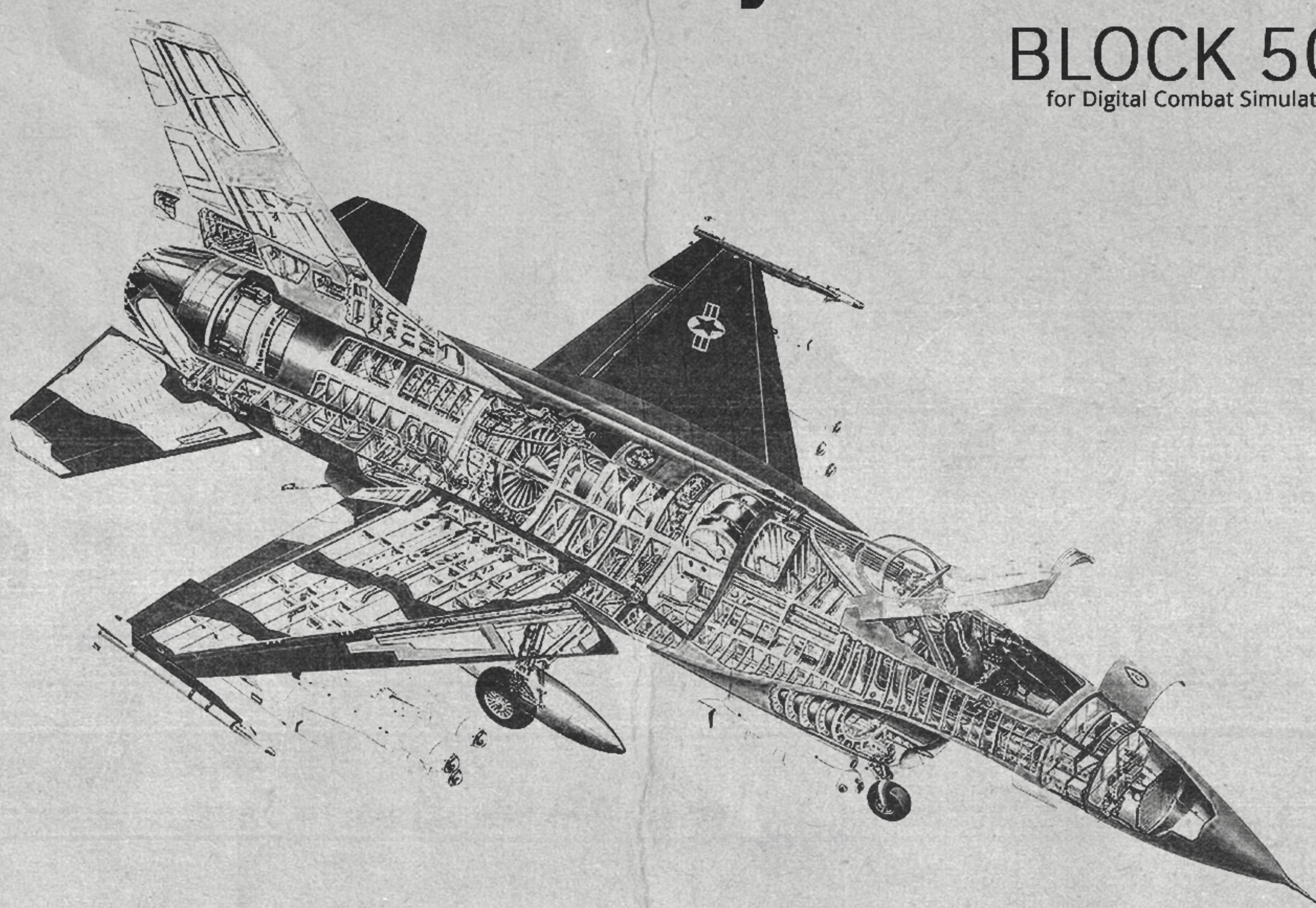


KNEEBOARD CHECKLIST

General Dynamics F-16C

BLOCK 50

for Digital Combat Simulator



By BISMARCK
Inspired by MINKY & FISADEV
Based of CHUCK'S GUIDES

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PRE START

MAIN PWR Switch BATT
Hot Mic Switch ON
UHF Backup Radio Function Knob MAIN
Wheel Chocks Request Placed

