



This plane is designed to be started from a "Cold & Dark" configuration. Systems are not configured to work properly if the plane is loaded with engines running. Checklist done to B.3.3 MUST be executed in 3d view with the mouse, NOT with shortcuts !

A - PREFLIGHT

A.1 - IMMOBILIZATION OF B17G

- Push the brakes primer
- Set brake primer (pull back 25% for grass, 50% for hard surfaces)
- Park Brake ON (handle up)
- Lock the tail wheel (only unlock when ready to taxi)
- Open cowl flaps
- Check trims : ailerons, rudder, elevators at neutral position
- Check payload and fuel (menu Aircraft/Payload & Fuel) - Wing tanks (1 & 3) must be 100% filled before using central tank (2) - Consider 800lb/100nm or 1350lb/hr
- Set fuel cross-feeds to NONE
- Set tank selector to NONE

A.2 - CALIBRATE PEDESTAL

- Toggle Manifold Pressure Selector (MPS) all the way round
- Set MPS to 1
- Toggle torque limiter all the way round from MAX (pushed forward) to none (pulled all the way aft)
- Set torque limiter to none
- Toggle all 4 waste-gates from on (pushed in) to off (pulled out)
- Set all 4 waste-gate to ON (pushed in)
- Toggle Prop speed handles all the way up and down
- Set prop speed handle to high RPM
- Toggle throttles from min to max
- Cut off throttles

- Set magnetos to OFF
- Set the LOCK MIXTURE AFT (auto system ON)

B - SETTING SYSTEMS TO "READY"

B.1 - TURNING ELECTRICALS ON

- Turn on Battery 1
- Turn on inverters 1 & 2
- Turn NAV lights ON
- Turn left wing light ON
- Turn on the radio stack
- Set NAV1 frequency as needed - PDI should come to life
- Set COM1 frequency
- Set transponder to STBY mode
- Turn IDI ON
- Acknowledge weather
- Turn IDI OFF - Short alarm must ring
- Set IDI HDG
- Set IDI FL
- Set IDI Bank to 5
- Contact tower to file flight plan
- Contact tower to pick up flight plan
- Set COM1 frequency
- Set the transponder code
- Contact tower for taxi clearance

B.2 - START-UP SEQUENCE

- Set MPS to 8
- Set tank selector to ALL
- Turn on batteries 2 & 3

B.2.1 - STARTING THE ENGINES

IF RESTARTING IN FLIGHT : feather the propeller

IF RESTARTING IN FLIGHT : turn generator off

- advised starting order : 1 2 3 4

- Unfeather propeller ONLY IF ON GROUND
- Turn fuel pump ON - Fuel pressure -> 15 PSI
- Turn fuel valve ON
- turn on magnetos to BOTH
- Throttle 1/3 aft
- Engage starter - 15 seconds max - ONLY IF ON GROUND
- IF RESTARTING IN FLIGHT : set 2500 rpm and unfeather propeller

B.2.2 - WHEN ENGINE IS RUNNING

- Turn the engine's generator ON
- Check electrical power is actually delivered
- Set throttle for Manifold Pressure 25
- Engine Temp should be 40 degrees C or greater at engine idle
- Redo B.2.1 & B.2.2 for other 3 engines

B.3 - ENGINES TESTING

B.3.1 - PREPARATION

- Check PROP pitch to high RPM

B.3.2 - TESTING

- advised order : 1 2 3 4
- Test both magnetos (left and right, per engine) : loss of 150 rpm max when cut off acceptable
- Set magnetos to both
- set MP42
- FEATHER the prop : engine should NOT stall and keep > 720rpm and < 950rpm
- Redo B.3.2. for engines 2, 3 and 4.

B.3.3 - SETTING UP TAKE-OFF CONFIGURATION (ENGINE RUN-UP)

- Unfeather all propellers
- Check 4 engines RPM < 2400 rpm
- Reset all engines to : IDLE



- Contact Tower for altimeter setting
- Set proper barometric pressure
- Fix vacuum compass heading
- Check all instruments panel readings for any out of range condition

C - TAKE-OFF

C.1 - TAXIING

- Turn on Beacon
- unlock tail wheel
- unlock park brake
- Do not exceed 20mph
- Keep manifold pressure below 15
- use only external engines with differential power to turn in combination with rudder - DO NOT USE ailerons !
- if you don't have a multi throttle joystick, please, see faq.
- Keep stick pulled
- Parkbrake on
- Contact tower for take-off clearance
- Confirm tail wheel is relocked after lined up on runway

C.2 - TAKE-OFF

C.2.1 - COURSE

- Flaps 1/5 (45000lb) 1/2 (65000lb)
- Check all 4 waste-gates ON
- Stick pulled 1/3 : remember – this is a 3-point take-off so no conventional rotation!
- Reset timer if needed. Start timer
- Park Brake to OFF
- Set manifold pressure 46
- Engines protected from wind : -100rpm / 10kt PA should be > 42 inches of mercury
- While IAS > 30kt = unlock tail wheel
- Spontaneous 3-points take-off at or above 90mph

