29 JULY 2021

REQUIEM'S AIR COMBAT TUTORIAL LIBRARY

COCKPIT WORKFLOWS: P-47D THUNDERBOLT

THANK YOU TO MY PATREON SUPPORTERS!

"Commercial Pilots" - D Drake, SmellyFella

"Private Pilots" - C Lavid, Colin, Donik, J Welch, PhunkaeG, B McDermott
M Jaspers, M Freeman,Boslandschap, M Screng,R Moore,
C Rocchio, 12th OIAE Gosling, Heinrich, Sigma, Grafspee
Smokin Hole, I Clark, D Hutchison, Albatross
Joe Robinson, M Dale, G Lahoest, Big Froggy Fat, N,
P Chieosmaut, V Kozyrev, M Dale, Jeanette B

"Student Pilots" - Roger Meatball, Peregryn, Utopioneer, P Angelopoulos,
ShamrockOneFive, A Bullock, J Conant, B Livingston
Tom, Snowy, Nadelbaum, T Anderson, Rasterops98, O Luciano
S Elder, Bluenoser, S Griffee, J Witkowski, E Mazuranich,
R Goldblatt, Hellbender, B Livingstone, Tom

A special thanks to “Busdriver” for reviewing my content so thoroughly!

If you would like to support my content you can do so here:

BECOME A PATRON

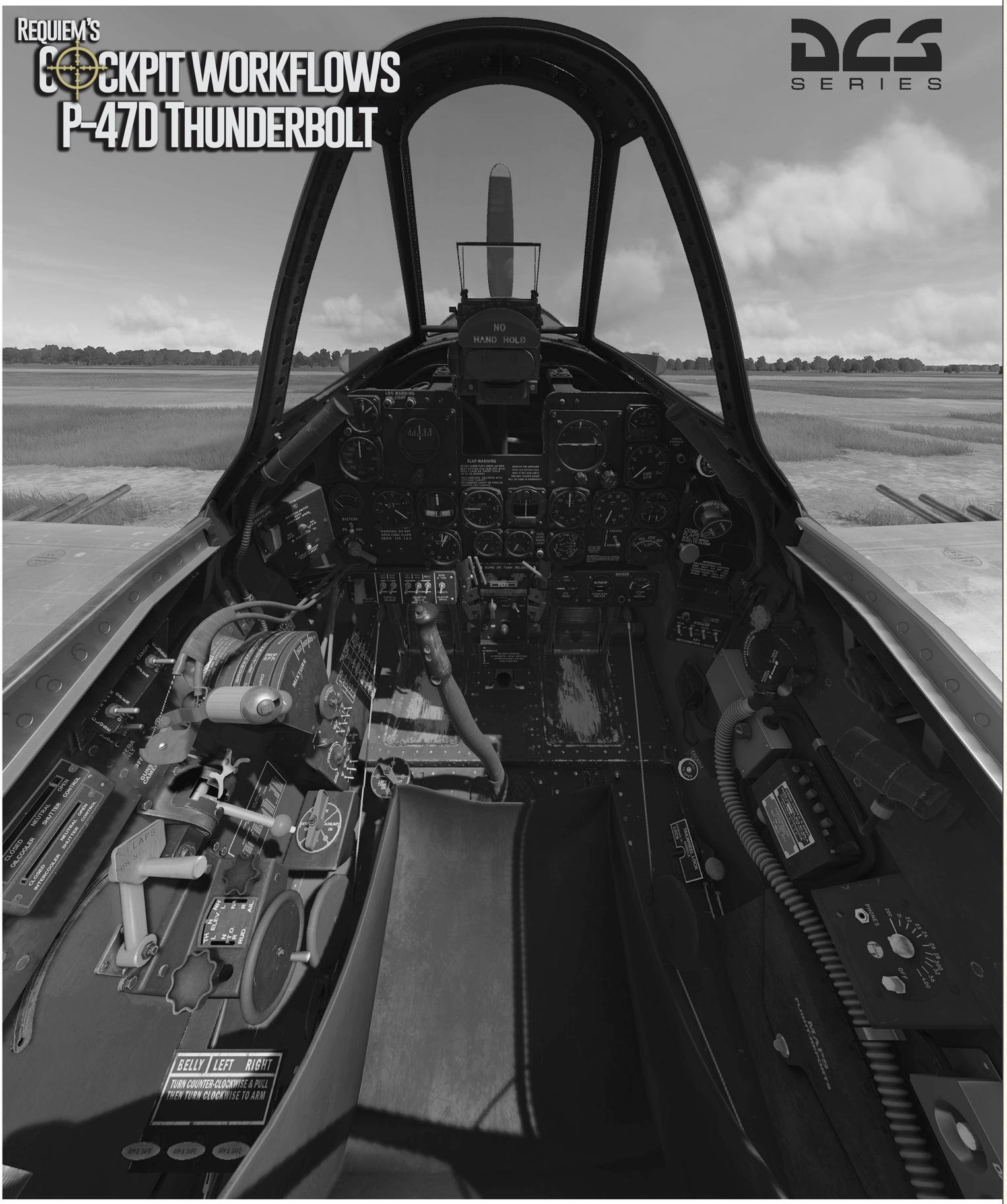
SUBSCRIBE

FOLLOW

DCS P-47D COCKPIT WORKFLOWS

(Click the flow)