EPU Switch OFF
ENG FEED Knob NORM
Master IFF Knob OFF
ECM Pannel All OFF
Event Mark Switch .. **INOP** W/O:REMARKS: TM-500 UNTHRD
CMDS Pannel All OFF
Master Arm Switch OFF
Laser Arm Switch OFF
Standby Attitude Indicator Caged
LEFT HDPT Power Switch OFF
RIGHT HDPT Power Switch OFF
FCR Power Switch OFF
RDR ALT Power Switch OFF
Oxygen Supply Switch PBG
Avionics Pannel All OFF
Parking Brake Switch ON
Throttle Check smooth travel to full AB
Parking Brake Switch Verify resets to ANTI-SKID
Throttle Cutoff

FLCS RLY Light Check lit
FLCS PWR TEST Switch Hold to TEST
Verify four FLCS PWR Lights illuminate "C A D B" in green
Verify FLCS RLY Light extinguishes
Verify TO FLCS Light is lit
Verify FLCS PMG Light is lit
Release FLCS PWR TEST Switch from TEST

MAIN PWR Switch MAIN
FLCS RLY Light Check lit
FLCS PWR TEST Switch Hold to TEST
Verify four FLCS PWR Lights illuminate "C A D B" in green
Verify FLCS RLY Light extinguishes
Verify TO FLCS Light is lit
Verify FLCS PMG Light is lit
Release FLCS PWR TEST Switch from TEST

ENGINE & HYD/OIL PRESS Lights Check lit
ELEC SYS & SEC Lights Check lit
EPU GEN & EPU PMG Lights Check OFF
Parking Brake Switch ON

ENGINE START

JFS Switch START 2
Wait for RPM to reach ~20% ~25%
Verify SEC Light extinguishes
Throttle Idle
JFS Switch Check OFF by ~55% RPM
Warning Lights Check None but CANOPY & SEAT ARM

POST START

Canopy Switch Canopy Closed & Switch Covered
Pitot Probe Heater System Verify Operation
Set PROBE HEAT Switch to PROBE HEAT
Verify PROBE HEAT caution light is OFF
Set PROBE HEAT Switch to TEST
Verify PROBE HEAT caution light flashes 3-5 times/sec
Return PROBE HEAT switch to OFF

Fire & Overheat Detection System Verify Operation
Press and hold FIRE & OHEAT DETECT button
Verify ENG FIRE warning & OVERHEAT warning light
Release FIRE & OHEAT DETECT button

Malfunction & Indicator Lights Verify Operation
Press and hold MAL & IND LTS button
Verify all cockpit warning, caution and indicator lights on
Verify VMS audio alerts are audible
Release MAL & IND LTS button

MMC, ST STA, MFD, UFC, GPS, DL Avionics Switches ON
Inertial Navigation System Perform Alignment
See Page 8 for further details
LEFT HDPT Power Switch As Required
RIGHT HDPT Power Switch As Required
FCR Power Switch ON
RDR ALT Power Switch STBY
COMM1 UHF & COMM2 VHF Volume As Desired
COMM1 UHF & COMM2 VHF Squelch SLQ
UHF Backup Radio Function Knob BOTH
FLCS Reset Switch Hold for 2-5 seconds
DBU System Verify Operation
Set DIGITAL BACKUP switch to BACKUP
Verify DBU ON warning light illuminates
Operate flight controls and verify all control surfaces respond normally
Set DIGITAL BACKUP switch to OFF
Verify DBU ON warning light extinguishes

POST START

SEC System Verify Operation

- Note Initial RPM and NOZ POS
- Set ENG CONT switch to SEC
- Check SEC caution light illuminates
- Check engine RPM is stabilized, may drop ~10%
- Hold wheel brakes
- Advance throttle towards MIL until engine RPM ~85%
- Snap throttle back to IDLE
- Check for normal and smooth indications
- NOZ POS should be 5% or less
- Set ENG CONT Switch back to PRI
- Check SEC caution light extinguishes
- Check NOZ POS returns to greater than 94%

