



Space Shuttle Simulator

Landing Checklist

Panel	Action
	Trap cold freon in the bay radiators
L1U	Set OUT TEMP to HIGH Set MODE 1/2 switches to MAN Set MAN SEL 1/2 to BYPASS
O14U,O15U,O16U	Set RGA 1, RGA 2+4 and RGA 3 to ON If RMS arm has been used, it must be stowed now Now, wait for deorbit window
	Stow the KU antenna
R13L	Set KU antenna to STOW Check that indicator shows STO after a few seconds
A7U	If used, Payload bay lights must be turned off.
	Check flash evaporators
L2R	Check that FLASH EVAP CONTROLLER PRI A/PRI B is set to GPC Check that FLASH EVAP CONTROLLER SEC is set to A SPLY or B SPLY Set NH3 CONTROLLER A/B to PRI/GPC
	Open water supply crossover valve
R11L	Set CROSSOVER VALVE to OPEN
	Stow radiators
R13L	Set PL BAY MECH POWER SYS1/SYS2 to ON Set RADIATOR CONTROL SYS A/SYS B to STOW When indicator shows STO Set LATCH CONTROL SYS1/SYS2 to LATCH When both indicators show LAT Set all radiator switches to OFF Set PL BAY MECH PWR SYS1/SYS2 to OFF
	Closure of payload bay doors
R11L	Enter OPS 202 PRO Set MAJ FUNC to SM. PL BAY DOOR SPEC display is now enabled. Enter ITEM 3 EXEC Enter ITEM 1 EXEC
R13L	Set PL BAY DOOR SYS1/SYS2 to ENABLE Set PL BAY DOOR to CLOSE Check door indicator When PL BAY DOOR status indicator shows CL Set PL BAY DOOR to STOP Set PL Bay DOOR SYS1/SYS2 to DISABLE Enter ITEM 2 EXEC to disable AC power. Enter OPS 201 PRO

Init deorbit

Enter OPS 301 PRO to init deorbit

Init APU burn

R2L

Set BOILER N2 SUPPLY 1/2/3 to ON
Set APU AUTO SHUTDOWN 1/2/3 to ENABLE
Set APU CNTRL PWR 1/2/3 to ON
Set HYD CIRC PMP 1/2/3 to OFF
Set HYD MAIN PUMP PRESS to LOW
Set APU FUEL TK VLV 1/2/3 to OPEN
The three APU READY TO START indicators should be grey

Now set APU OPERATE for Unit 1 to START/RUN

Perform OMS gimbal check

C3

Enter ITEM 34 EXEC
Gimbal test cycle starts

Init deorbit burn

C3

Enter OPS 302 PRO

Load burn targets

C3

Enter ITEM 22 EXEC

Start maneuvering to deorbit burn attitude

C3

Enter ITEM 27 EXEC

O14/O16

Set L/R OMS ENG VLV to ON

C3

Set OMS ENG LEFT/RIGHT to ARM/PRESS

Start deorbit burn countdown

C3

Enter ITEM 23 EXEC
Countdown can be seen at any CRT
Now press EXEC on the pilots, right, keyboard
Deorbit burn starts

Deorbit burn complete

Deactivate OMS system

C3

Set OMS ENG LEFT/RIGHT to OFF

O14/O16

Set L/R OMS ENG VLV to OFF

	Shuttle turn maneuver
C3	Enter OPS 303 PRO Use RHC(RotationalHandController) to turn shuttle around
F5/F9	Use ADI(AttitudeDirectionIndicator) on CDR1/PLT1 for correct alignment
	Activate APU UNIT 2+3
R2	Set APU OPERATE 2/3 to START/RUN Set He ISOLATION A LEFT/CENTER/RIGHT to OPEN Set He ISOLATION B LEFT/CENTER/RIGHT to OPEN Set PNEUMATICS LEFT ENG He XOVER to OPEN Set He INTERCONNECT CENTER/RIGHT to OUT OPEN Set He INTERCONNECT LEFT to IN OPEN Set HYD MAIN PUMP PRESS 1/2/3 to NORM
	Hydraulic surfaces check
C3	Enter ITEM 39 EXEC
O17	Set ATVC 1/2/3/4 to ON
R4	Set MPS/TVC ISOL VLV SYS1/SYS2/SYS3 to OPEN
O7U	Set GPS 1/2/3 PRE AMPL UPPER/LOWER and POWER to ON
C3	Enter ITEM 36 EXEC followed by ITEM 37 EXEC
	Enter ITEM 38 EXEC Wait for ready Enter ITEM 40 EXEC
O8	Set FWD RCS He PRESS A/B to CLOSE Set TANK ISOL. 1-2/3-4-5 to CLOSE Set MANIFOLD ISOL. 1/2/3/4/5 to CLOSE
	Re-entry
C3	Enter OPS 304 PRO Pitch nose up to 35 degrees using the keyboard/joystick See correct alignment on the ADI
	Atmospheric entry begins
F2/F4	Check that pushbuttons for PITCH and ROLL/YAW are set to AUTO
	Enable horizontal situation display
C3	Enter SPEC 50 PRO

	Start up radiator cooling
L1U	Set OUT TEMP to NORM Set MAN SEL 1/2 to RADFLOW
	Deploy air data probe
C3	Set AIR DATA PROBE LEFT/RIGHT to DEPLOY or DEPLOY/HEAT
F6/F8	Set AIR DATA SEL to LEFT or RIGHT
O8U	Set RADAR ALTIMETERS 1/2 to ON
O14,O15,O16	Set BRAKE POWER MN A,B,C to ON
	Activate the MSBLS(MicrowaveScanBeamLandingSystem)
O8U	Set the three MLS switches to ON Set the corresponding thumbwheels to channel 1 Enter OPS 305 PRO on any keypad
F2/F4	Set PITCH and ROLL/YAW to CSS Keep shuttle on glidescope and on runway centreline using the heading diamond on the HUD
	Deploy landing gear
F6/F8	Click LANDING GEAR ARM twice followed by clicking LANDING GEAR DN twice. Now try to make a smooth touchdown.
	TOUCHDOWN
	Deploy brake chute
F6/F8	Click CHUTE ARM twice followed by clicking CHUTE DPY twice Pitch nose down Use wheelbrakes by pressing B on the keyboard to stop the shuttle
	Release the brake chute
F6/F8	Click CHUTE JETT twice Keep using speedbrakes until shuttle stops
	GOOD WORK!