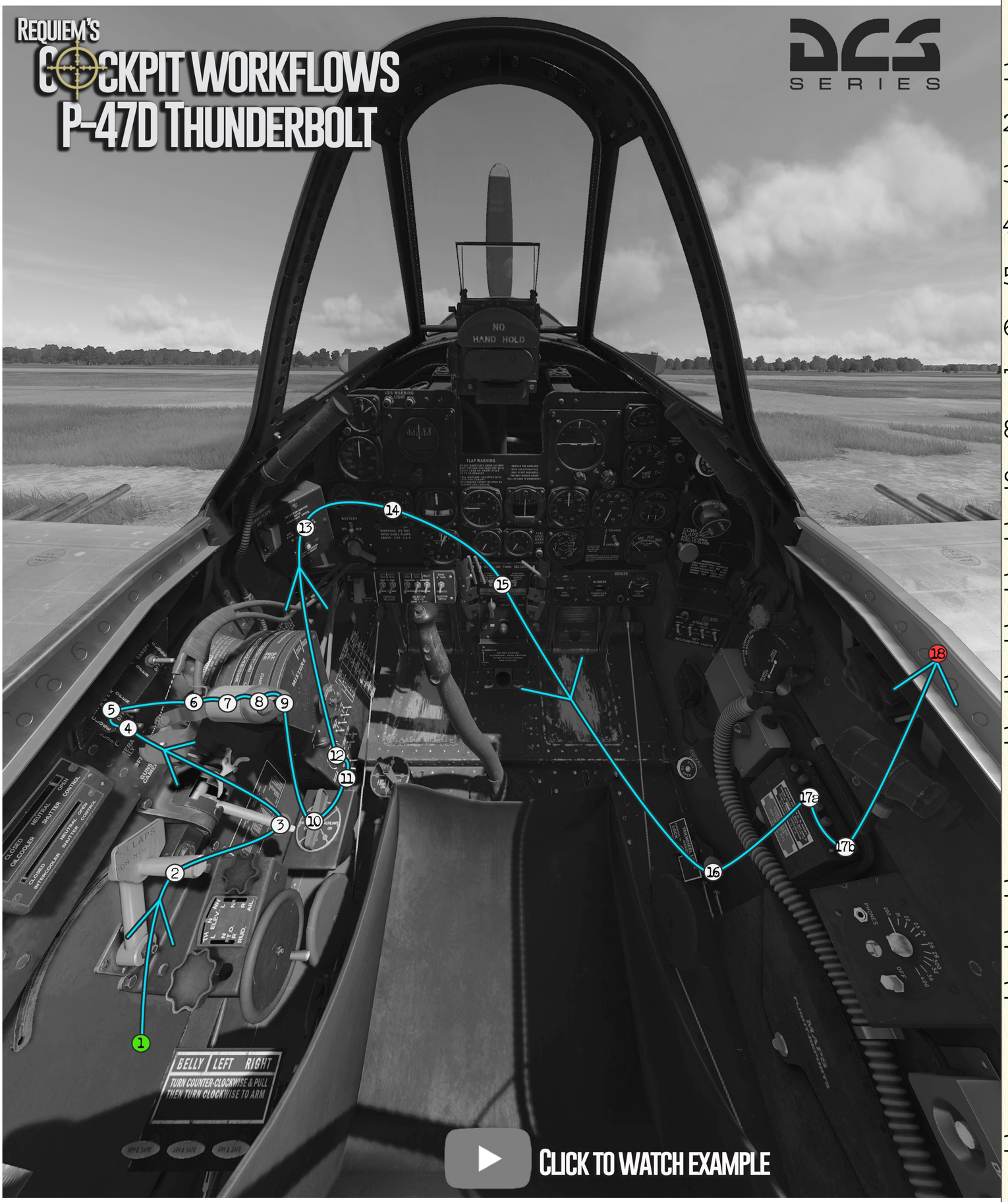
1. Practice Page
2. Before Start
3. Engine Start
4. After Start
5. Before Takeoff
6. After Takeoff
7. Air Combat
8. Rocket Attack
9. Dive bombing
10. Before Landing
11. Go Around
12. After Landing
13. Shutdown



P-47D FLOW PRACTICE PAGE

This page is intentionally blank so you can practice visualising your flows on a blank cockpit