FLCS Verify Operation

- Cycle all flight controls with stick and pedal input
- Set FLT CONTROL BIT Switch to BIT
- Built in Test is running while RUN light is lit
- After ~45 seconds RUN light should extinguish
- Upon success, BIT Switch returns to OFF. FAIL and FLCS warning lights remain OFF
- Verify BIT PASS in MFD FLCS Page

IFF Master Knob NORM

DED IFF Page As Desired

Standby Attitude Indicator Uncaged

Barometric Altimeter Set

STORES CONFIG Switch As Required

Electronic Countermeasures (if AN/ALQ-184 ECM Pod is equipped)

ECM Switch STBY

ECM XMIT Module 1 -> 6 buttons ON

ECM BIT Button Press and hold

- Verify "S A F T" lights in modules 1 through 6 illuminate

ECM XMIT Switch As Required

Speed Brakes Fully Extended

- Verify correct position and indication
- Return speed brakes to fully closed
- Verify correct position and indication

Air Refuel Switch Open

- Verify correct position
- Set Air Refuel Switch back to Closed
- Verify correct position

Fuel Quantity Indication System Verify Operation

- Set FUEL QTY Knob to TEST
- Verify FR & AL pointers indicate 2000 (+/- 100) lbs
- Verify Fuel TOTAL indicates 6000 (+/- 100) lbs
- Verify FWD & AFT FUEL LOW caution lights are lit
- Cycle FUEL QTY Knob to all positions and verify readouts match aircrafts actual load
- Set FUEL QTY back to NORM

POST START

HUD SYM Brightness Wheel As Desired
Master and Override Modes As Required
DED UHF & VHF Radio frequencies As Required
DED BULLSEYE ON

Verify the correct STPT is selected and loaded

DataLink

Check DED Time page
Verify GPS System line is SOLID (not flashing)
Set MIDS LVT Knob to ON
Under DED DLINK page, set GPS Time to ON
Verify SYNC changes from COARSE to FINE within ~5 seconds
Configure DLINK page as required

TWA/RWR Power Button ON
CMDS RWR Switch ON
CMDS JMR Switch As Required
CMDS CH Switch ON
CMDS FL Switch ON
CMDS MODE Knob As Required
CMDS PRGM Knob As Desired
Helmet Mounted Cueing System Perform Alignment
Set HMCS Brightness Knob as desired
See Page 8 for further details

Trim System Verify Operation

Set TRIM/AP DISC Switch to DISC
Use trim hat on stick to trim both pitch and roll
Verify no control surface motion and no movement on TRIM wheel or indicators
Set TRIM/AP DISC Switch to NORM
Use TRIM hat on stick to trim both pitch and roll
Verify there is control surface motion and movement on TRIM wheel and indicators
Center pitch & roll trim, then use YAW TRM Knob to check center trim for yaw

MPO System Verify Operation

Push stick full forward and hold
Verify horizontal stabilizers deflect down
Set and hold MANUAL PITCH Switch to OVRD
Verify horizontal stabilizers deflect further down
Release stick pressure and MANUAL PITCH Switch
Confirm horizontal stabilizers return to original position

Wheel brakes Press

Verify correct braking force, then release wheel brakes
Set Wheel Brakes CHAN Switch to CHAN II
Press and hold wheel brakes
Verify correct braking force, then release wheel brakes
Set Wheel Brakes CHAN Switch back to CHAN I