C.2.2 - INITIAL CLIMB

- Park Brake ON
- Gear UP
- Maintain 500ft/mn max
- 105mph : flaps UP
- Maintain 500ft/mn max > 130mph
- Maintain 130mph > 1500ft above ground

D - CLIMB

- Turn IDI ON : Master, Auto, Servos
- Set manifold pressure 42
- Set prop speed 2400 rpm
- Turn off left landing light
- When wings are levelled, turn fuel pumps OFF
- When reaching 10000ft, set barometric pressure to 2992
- alt.> 17000ft(+/-2000ft), set manifold pressure selector to 8.5
- Maintain vertical speed between 500ft/mn and 1000ft/mn
- Close cowl flaps
- To reach very high altitude, refer to manual : Engine management

E - CRUISE

- Turn off beacon
- Ceiling : 50000lb = 38000ft (75mn from sea level)
- Ceiling : 65000lb = 32000ft (50mn from sea level)
- When IDI alarm rings, Target FL within 300ft = reduce throttle to obtain +200ft/min
- Check IDI has locked onto target FL
- When the plane levels off, adapt engines settings.
- Calculate heading correction
- Turn Auto IDI OFF
- IDI : set corrected heading

- IDI : set BANK according to weather and payload
- IDI : turn Auto ON
- Maintain speed (20000ft: max 215mph) (38350ft: max 125mph)

F - DESCENT

- NB : Begin Check-List F at least 60mn before next waypoint
- Turn on beacon
- Turn fuel pumps ON
- Turn anti-ice on (all systems)
- Turn pitot heat on
- Mixture lock AFT to on
- IDI : SERVOS off
- IDI : auto off
- Dial new low flight level
- IDI : Master off
- Slow down 150 mph
- IDI : Master on
- IDI : Auto on
- IDI servos on
- All 4 waste-gates to on
- Torque limiter to none
- Open cowl flaps
- MPS set to 7
- Set rpm to 2500
- RPM lock down to off
- Cut throttles
- Control descent rate with throttles
- 150mph max, -1500ft/min max
- At 10000ft, control tower for altimeter setting

G - LANDING

- Fuel pumps ON
- Waste-gates ON
- RPM lever lock on (up)
- Set prop speed 2500rpm
- Set 125 mph



- Torque limiter set to 1/5
- Brake Primer set according to landing strip surface
- Landing lights ON if needed
- Navigation Lights ON
- Manifold Pressure between 32 and 38 inches of mercury
- IDI master off
- IAS below 147mph
- Flaps 1/2
- IAS below 105
- Unlock Park Brake
- Gear down
- Flaps all down
- Engine protected from wind : -150rpm
- Over the runway end : engines to idle + wind difference
- !!! Contact 3-Points !!! (nose up slightly)
- Plane on ground and lined up : tail wheel lock
- 60mph = stick tail to ground
- Stall inboard engines - Turn off fuel valves 2 & 3
- Feather inboard engines
- 50mph : regular braking

H - EMERGENCY : LOSS OF ONE ENGINE

H.1 - WITH NO FIRE

- IMMEDIATELY feather the prop
- IDI activate Emergency
- Set manifold pressure 46 - set rpm 2500
- Stabilise with trims (rudder first)
- ATTEMPT TO RESTART (B.2.1) ; IF ATTEMPT FAILS =
- SHUT THE ENGINE DOWN AS IF IT WORKED NOMINALLY
- Mixture : AUTO system locked FORWARD (disengaged)
- Turn fuel pump to OFF
- Throttle full aft

- Feather the prop
- Mixture : full lean
- Magnetos : OFF
- Turn generator OFF
- Push the torque limiter to +1/10 position
- Transfer fuel from affected side to central tank
- !!! DO NOT RE-ENGAGE AUTO systems !!!

H.2 - WITH ENGINE FIRE

- !!! DO NOT USE EXTINGUISHER NOW!!!
- !!! DO NOT ATTEMPT B.2.1 !!!
- !!! FUEL PUMP MUST STAY ON !!!
- IMMEDIATELY feather the prop
- IDI activate Emergency
- Set manifold pressure 46 - set rpm 2500
- Stabilise with trims (rudder first)
- Turn generator OFF
- Throttle full aft for faulty engine
- Mixture : AUTO system locked FORWARD (disengaged)
- Mixture : full lean
- Magnetos : OFF
- !!! TURN ON EXTINGUISHER NOW !!!
- Transfer fuel from affected wing TO the other wing: Leave the transfer valve set in the FROM position on the damaged wing in order to keep the tank depressurized
- ASAP, divert to land
- Begin CHECK-LIST I

I - EMERGENCY LANDING

- If possible : empty tank 2 (belly tank)
- Mixture : AUTO system locked FORWARD (disengaged)
- Set rpm 2500
- RPM : AUTO system locked DOWN (disengaged)
- All payload jettisoned
- If landing on rough terrain : gear UP, flaps all

- down
- If landing on runway : Gears DOWN, flaps 1/2
- If landing gear out-of-order : GEAR UP
- 5 seconds to impact : feather props
- 5 seconds to impact : all mixtures full lean