BACK TO COCKPIT FLOWS LIST

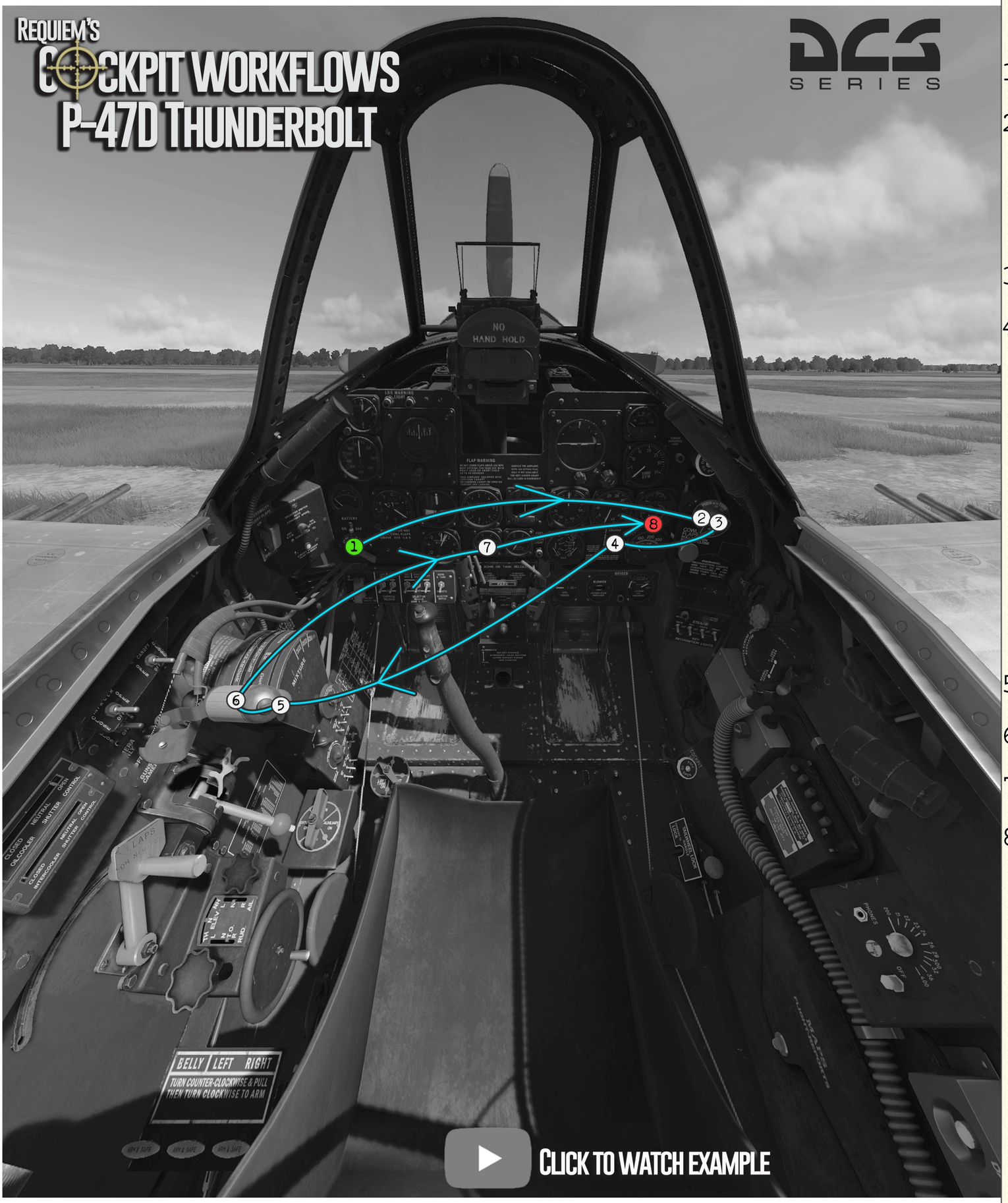


BEFORE START

TRIGGER: PREFLIGHT COMPLETE

1. External Power.....CONNECT
2. Flaps.....UP
3. Landing Gear.....DOWN
4. Oil Cooler Flaps.....NEUTRAL
5. Intercooler Flaps.....NEUTRAL
6. Supercharger Lever.....OFF
7. Throttle.....OPEN 1/2 INCH
8. Propeller Control.....MAXIMUM
9. Mixture.....IDLE CUT-OFF
10. Fuel Selector Valve.....MAIN
11. Generator.....ON
12. Fuel Boost Pump.....START & ALTITUDE
13. Propeller Switch.....AUTO
14. Altimeter.....SET & CHECK
    *QFE - Local Flights, ALT = 0
    *QNH - Cross Country, ALT = Elevation MSL
15. Parking Brake.....SET
16. Tailwheel.....UNLOCKED
17. VHF Radio.....SET
    a. Select channel B (ATC)
    b. Mode Switch - REMOTE (to the right)
18. Request Startup from ATC

BACK TO COCKPIT FLOWS LIST



ENGINE START

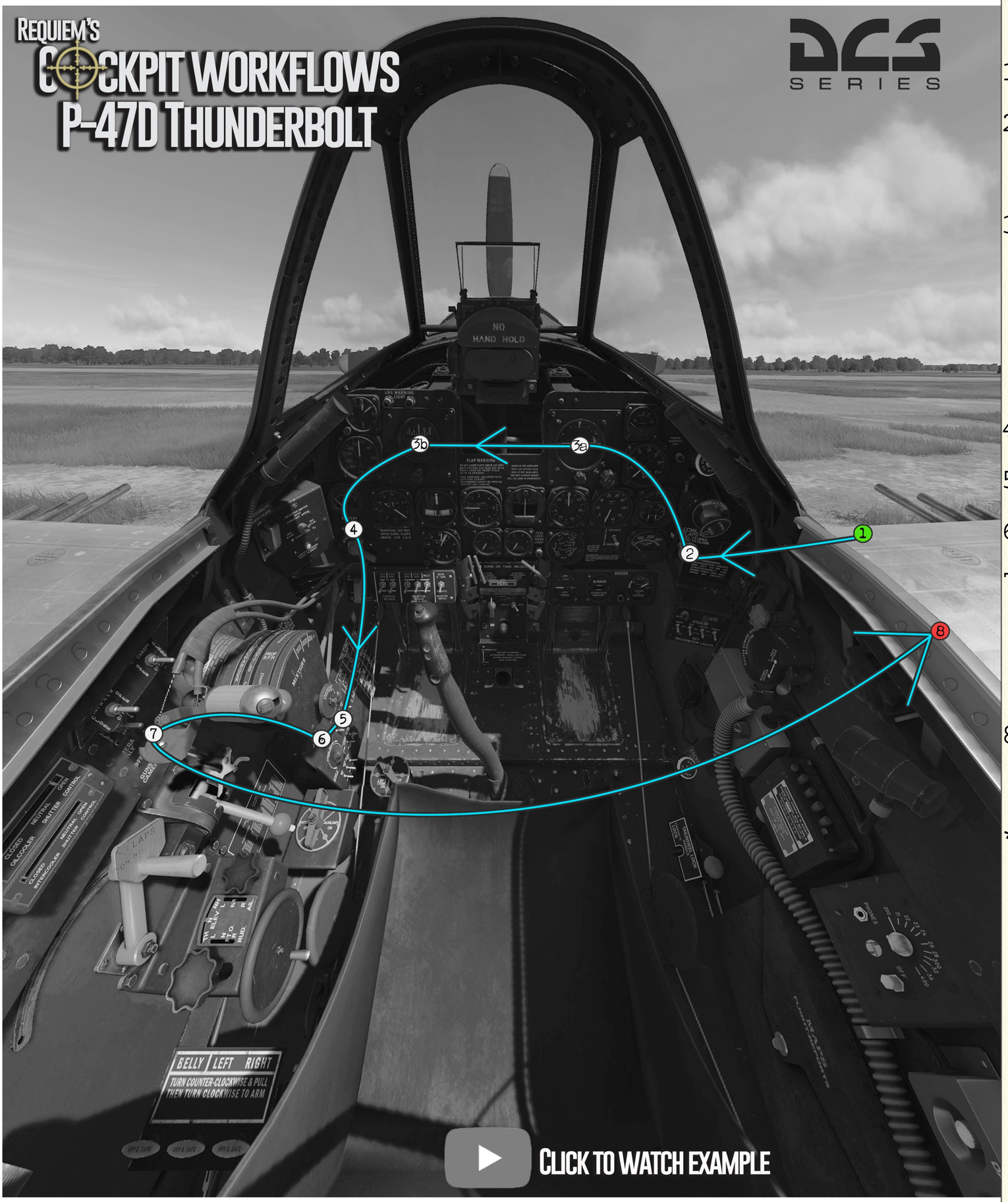
TRIGGER: ATC CLEARED TO START

1. Ignition Switch.....BOTH
2. Fuel Primer.....UNLOCK & PRIME ENGINE
   a. 2 to 4 strokes for warm engine
   b. 4 to 6 strokes for cold engine
3. Fuel Primer.....LOCKED
4. Engine Starter Switch.....USE
   a. Flick to ENGAGE Briefly
   b. Hold at ENERGIZE (15 to 20s max) then
   c. ENGAGE (until a few secs after start)

As the engine starts...