POST START

EPU System Verify Operation

Check EPU FUEL reads ~95%

Set OXYGEN Switch to 100%

Set EPU Switch to NORM

Press and hold wheel brakes

Increase engine RPM to 10% above normal IDLE power

Set and hold EPU/GEN TEST Switch to EPU/GEN

Verify EPU AIR light is lit

Verify EPU RUN light illuminates for ≥ 5 seconds

Verify EPU GEN & EPU PMG lights remain extinguished

Verify FLCs PWR lights illuminate

Release EPU/GEN TEST Switch to OFF

Return throttle to IDLE

Release wheel brakes

Set OXYGEN Switch back to NORM

Seat Height Adjust Switch As Desired

External Lights ANTI-COLL Knob As Required

External Lights WING/TAIL Switch BRT/DIM

External Lights FUSELAGE Switch BRT/DIM

External Lights MASTER Knob NORM

Nose Lights Switch TAXI

Wheel Chocks Request Removed

Ejection Seat Lever Armed

TAXI

Parking Brake Switch ANTI-SKID

NWS A/R DISC & MSL STEP Button Press

Verify AR NWS light illuminates

Throttle Slightly Above Idle

Taxi Speed <25kts

Turn Speed <10kts

TAKEOFF

Nose Lights Switch LANDING
 PROBE HEAT Switch PROBE HEAT
 Other Lights As Required
 Speed Brake Indicator Verify Closed
 STORES CONFIG Switch Verify Correct
 RDR ALT PWR Switch ON

Wheel Brakes Hold
 Throttle 90% RPM
 Verify engine within parameters and no warning lights
 Throttle MIL or MAX AB (As Required)
 Wheel Brakes Release
 Nose Wheel Steering Disengage at ~70kts
 Speed Wait for take off speed
 Stick Pull to establish T/O Pitch (8°/12° Nose Up)
 Landing Gear Lever Retract after positive climb rate
 Ensure Landing Gear is retracted before 300kts

Takeoff Speed Table

Aircraft Weight (lbs)	20000	24000	28000	32000	36000	40000	44000
Takeoff Speed (kias)	128	142	156	168	178	188	198

LANDING

Initial Approach

- Verify RDR ALT Power Switch is ON
- Align with runway at 1500ft AGL and 300kts

Overhead Break

- Break left or right over desired touchdown point
- Hold speed between ~300kts and ~250kts
- Deploy speedbrakes
- Fly break at ~70° bank and ~3-4G
- Align FPM with horizon line to maintain level turn

Downwind Leg

- Roll out into downwind leg opposite of landing heading.
- Retract speedbrakes as required
- Extend landing gear
- Set landing lights switch to LANDING
- Reduce speed to prevent excessive airspeed in base turn.
- Use throttle to adjust to on speed AOA (~11°), don't use pitch trim as FBW system will take care of AoA based on throttle

Base Turn

- Initiate base turn once abeam rollout point, about once wingtip is at the end of the runway
- Lower nose to 8-10° of pitch and fly turn at 11° AoA

