, enter your SimBrief Pilot ID once.
2. On an MFD press B6 STAT, T5 LOAD. Select ST2 - SIMBRIEF and press R6 LOAD.
3. The route goes into the ACTIVE file and the map shows it. Check it on NAV → DPS.

Or send it from the EFB: **Flight plan** tab, *Route*, **Send route to aircraft**. It arrives as an UPLD file: accept it on the MFD or the BCDU. If the EFB option *Activate loaded flight plans* is off, the plan goes to a store file: select it on DPS and press LOAD.

How do I load a flight plan from INSPlanner?

1. Open insplanner.miltechsimulations.com. Click the map to add the waypoints (at least 2), then **Send to Aircraft**. Write down the 6-digit ID.
2. On an MFD press B6 STAT, T5 LOAD. Select ST3 - INSPLANNER and press R5 DTAIL.
3. Press L2 PLAN, type the 6 digits on the UFCD keypad, then L3 FTCH. The points show in the list.
4. Press R6 LOAD. Check the route on NAV → DPS.

Use ST4 - INSPLANNER 2 for a second plan. Zones, TP boxes and charts are in INSPlanner.

How do I send a flight plan from the MSFS EFB?

1. Make the route in the MSFS 2024 EFB flight planning app and send it to the avionics.
2. The U-2 puts it in ST1 - EFB by itself. With the EFB option *Activate loaded flight plans* on (the default), it becomes the ACTIVE file at once.
3. Check it on NAV → DPS. If it is not active: B6 STAT, T5 LOAD, select ST1 - EFB and press R6 LOAD.

Each fix becomes a DP (up to 99, names to 8 characters). Legs with no fix, such as a climb to an altitude, are not loaded.

How do I enter a destination point by hand?

1. UFCD DP page. LS1, type the DP number (1-99), ENT.
2. LS3: latitude as six digits DDMMmm (39° 08.16' = 390816), ENT. LS3 again and 2 for N or 8 for S.
3. LS4: longitude as seven digits DDDMMmm, ENT. LS4 again and 4 for W or 6 for E.
4. Optional: LS2 and turn the knob for the name (large knob letters, small knob digits, push for the next character), ENT.

The point appears on the MFD and BCDU immediately. See UFCD.

How do I fly an orbit?

1. Make the file contain the orbit: the start point entered twice - once where the loop begins and again where it ends (same position, same turn radius) - then the exit point, then nothing. Three shipped routes already have one (CROSS US, DEBORAHA, JOANR001: DP 3 = DP 8).
2. Steering mode F/T.
3. UFCD HOM page, box ORB, type the number of laps (2-15), ENT.

ORBIT REJECT = the file has no valid double DP. See Navigation System / Orbits.

How do I overfly the next point instead of cutting the corner?

1. MAP page, L3 OFLY, then L4 YES.
2. Press OFLY again when you want to rejoin the route.

How do I change the map scale or put north up?

Left rocker = scale (10 / 25 / 100 / 200 / 400 NM; 100 when the flight loads). L1 NORTH toggles north-up (green) and track-up (white). All three MFDs share the scale, NORTH and the SMBL options.

How do I find the nearest airfield?

1. UFCD EMER page - 01 is the nearest field in the EMER file, with bearing, range, time and fuel on arrival.
2. To steer to it: LS4 DIR STR, ENT. This makes the EMER file the ACTIVE route; it is refused while the autopilot flies NAV.

The EMER file can be filled from SimBrief airports with the EFB datalink uplink (Flight plan tab, *Airports - EMER file*).

Radios and Transponder

How do I enter a COM frequency?

1. UFCD HOM page. Press LS1 (COM1) or LS2 (COM2) **twice** so the box sits on the frequency.
2. Type the digits - 1245 for 124.500, 127175 for 127.175.
3. ENT. Nothing changes until you press it.

VHF only, 118.000-136.990 on the 8.33 kHz channels (118.005, 118.010, 118.015, 118.025 ...); a frequency that is not a channel flashes and is refused. The previous frequency is kept: with nothing typed, ENT swaps back to it.