5. Mixture Control.....AUTO RICH
6. Throttle.....800-1000 RPM
7. Suction Gage.....3.85" to 4.15"
8. Engine Instruments.....CHECK
   a. Oil Temperature - 50°C
   b. Oil pressure - 75-85 psi
   c. Fuel Pressure - 22-24 psi
   d. Cylinder Head Temp - 100-260°C

BACK TO COCKPIT FLOWS LIST



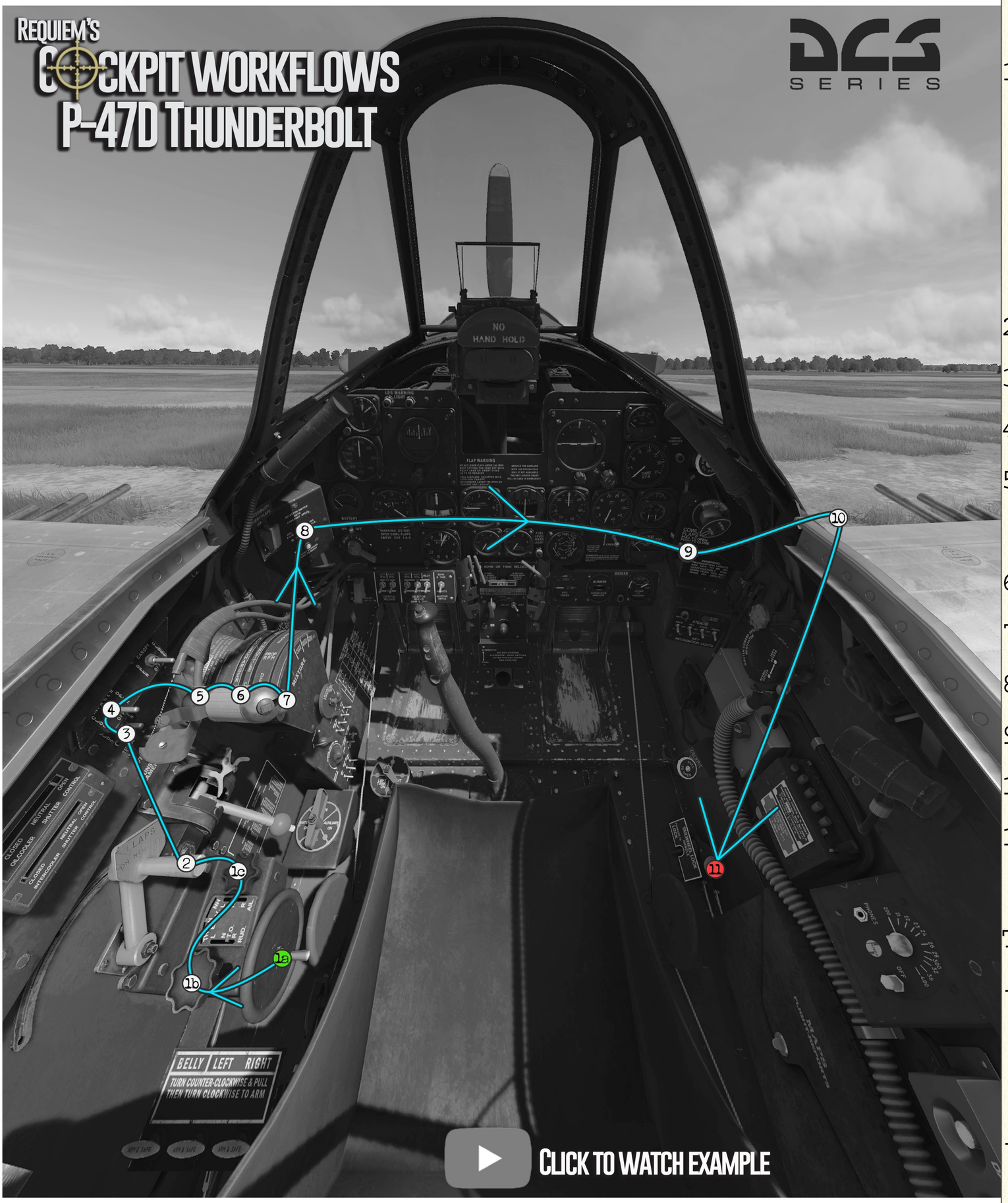
AFTER START

TRIGGER: ENGINE WARMING UP

1. External Power.....DISCONNECT
2. Cowl Flaps.....AS REQUIRED
   (CHT 100-260°C)
3. Gyroscopic Instruments.....CHECK
   a. Attitude Indicator - Uncaged
   b. Directional Gyro - Verify Heading
      (check against Magnetic Compass)
4. Battery Switch.....ON
5. External Lighting.....AS REQUIRED
6. Gunsight Rheostat.....ON
7. Gun Safety Switch.....CHECK
   a. GUNS & CAMERA, verify sight displayed
   b. OFF (Guarded)
8. Request Taxi from ATC

