LET BLANIK L-23 N914B **s/n 917914 KIAS *USE at YOUR OWN RISK***

Czechoslovakian (Czech Republic) – LET Aircraft Co.

AIRSPEEDS & PERFORMANCE

Best L/D – 48-50 (~180’/min), 28:1, Approx. 220’/nm (zero wind, optimal)

Min Sink – 41 (~170’/min)

Va – 86 Vra – 86 Vt – 81 (Recommended 54-70) Vs - 32

Vlo – 133 (PSSA normally keeps landing gear down at all times)

Vne – 133 (SL – 11,000’ PA), 111 (20,000’ PA)

Decrease Vne ~2kts/1,000’ from 133 above 11,000’ PA

Max. Demonstrated crosswind: 16 kts

Max. Demonstrated Altitude: 13,780’ PA

Glide @ best L/D: About 28:1 (~220 feet/nautical mile)

Wing Span – 53.5’, Aspect Ratio – 13.7, Wing Loading – 5.45 lbs/ft2

Green Arc, Vno – 36-86

Yellow Arc, Smooth Air – 86-133

Yellow Triangle – 41 (Approach Speed – 1124 lb Max GW),

 add ~ 5kts w/air brakes

WEIGHTS & LOADING

Max GW = 1,124 lbs (two occupants, 925 (solo)

EW = 683 (??) Useful =441 (??)

Empty CG = 26.242” (??) Mom = 17,923.1 (??) %MAC =

Min Pilot Wt Solo = 154 (no ballast) Max Pilot Solo = 242

Min Pilot Wt Solo w/Front Seat Optional Ballast cushion

 (with 33 lb cushion) = 121

Max Baggage = 22

Allowed CG range 23%-40% MAC or 99.1”- “ from fuselage nose

Solo Front Seat Only

AEROTOW

Max Cable strength (per GFM) – 1460 lbs (less than FAA “200% rule”!!)

Min cable length – 50’, recommended 100’-130’

Cruise Vt – 81 kts

Blanik POH Recommended:

Approach, Spoilers In: 41-46

Approach, Spoilers Out: 43-51

Aircraft is certified in the “Utility Category”

Any “Basic Aerobatics” must be logged in the aircraft logbook.

NO AEROBATICS per PSSA Club Rules (to limit airframe aging limits)

Steep Turns: Solo – 92, Dual – 97

Loops, Entry: Solo – 86, Dual – 97

Spins: Conventional Recovery,Max 86 kts recovery (alt loss ~390’/360⁰)

Side Slipping: Conventional, to increase rate of descent must also have

 full air brakes. Slip alone does little for descent rate

Misc:

\*Important to train on careful & proper canopy ops from Flight Manual\*

Tire Pressure: Max 37 psi

Takeoff Ground Roll: get tail off runway early

Landing: land on main wheel, avoid landing tail wheel first (stress on tail)

Off Field Landings: Recommend gear up if soft surface

Brake failure, emerg stop on ground: nose down

Example Wt & Balance: Pilot (170), Rear Pax (220), Bagg (5)

 Takeoff Wt = \_\_\_\_\_\_\_\_, CG = ~\_\_\_\_% MAC or \_\_\_\_\_\_\_”

PW-6U N766PW KIAS ***USE at YOUR OWN RISK***

Polish - [PZL Świdnik](https://en.wikipedia.org/wiki/PZL) Aircraft Co.

AIRSPEEDS & PERFORMANCE

Best L/D – 56 (~170’/min), Approx. 185’ / nm (zero wind, optimal)

Min Sink – 51 (~160’/min)

Va – 89 Vra – 89 Vt – 89 (Recommended 59)

Vlo – Aircraft does not have retractable landing gear

Vne – 141 (SL – 9,843’), 135 (9,843’ – 13,123’)

Decrease Vne ~ 1.5 kts/1,000’ from 135 above 13,000’

Max. Demonstrated Crosswind – 12 kts

Glide at best L/D: About 34:1 claimed by PZL (~180 feet/nautical mile)

Wing Span – 52.5’, Aspect Ratio – 16.8, Wing Loading – 7.4 lbs/ft2

Green Arc, Vno – 45-89

Yellow Arc, Smooth Air – 89-141

Yellow Triangle – 54 (Approach Speed – Max GW)

WEIGHTS & LOADING

Max GW = 1204 lbs EW = 763.4 Useful = 440.6

Empty CG = 25.86” Moment = 19,742

Min Pilot Wt Solo (w/chute) = 121 (no ballast) Max Pilot Wt = 242

Max Cockpit Load (Crew + Chutes + Baggage) = 441

Max Fuselage + tailplane wt = 419 Max Baggage = 11

CG Limits: 17%-42% MAC or 7.02”-16.77”(From root cord leading edge)

Solo Front Seat Only

?Use a booster cushion to improve visibility from the back seat (if <5’9” ?)