Final Turn

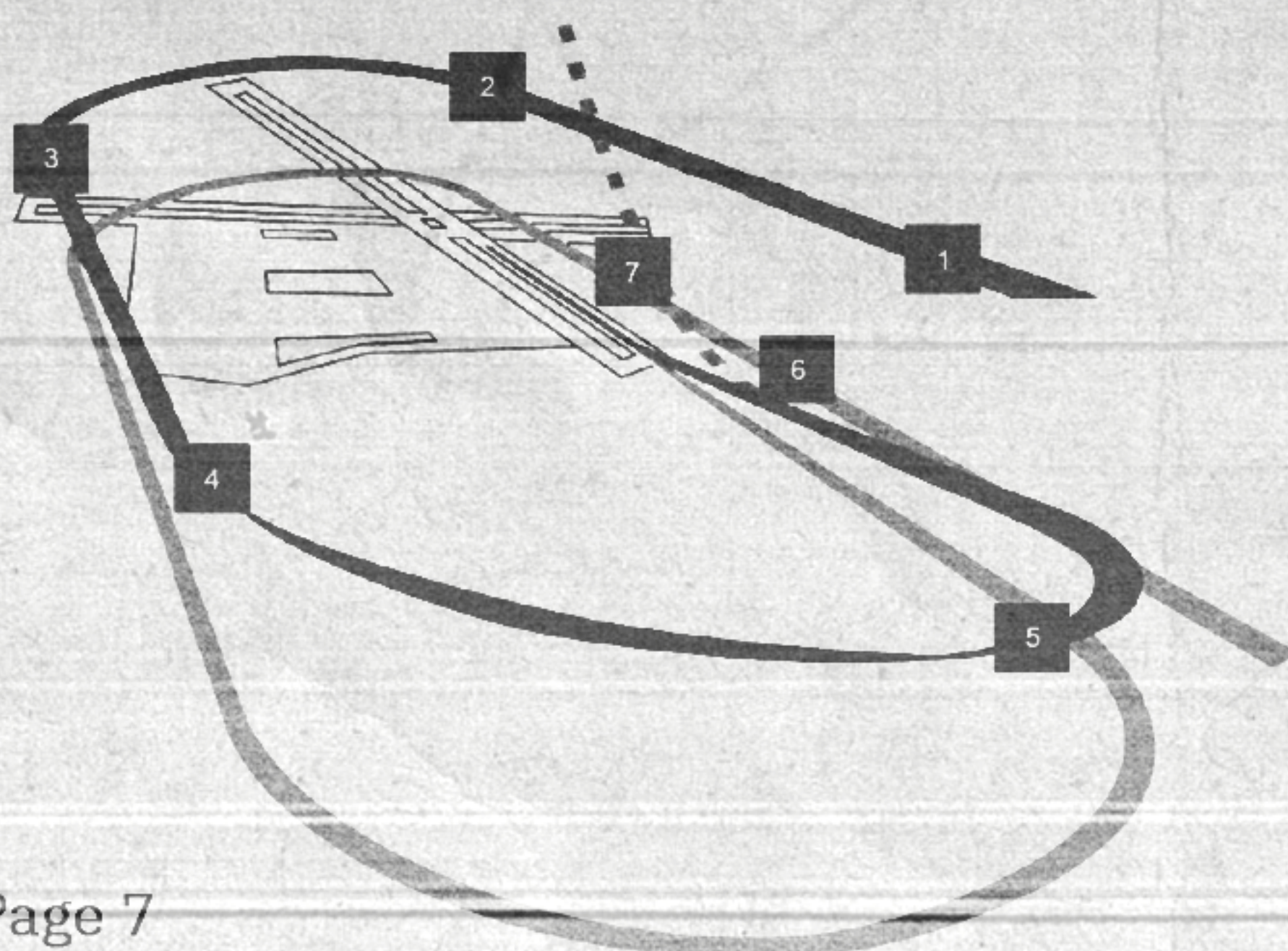
- Use throttle for airspeed & stick to maintain 8-10° pitch nose low and ~11° AoA throughout turn
- Roll out on final and raise nose to maintain glide path (300ft AGL at 1nm from the touchdown point)
- Align FPM & 2.5° pitch low ladder line with runway threshold to help maintain glidepath and AoA

Short Final

- Once over the overrun shift FPM ~300-500ft down the runway.
- Gently pull stick to flare & reduce the rate of descent (DON'T LEVEL OFF).
- Throttle to IDLE and touchdown with on speed AOA (Max 13°).

Roll-Out

- Maintain 13° nose-up attitude to aerobrake until ~100kts.
- Reduce backstick pressure & lower nosewheel to runway.
- Open speedbrakes fully & maintain full aft stick.
- Apply wheelbrakes as required.
- Engage NWS once below 30kts and taxi off of runway.



1. Initial Approach
2. Overhead Break
3. Downwind Leg
4. Base Turn
5. Final Turn
6. Short Final
7. Roll-out

INS Alignment

INS Select Knob NORM/STOR HDG
Wait ~8 minutes for NORM alignment
Wait ~2 minutes for STOR HDG alignment
DED INS Coordinates Verify Correct
DED INS Alignment Status Check Complete
Verify RDY is flashing
INS Select Knob NAV

HMCS Alignment

HMCS Brightness Knob As Desired
DED Open HMCS ALIGN Page
Press LIST on ICP
Press M-SEL/0 for MISC
Press RCL for R-HMCS
Move dobber switch to SEQ once

HMCS Coarse Alignment Complete
Select Coarse on DED with dobber switch and press M-SEL
Move head to align HMCS cross with HUD cross
Depress cursor slew switch until ALIGN OK
Press M-SEL to save alignment

HMCS AZ/EL Alignment Complete
Select AZ/EL on DED with dobber switch and press M-SEL
Align top smaller cross with large cross via slew switch
Press M-SEL to save alignment

HMCS ROLL Alignment Complete
Select ROLL on DED with dobber switch and press M-SEL
Align roll of both cross sets via slew switch
Press M-SEL to save alignment