*Engine should be warmed up before taxiing

BACK TO COCKPIT FLOWS LIST



BEFORE TAKEOFF

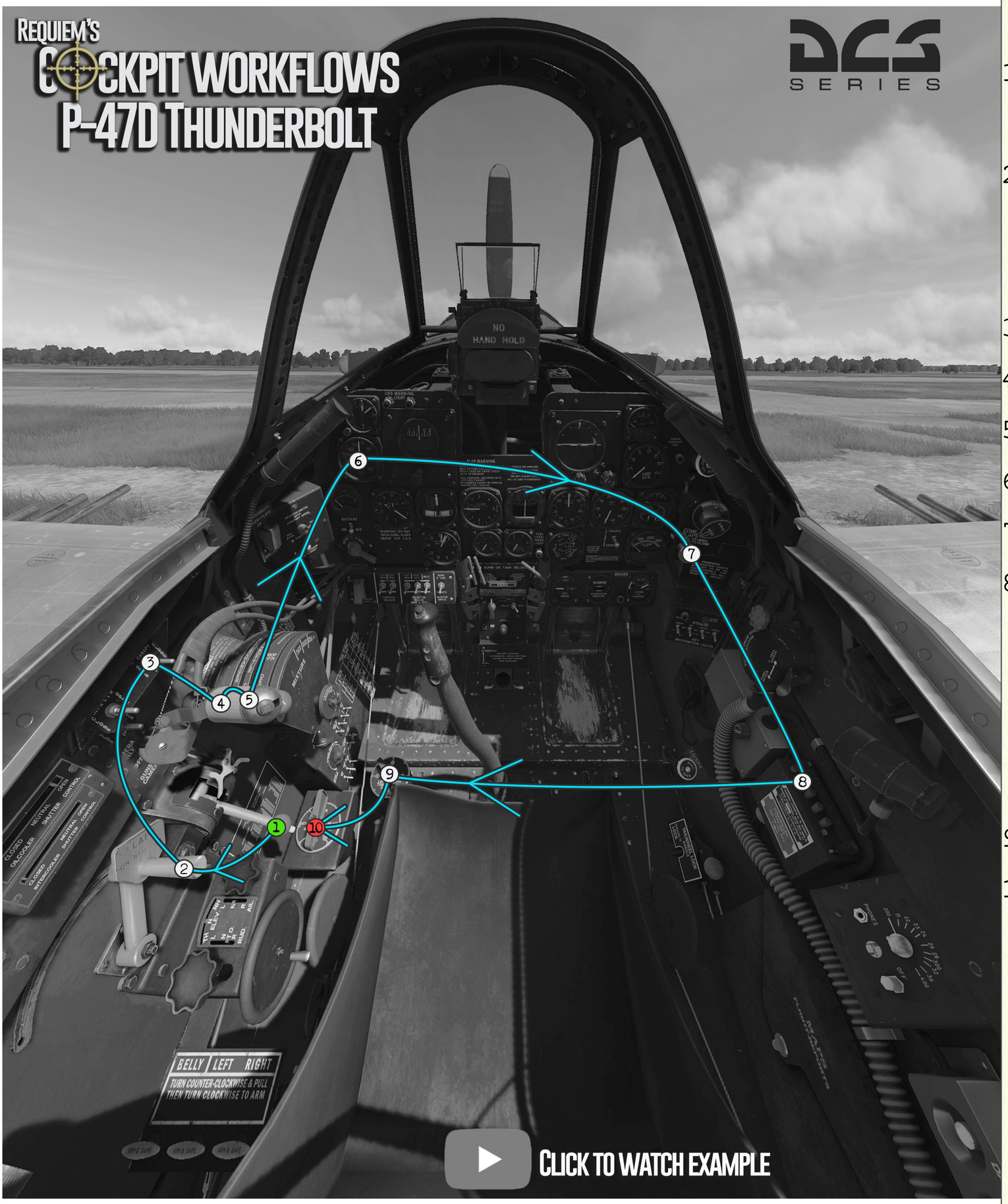
TRIGGER: APPROACHING RUNWAY

1. Trim Tabs.....SET FOR TAKEOFF
   a. Elevator - Neutral
      (1/4" Nose heavy if Aux fuel tank full)
   b. Rudder - T/O
   c. Ailerons - Neutral
2. Flaps.....UP or 20°
3. Oil Cooler Flaps.....NEUTRAL
4. Intercooler Flaps.....OPEN
5. Supercharger Lever.....LINKED
   (DO NOT link above 35°C OAT)
6. Propeller Control.....MAX (2700 RPM)
7. Mixture.....AUTO RICH
8. Propeller Switch.....AUTO
9. Cowl Flaps.....OPEN
10. Request takeoff from ATC
11. Tailwheel.....LOCKED

Takeoff Technique Notes:

- Increase throttle to 30" Manifold Pressure while holding brakes, then to full power not exceeding 52"
- Takeoff speed 115-120 mph

BACK TO COCKPIT FLOWS LIST



AFTER TAKEOFF

TRIGGER: POSITIVE RATE OF CLIMB

1. Landing Gear.....UP

CLIMBING THROUGH 500 FT

2. Flaps.....UP

*Clear of obstacles

*Airspeed is sufficient (140 mph)

3. Canopy.....CLOSED
4. Throttle.....42.5" MAP
5. Propeller Control.....2550 RPM
6. Climb Speed.....160-170 MPH
7. Cowl Flaps....AS REQUIRED (CHT 100-260°C)
8. VHF Radio.....CHANNEL A (Flight)

CLIMBING THROUGH 3000 FT AGL

FUEL MANAGEMENT

9. External Tank (if available).....SELECT
10. Tank Selector.....EXTERNAL or AUXILIARY

Without EXTERNAL fuel, select AUXILIARY if it has fuel but switch back to MAIN with 10 gallons AUX fuel left to keep as reserve

BACK TO COCKPIT FLOWS LIST

ENTERING AIR COMBAT

TRIGGER: ENEMY AIRCRAFT CLOSE

1. Fuel Selector.....MAIN
2. Gun Safety Switch.....GUNS & CAMERA
3. External Tanks / Bomb Releases.....PULL
4. Mk 8 / K-14 Gunsight.....SET

   Wingspan - Set to target

   K-14 Gunsight mode - Gyro (if installed)

BACK TO COCKPIT FLOWS LIST

P-47D-40 ROCKET ATTACK

TRIGGER: WHEN TARGET IS FOUND

1. Fixed Reticule Lever.....UP (Visible)
2. Fuze.....INST or DELAY
3. "ROCKET TO BE FIRED" Dial.....Turn to 1
4. Firing Mode.....AS DESIRED