How do I set the squawk?

1. IFF switch ON (right console).
2. UFCD IFF page. LS2, four digits (0-7), ENT.
3. Box MSTR: with LS3 and turn the knob to NORM - it powers up in standby.

Ident: the IDENT key. Emergency: knob to EMER, ENT (7700).

How do I tune an ILS?

1. UFCD HOM page. Press LS3 four times (channel → X/Y → mode → ILS).
2. Type the frequency - 1095 for 109.50 - and ENT.
3. On the PFD press L6 ILS as the steering source and set the course with R3 CRS.

Also: MFD COM → CNI, L2 EDIT, L1 once to box the ILS frequency, then INC/DEC through the localizer channels. Only the 40 localizer frequencies from 108.10 to 111.95 are accepted.

How do I tune a TACAN?

1. UFCD HOM page, LS3, type the channel (1-126), ENT. LS3 again toggles X / Y.
2. PFD L5 TAC to steer by it; R3 CRS for the radial (double-press = direct to the station).

Flying

How do I set the altimeter?

PFD R2 BARO, then turn the UFCD knob (or type 2992 ENT on the UFCD - its PAD comes on by itself). R1 while it is open sets standard 29.92. The SFD has its own setting: turn its knob too (push = 29.92). R4 in BARO switches all three MFDs and the SFD to hPa.

How do I set a heading or altitude for the autopilot?

1. PFD L3 HDG and turn the UFCD knob (double-press HDG = present heading). Press HDG on the AFCS panel.
2. Level off at the altitude you want and press ALT on the AFCS panel - it holds the altitude you are at. To move it, turn the PITCH MACH wheel: 100 ft per click. Hold your speed with the throttle.

How do I make the autopilot fly the route?

1. INS in NAV (N or L on the PFD) and a route in the ACTIVE file.
2. PFD L4 NAV as the steering source.
3. AFCS ENGAGE, then NAV on the AFCS panel. The lamp lights when it is tracking.

How do I use the lift spoilers?

1. Once: bind **Toggle water rudder** in MSFS Controls.
2. SPOILER switch ARM, landing-spoiler switch LANDING.
3. Press the bound button at touchdown; press again to retract. For the descent use LET DN instead - they stay up.

Your normal spoiler key only moves the fuselage speedbrakes. See Speedbrakes and Lift Spoilers.

How do I record a fix?

UFCD FIX key. It appears on MFD NAV → FIX at once and as a black X on the map. L2 ADD on the FIX page records one too.

Start-Up

How do I align the INS quickly?

1. EFB, Settings tab, **INS alignment time** = *Instant* (or *Short*).
2. INS switch to LOAD, then ON.
3. MFD NAV → INIT: R1 ALN, R2 YES. When FULL NAV READY shows: R1 ACPT, R2 YES.

How do I connect ground power?

1. Stop off the runway and set the PARKING BRAKE.
2. EFB, Ground tab: the ground power unit (GPU) must be on the stand (*Shown* if it is not). Then Servicing, **Ground power**: *Connect*. The cart drives to its service point; wait until the line reads *Connected*.
3. BATTERY to EXT PWR, then EXTERNAL POWER ON.

The cart comes off line as soon as you release the parking brake or hide it. See Electrical and Avionics Power.

How do I start the engine?

1. Boost pumps ON, throttle OFF (right-click the throttle below 10 %).
2. EFB, Ground tab: the air-start unit (ASU) is brought out by *Attach* if it is hidden; the parking brake must be set. Then Servicing, **Air Supply Unit**: *Attach*, then *Apply* (or press MIC on the yoke or throttle: the crew applies it). The cart drives up and connects the hose; the air comes on once it is connected.
3. At 20 % N2 right-click the throttle to IDLE. The crew removes the air by itself.

Nothing happens without the starting air. Or let the EFB do the whole start, no carts needed: Aircraft tab, **Set up aircraft**, *Ready for takeoff*. See Engine Start.

How do I get the pins and chocks off?

