Miltech Simulations U-2

Landing

The pattern, the touchdown and the rollout.

Note
Sim values. Performance values are measured in the sim. They may not accurately represent (nor do they intend to accurately represent) the performance of the real aircraft.

BEFORE LANDING

On downwind, before the turn to final.

1 LANDING GEAR HANDLE - DOWN FORE / AFT indicators down. With the handle UP and 20° flap or more you get LANDING GEAR NOT DN and the GEAR lamp

2 SPEED BRAKE - OUT

3 TURBINE BYPASS - NORM/9TH Below 25,000 ft the cooling turbine cuts in and out at 70 % N2 - expect the airflow to change

4 FLAPS - 20° TO 35° Below 130 KIAS (FLAPS DOWN warning above it); 5° per click. They pitch the nose down: trim nose up.

5 THRESHOLD SPEED - AS COMPUTED

Note
Note: The stall strips come out by themselves at 24° flap or more (EFB option Cockpit handle on Stall strip: pull the handle). At 20° they stay in and the STALL STRIP IN advisory stays.

Note
Note: 30° of bank at most in the pattern - the AOA rises with the bank. Avoid moderate turbulence. Buffet from gear, flaps and spoilers, and near the stall, is simulated (EFB Settings tab, Cockpit vibration).

AT THE THRESHOLD

6 THROTTLE - IDLE

7 LIFT SPOILERS - UP AT TOUCHDOWN SPOILER button on the yoke or throttle (hold, or click to latch), or your Toggle water rudder binding. Needs SPOILER SWITCH ARM and LANDING SPOILERS LANDING; nothing deploys by itself

LANDING PATTERN

Technique for the standard 360° overhead pattern. The heights and speeds are targets, not limits.

INITIAL APPROACH

1 PATTERN - 360° OVERHEAD Enter as traffic and wind require

2 INITIAL APPROACH - 130 KIAS, 1,500 FT AGL

TURN TO DOWNWIND

3 TURN - NEAR THE RUNWAY END, DESCENDING, 20° TO 30° BANK Hold the speed with the throttle

4 FLAPS - 20° TO 35° (35° RECOMMENDED) Full flaps give the shortest float and roll

5 AIRSPEED - 90 KIAS OR T + 10

6 AOA - ABOUT .64 AT T + 10 Indexer yellow and green, green alone from .65

DOWNWIND

7 ALTITUDE - ABOUT 1,000 FT AGL

8 POWER - SET FOR A SLIGHT DESCENT, SAME SPEED

9 BEFORE LANDING CHECKLIST - COMPLETE

TURN TO FINAL

10 TURN - AT ABOUT 700 FT AGL, 20° TO 30° BANK, COORDINATED

11 AIRSPEED - 90 KIAS OR T + 10

12 90° POINT - ABOUT 500 FT AGL

FINAL APPROACH

13 ROLL OUT - ABOUT 250 FT AGL, ON SPEED

14 THRESHOLD - T-SPEED (ABOUT .80 AOA), 10 FT AGL MAX Indexer green and red; the approach beeps turn into the steady 500 Hz flare tone

Note
Note: Keep a smooth, stable glide to touchdown. With the chase car on (EFB Settings tab), the mobile calls your height above the runway in the flare.

LANDING

Special cases. Normal landings follow LANDING PATTERN.

1 NIGHT LANDING - SAME AS BY DAY Trim for pitch

2 CROSSWIND LANDING - BANK INTO THE WIND, DOWNWIND RUDDER Lift spoilers as needed

3 HEAVY WEIGHT (ABOVE 24,300 LB) - LOW SINK RATE, NO FULL-STALL TOUCHDOWN Fly it onto the runway

4 NO-FLAP LANDING - IDEAL CONDITIONS ONLY, 24,300 LB MAX Fly about .80 AOA at the threshold with the flaps up

5 MINIMUM GROUND RUN - FLAPS 35, SPEED BRAKE OUT Plan the threshold 500 ft before the runway; lift spoilers at touchdown

6 TOUCH-AND-GO (24,300 LB MAX) - SLOW TO 50 KIAS, FLAPS AND LIFT SPOILERS IN, GO Normal touchdown first. The pogos are not refitted - they only come back when you stop

LANDING ROLLOUT

From touchdown to the stop.

1 ROLLOUT - WINGS LEVEL, TAILWHEEL ON THE RUNWAY Hold the wings with the yoke: left neutral, a wing goes down in a few seconds. A wing-tip skid touches as you slow

2 BRAKES - AS REQUIRED Either pedal brakes the main wheel, no antiskid; the tailwheel steers only at low speed (full below about 20 kt)

3 SPEED BRAKE - IN Once directional control is good

4 FLAPS - UP

5 LIFT SPOILERS - DOWN SPOILER button again if you latched them

6 AIRCRAFT - STOP, HOLD THE BRAKES With chase-car support enabled, stop (3 kt or less) on the runway or wherever you have rolled to and hold the brakes. The pogo truck's crew fits both pogos, raised wing first, levels the aircraft, then the other side; there is no time limit, so wait for the crew-clear call before taxiing. If you move off, the crew stops. With support disabled, the pogos are restored automatically on touchdown.

7 TAXI SPEED - BEFORE YOU TURN OFF THE RUNWAY With the pogos off, yoke into the turn to keep the wing up

Related pages: Flying the U-2S · Angle of Attack (AOA) · Speedbrakes and Lift Spoilers · Chase Car and Ground Support Equipment · After Landing and Shutdown

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.