   SINGLE - Fires one rocket at a time

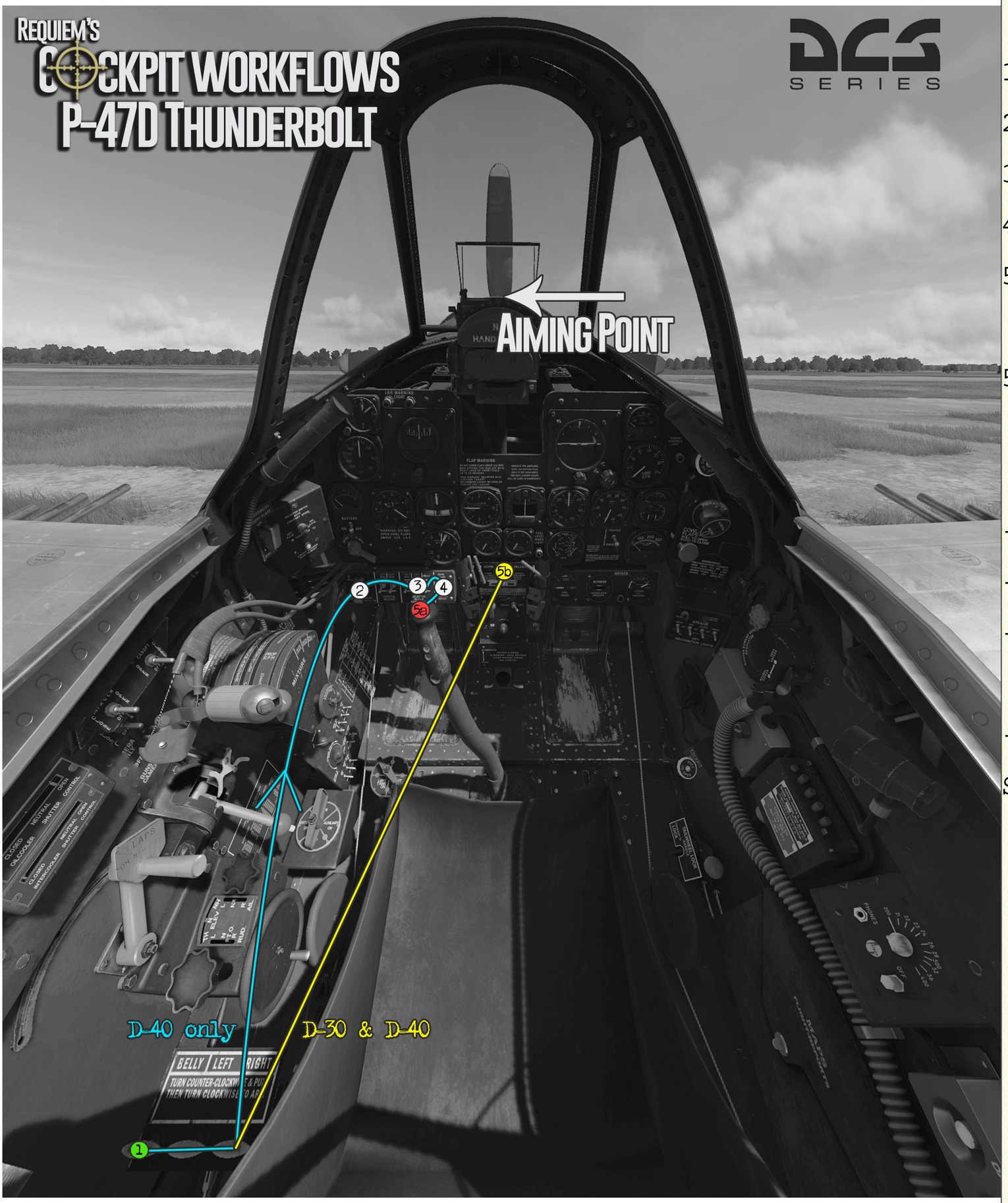
   AUTO - Ripple fires all rockets
5. Bomb-Rocket Selector.....ROCKETS
6. Safety switch.....READY
7. Bomb-Rocket Release Button:

   SINGLE - Press once to fire a rocket

   AUTO - Hold for 1 sec to fire all rockets

See this video to learn how to perform rocket attacks:

BACK TO COCKPIT FLOWS LIST



BOMBING ATTACK

TRIGGER: WHEN TARGET IS FOUND

1. Bombs.....ARM (BELLY/LEFT/RIGHT)
2. Safety Switch.....READY
3. Selector Release.....AS DESIRED
4. Selector Switch.....BOMB & TANK