AEROTOW

Max Cable Strength - 2408 lbs

Min Cable Length – 66 ft

Recommended Aerotow, Climbing – 59

Recommended Aerotow, Cruising – 81 kts (Low-tow position not

recommended by PZL as cable will rub on lower nose section)

“Circling Airspeed” 43-51 kts

Caution: Airbrake deployment over 108 kts causes sudden negative G’s,

deploy slowly and tighten seat belt first.

Max airbrake retraction is 89

Land on main wheel & avoid tail skid ground impact

Min Sideslip Speed: 49, Airbrakes may be in or out

Max Sideslip Speed: 70, Airbrakes may be in or out

Sideslip bank > 20 degrees, nose will turn with full opposite rudder

Aircraft is certified in the “Utility Category”

Aerobatics Allowed by Manufacturer:

(Parachute required by PW-6 Flight Manual for all aerobatics):

Spins, Loops, Stall turns, Chandelles, (See Flight Manual for entry speeds)

Loops & Chandelles, Entry: 102-108

Aerobatics: Air brakes must be locked, smooth air, and trim for 70 kts

*FUSTALL*: **F**laps, **U**ndercarriage, **S**peed, **T**rim, **A**ir brakes, **L**ook, **L**and

Add Speed for Bank Angle: 30⁰=7%, 40⁰=14%, 45⁰=19%, 50⁰=24%

Add Sink Rate for Bank Angle: 30⁰=24%, 40⁰=49%, 45⁰=68%, 50⁰=94%

**USE at YOUR OWN RISK Last Updated: 02/27/2020 Brad Pattison**

PW-5 “SMYK” N157AJ KIAS ***USE at YOUR OWN RISK***

Polish - [PZL Świdnik](https://en.wikipedia.org/wiki/PZL) Aircraft Co.

AIRSPEEDS & PERFORMANCE

Best L/D – 51 (~170’/min), Approx. 200’ / nm (zero wind, optimal)

Min Sink – 44 (~140’/min)

Va – 81 Vra – 81 Vt – 81 (Recommended 59)

Vlo – Aircraft does not have retractable landing gear

Vne – 115 (SL- 16,400’)

Maximum Altitude – flight above 16,400’ prohibited

Max. Demonstrated Crosswind – 12 kts

Glide at best L/D: About 32:1 claimed by PZL (~190 feet/nautical mile)

Wing Span – 44’, Aspect Ratio – 17.8, Wing Loading – 6.1 lbs/ft2

Green Arc, Vno – 38-81

Yellow Arc, Smooth Air – 81-115

Yellow Triangle – 51 (Approach Speed – Max GW)

WEIGHTS & LOADING (Last weighed 10/10/2014 by Terry Crippen, A&P)

Max GW = 661.4 lbs EW = 415.5 Useful = 237 (per T. Crippen)

Empty CG = 22.91” Moment = 9517.5

Above is without oxygen tank or regulator

Min Pilot + Chute Wt = 121 (no ballast) Max Pilot + Chute Wt = 237

If Pilot + Chute < 132, seat must be full forward

Max Cockpit Load - 242

Max Fuselage + tailplane wt = 247 Max Baggage = 11

CG Limits: 20%-42% MAC or 9.25”-16.14” (From root cord leading edge)

AEROTOW

Max Cable Strength (per GFM) - 1573 lbs , (FAA limit might be 1328…)

Min Cable Length – 66 ft

Recommended Aerotow, Climbing – 60

Recommended Aerotow, Cruising – 81 kts (Low-tow position not

recommended by PZL as cable will rub on lower nose section)

“Circling Airspeed” 43-46 kts

Caution: Airbrake deployment over 92 kts causes sudden negative G’s,

deploy slowly and tighten seat belt first.

Max airbrake retraction is 81

Recommended Approach: 51

Land on main wheel & avoid tail skid ground impact

Min Sideslip Speed: 49, Airbrakes may be in or out

Sideslip bank > 20 degrees, nose will turn with full opposite rudder

Aircraft is certified in the “Utility Category”

Aerobatics Allowed by Manufacturer:

Spins, Loops, Stall turns (See Flight Manual for entry speeds)

Loops, Entry: 92-97

Aerobatics: Air brakes must be locked, smooth air, and trim for 70 kts

Parachute required for all flights (“minimum equipment”)

Canopy Jettison Procedure:

1. Pull handle fully 2. Push up on front canopy

3. Release safety belt/harness 4. Bail Out

**Formulas:**

Load Factor (g’s) = 1/cos(bank angle)

Stall speed = Vs x (Load Factor ^0.5) (square root of the load factor)

Min Sink Speed (Vms) = Vms x (Load Factor ^0.5)

Sink rate = Level sink rate x (Load Factor ^1.5)