1. **Gear pins:** in the walkaround, stopped on the ground, click the main or tail gear pins once. The EFB **Set up aircraft** *Ready* presets remove them too.
2. **Wheel chocks:** stopped on the ground, use **Wheel Chocks Off** on the EFB Ground tab or click them away in the walkaround; **Wheel Chocks On** there puts them back. They don't follow the parking brake.
3. **Pogo pins:** leave them. Line up on the runway, hold still with the chase car on, and wait for "ground crew clear".

Without the runway crew the pogos stay on for the whole flight. See Takeoff.

How do I skip the long avionics start-ups?

EFB, Settings tab, **Avionics startup time** = *Fast* (the default): AVP 7 s, SFD 10 s, EW self-test 30 s. *Realistic* is 2, 3 and 5 minutes. Or start on the runway - everything is already on, EW CONT in RPT included - or use **Set up aircraft** on the EFB Aircraft tab.

How do I open the canopy?

Set the CANOPY SEAL T-handle OFF (left console), then click the CANOPY LATCH placard on the right sill. On the ground only. Seal ON again before takeoff or the cabin will not pressurize.

Alerts and Sensors

How do I clear an alert?

L7 ACK on any MFD clears the alert line; click the MASTER CAUTION lamp to reset the lamp and tone. The alert itself stays on STAT → ICAW until its cause is gone. To stop a nuisance alert from lighting the Master Caution again, inhibit it on STAT → HIST (INHB).

How do I use the camera or the radar?

1. EFB, Aircraft tab: fit the **ASARS-2** nose for the radar, or for the camera the **SYERS-2A** nose - or the Standard nose with the **OBC** in the Q-bay.
2. Radar: MODE to STBY on the Mark IV panel (right console) starts the warm-up. SYERS-2A: on the Mark IV panel (right console) MK IV MASTER ON and MODE to STBY to boot it. OBC: DRIFTSIGHT and MK IV MASTER ON boot it, then MODE OFF runs its self-test. The boot takes 30 seconds; with the EFB option **Sensor warm-up time** on *Realistic* the radar takes 12 minutes, the SYERS-2A 4 and the OBC 90 seconds.
3. MFD B5 PME, then CAM or RDR. Then MODE 1-5: the radar radiates once airborne, the SYERS-2A opens at once, and the OBC photographs at or above 5,000 ft. L4 TEST runs the radar's or the SYERS-2A's self-test on the ground.

Camera zoom is on the left rocker of the CAM page and on the *Increase / Decrease mixture 3* bindings, the band on L3. Both pages need an internet connection. If a page stays black although the camera is open or the radar sweeps, a VPN or web filter may be blocking the map servers - the EFB Datalink tab's console names the error; see Mission Equipment.

How do I use targeting points?

1. Fit an imaging sensor on the EFB Aircraft tab, and bind **Condition lever high idle** in MSFS Controls.
2. To mark a point: open the camera or get the radar operating, put the crosshair on the target with the hand control and press the binding. The TP goes in the first free slot. The camera and radar SPOT read the object's size; radar SRCH gives a 300 ft square.
3. To load points from a plan: B6 STAT, T5 LOAD, L6 TD - INSPLANNER, type the plan number, R6 LOAD. This replaces the whole list.
4. See them: yellow triangles on the MAP, yellow boxes on the CAM and RDR pictures, the list on NAV → DPS (L1 FILE to TP).
5. Fly there: on that list L3 DS, pick the TP with L1/L2, R1 YES. The aircraft flies straight to it and then keeps turning right until you select something else.

To point a sensor at a TP: CAM or RDR page, R4 DP, R2 to TP, right rocker, R1 ENT. See Targeting Points.

How do I change the nose, pods or antennas?

EFB, Aircraft tab: click the chips on the aircraft drawing, or use the Nose / Superpods / Q-bay rows under it (and Senior Spear with the Senior Ruby pods) and the SPAN switch - on the ground or in flight. The weights go to the payload automatically.

Related pages: Up-Front Control Display (UFCD) · Navigation Pages (NAV)

Miltech Simulations U-2. SIMULATION USE ONLY. This documentation describes the simulated aircraft as delivered in the add-on and must not be used for real-world aviation.