5a. D-40 Weapon Release Button - Press to drop bombs according to your settings

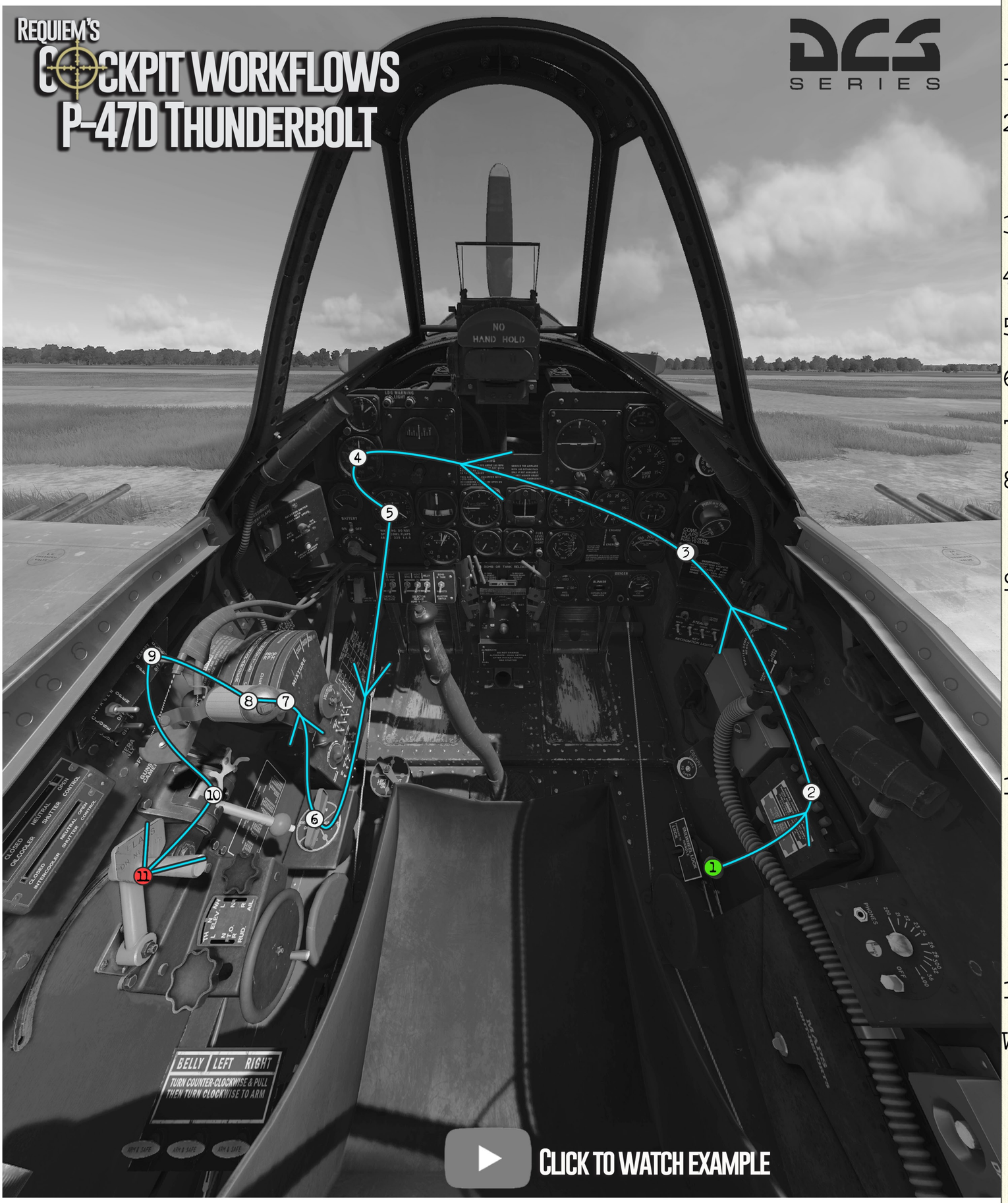
5b. D-30 - Use Weapon release handles to drop desired bomb for each station

ATTACK TECHNIQUE:

- Initial Altitude of 6000 to 8000ft AGL
- Slow to 150 MPH & initiate diving attack
- Place target on sight in 45-60° dive then set target just under gunsight glass
- Bomb Release at 3000ft AGL

See this video to learn how to dive bomb:

BACK TO COCKPIT FLOWS LIST



BEFORE LANDING

TRIGGER: 5NM AWAY FROM RUNWAY

1. Tailwheel.....LOCKED
2. VHF Radio.....SET
   *Channel B and Request Landing
3. Cowl Flaps.....CLOSED
4. Airspeed.....250 MPH
5. Altimeter.....1000 FT AGL
6. Fuel Tank Selector.....MAIN
7. Mixture Control.....AUTO RICH
8. Propeller Control.....2550 RPM
   (Increase to maximum on final)
9. Canopy.....OPEN

LEVEL BREAK OVER RUNWAY

10. Landing Gear.....DOWN
    (below 190 MPH)

FLY A CURVED BASE TO FINAL TURN

11. Flaps.....EXTEND FULLY

When stablished on final;

- Check Flaps are full
- Airspeed between 120-130 MPH

BACK TO COCKPIT FLOWS LIST

GO AROUND

TRIGGER: UNSTABLE APPROACH, RUNWAY UNSAFE

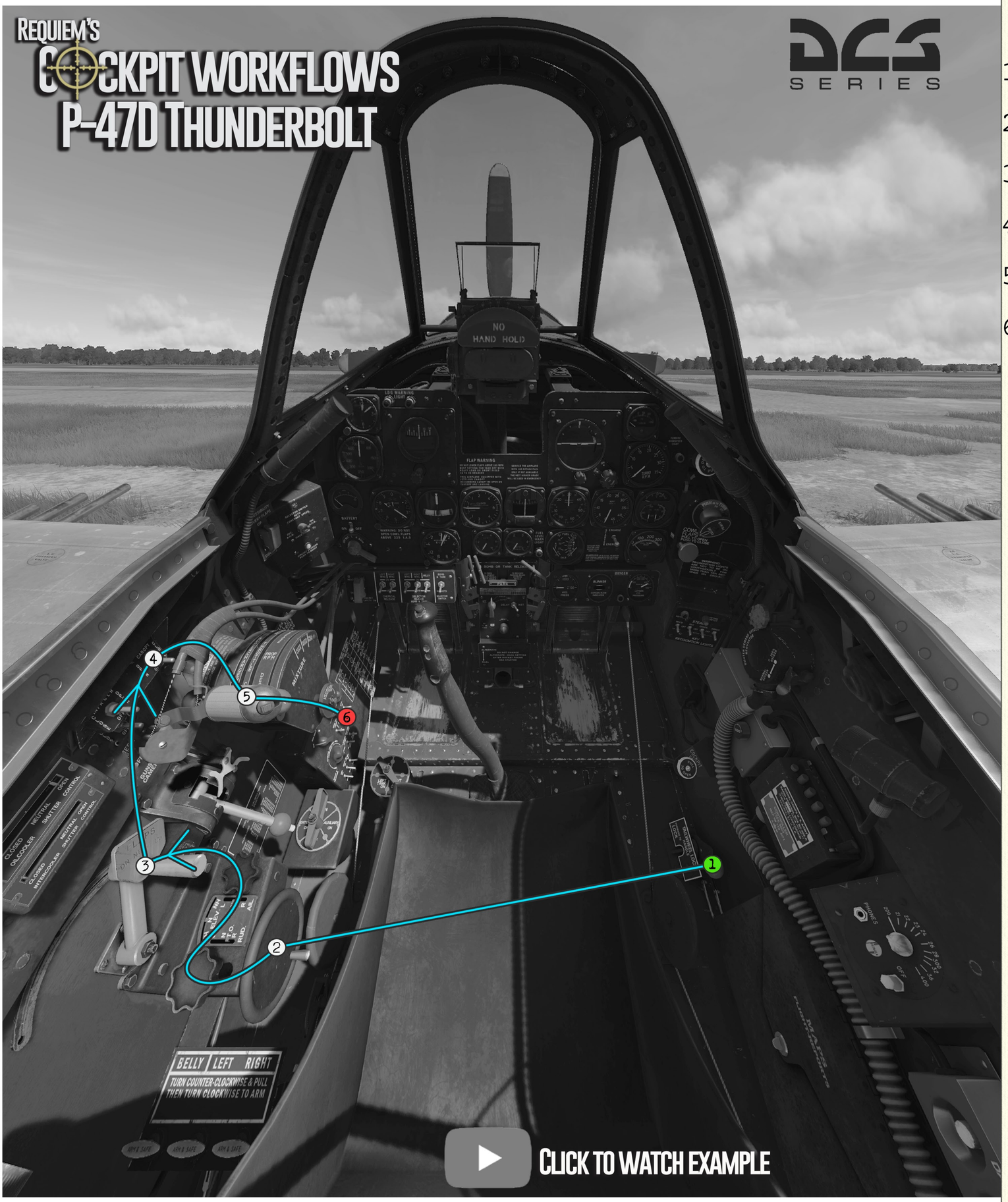
1. Throttle, Prop, Boost.....FULL POWER
   (Right rudder and right trim needed)
2. Landing Gear.....UP
3. Cowl Flaps.....OPEN

ONCE ALTITUDE > 500 FT

4. Flaps.....UP

REJOIN THE TRAFFIC PATTERN

BACK TO COCKPIT FLOWS LIST

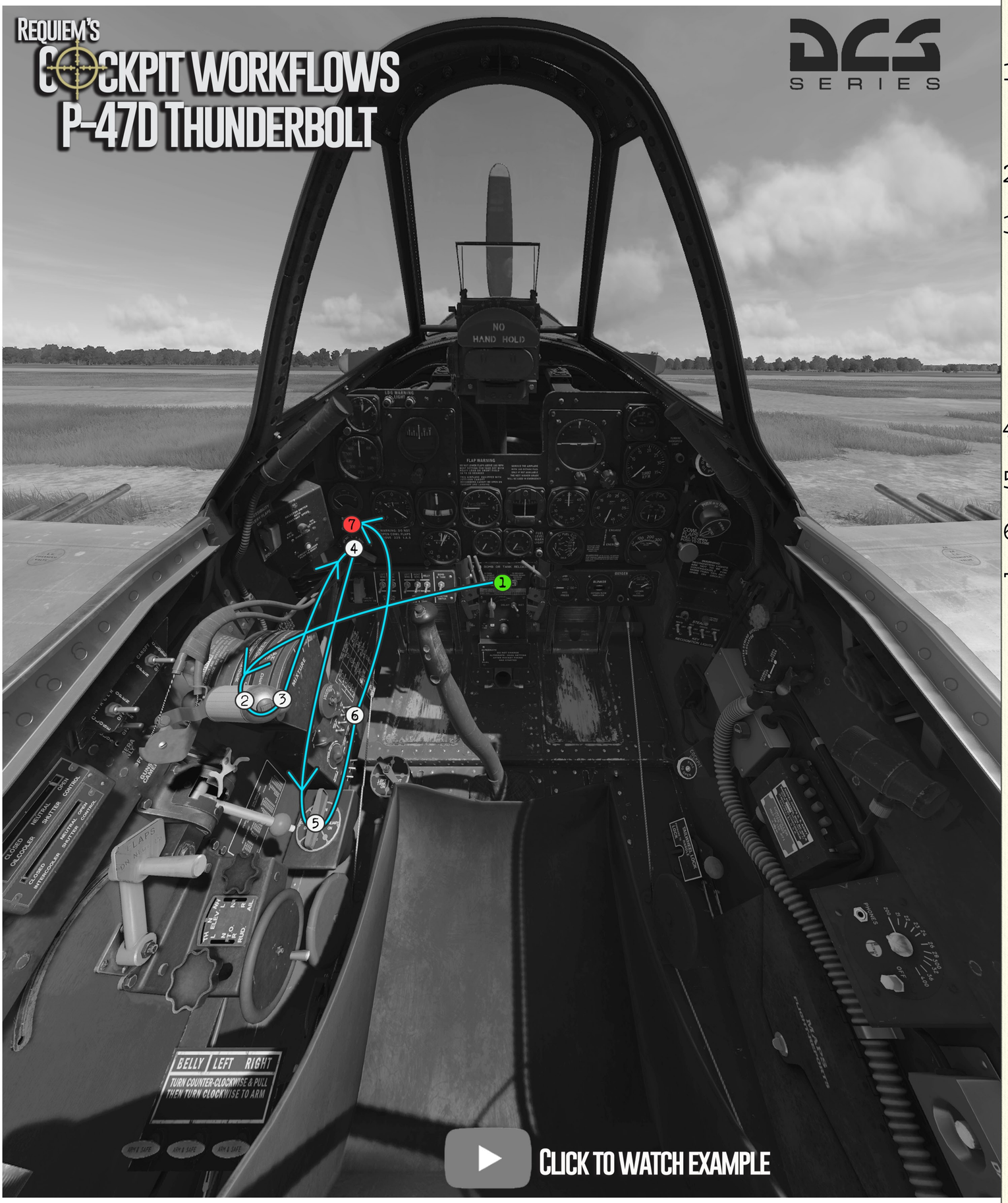


AFTER LANDING

TRIGGER: SAFE TAXI SPEED

1. Tailwheel.....UNLOCKED
2. Trims.....ALL NEUTRAL (0°)
3. Flaps.....UP
4. Canopy.....OPEN
5. Propeller.....MAXIMUM
6. Landing Light.....OFF (daytime)

BACK TO COCKPIT FLOWS LIST



SHUTDOWN

TRIGGER: TAXI INTO PARKING SPOT

1. Parking Brake.....SET

   *Apply toe brakes while setting brake

2. Throttle.....1000 RPM
3. Mixture Control.....IDLE CUT-OFF

AFTER PROPELLER STOPS SPINNING

4. Ignition Switch.....OFF
5. Fuel Selector Valve.....OFF
6. Switch Box.....EVERYTHING OFF
7. Battery Master.....OFF

BACK TO COCKPIT FLOWS LIST