

# Preflight Checklist

Completed By \_\_\_\_\_ Date: \_\_\_\_\_

Tail Number: \_\_\_\_\_

## Documents (ARROW PEC)

- o Airworthiness Certificate – 91.203 (a)(1) Date: \_\_\_\_\_
- o Registration Certificate – 91.203 (a)(2) Exp. \_\_\_\_\_
- o Radio Station License (plane) (international) – 47 CFR 87.1B
- o Operating Handbook (POH) – 91.9 (b)
- o Weight and Balance (POH, official) – 23.2620
- o Placards – 23.2610 (a,b,c)
- o External Data Plate – 45.11
- o Compass Deviation Card – 23.1547

## Inspections (AVIATES)

- o Annual – 91.409 (a) – 12 calendar months
  - o Most recent \_\_\_\_\_ Next Due \_\_\_\_\_
- o VOR equipment check (if using for IFR flight) – 91.171 – 30 Days
  - o Most recent \_\_\_\_\_ Next Due \_\_\_\_\_
- o 100-hour – 91.409 (b) – every 100 flight hours, less prev. over-flight
  - o Total AC Time at next due \_\_\_\_\_
  - o (-) Current Hobbs \_\_\_\_\_
  - o (=) Hours left to 100-hour \_\_\_\_\_
- o Altimeter/Static Encoder 91.411 – 24 calendar months (for IFR flight)
  - o Most recent \_\_\_\_\_ Next Due \_\_\_\_\_
- o Transponder – 91.413 – 24 calendar months
  - o Most recent \_\_\_\_\_ Next Due \_\_\_\_\_
- o ELT – 91.207 (c) & (d) – 1 hr use, 50% life remaining. Inspection 12 Cal. Months.
  - o Battery replacement due \_\_\_\_\_
  - o Inspection: Most recent \_\_\_\_\_ Due \_\_\_\_\_

OUT HOBBS \_\_\_\_\_

OUT TACH \_\_\_\_\_

## Airworthiness Directives – Part 39

Airworthy means an aircraft and component parts meet its type design (or properly altered configuration) and is in a condition for safe operation. (FAR 21.31, 21.41, 21.183). If Specified as an engine or prop time, rather than AC Time, recalculate using engine/prop time at most recent 100-hour

- o List Available: [Airworthiness Directives \(ADs\) – Current Only](#)
- o Applicable FAA Airworthiness Directives Compliance
- o To verify recurring AD currency, if required
- o Total AC Time at next due (From Mx Summary) \_\_\_\_\_

## Form 337 – Part 43, Appendix B

- o Required for major repairs and Alterations – Appendix A
- o Review Mx Book for any 337 present

## Inoperative Equipment

List Inoperative Equipment \_\_\_\_\_

- o Verify not required by:
  - o Part 91: 91.205 - (b) Day VFR, (c) Night VFR, (d) IFR
  - o Equipment list in POH; and/or Kinds of Operation List
  - o Airworthiness Directives
  - o Type Certification Data Sheet (Certification Basis section)
- o Deactivated and Placarded “Inoperative”
  - o Or removed, placarded, and maintenance recorded
- o PIC determines that inop. equipment is not a hazard to the aircraft.

## Maneuvering Speed Calculation @ planned landing weight (Va)

$$Va = \sqrt{\text{current wt.} / \text{max wt.}} \times (Va @ \text{max wt.}) \quad Va = \underline{\hspace{2cm}}$$

**NEWKRAFT 91.103** - Notams, Everything, Weather, Known ATC delays, Runway lengths, Alternatives, Fuel requirements, Takeoff/landing distance calculations

IN Hobbs \_\_\_\_\_

IN TACH \_\_\_\_\_

**Required Equipment:****91.205****VFR Day 91.205 (b) (ATOMATOFLAMES)**

- ☐ Altimeter
- ☐ Tachometer
- ☐ Oil Pressure gauge
- ☐ Manifold pressure gauge (each altitude engine -turbo or supercharged)
- ☐ Anti-collision light system (if manufactured after 1996) (beacon & strobe)
- ☐ Temperature gauge (each liquid cooled engine)
- ☐ Oil temperature gauge (each air cooled engine)
- ☐ Fuel gauges for each tank (must be accurate when empty)
- ☐ Landing gear position indicator (if retractable gear)
- ☐ Airspeed indicator
- ☐ Magnetic direction indicator (compass)
- ☐ Emergency Location Transmitter (if required by 91.207)
- ☐ Safety Belts (anyone over 2 years) (shoulder harness taxi, T/O, and landing)
- ☐ \*\*\*\* Transponder 91.215 & ADS-B out 91.225- (if in or above Class A, B, C airspace; above 10,000ft MSL excluding within 2,500ft AGL; within a Mode C veil)

**Night 91.205 (c) (FLAPS)**

- ☐ Fuses/Circuit Breakers (if fuses- spare set, or 3 spares of each kind)
- ☐ Landing light (if for hire)
- ☐ Anti-collision light system (if manufactured after 1971)
- ☐ Position lights (navigation lights red, green, white)
- ☐ Source of electricity

**IFR 91.205 (d) (GRABCARDD)**

- ☐ Generator/Alternator
- ☐ Rate of Turn indicator (turn coordinator)
- ☐ Attitude indicator (gyro pitch and bank)
- ☐ Ball (slip/skid indicator) (inclinometer)
- ☐ Clock (installed in plane with seconds and minutes) (analog or digital)

OUT HOBBS \_\_\_\_\_

OUT TACH \_\_\_\_\_

- ☐ Altimeter (barometric pressure sensitive - can set in Kollsman window)
- ☐ Radio equipment necessary for flight (communication & navigation)
- ☐ Directional gyro (heading indicator)
- ☐ DME 91.205(e) (if above FL240 and using VORs)

**Weight & Balance** \* (W x A = M) (check within limits in POH) for 5720W & 5546W

<u>Weight (lbs)</u>	<u>CG (in)Arm(1942Z)</u>	<u>Moment (lbs x in)</u>
Empty (POH W&B)		
+ Front seat	85.5 in	
+ Back seat	118.1 in (117 in)	
+ Fuel	95 in	
+ Baggage (check limit)	142.8 in (117 in)	
- Taxi Fuel (1 gal normal)	95 in	
= Takeoff		
- Flight fuel burn	95 in	
= Landing		

100LL Fuel 6 lbs / gal.; Oil 2 lbs / qt.

**Pressure Altitude:** (alt. corrected for nonstandard pressure)

PA = (29.92 - current alt. setting) x 1000 + elev

PA = \_\_\_\_\_

**Density Altitude:** (alt. corrected for nonstandard temperature)

DA = 120 x (current temp @alt - ISA temp @alt) + pressure alt.

DA = \_\_\_\_\_

**Takeoff & Landing Performance Calculations (POH chart) \*density alt.****Takeoff Distance to clear 50ft Obstacle** \_\_\_\_\_**Landing Distance to clear 50ft Obstacle** \_\_\_\_\_

IN Hobbs \_\_\_\_\_

IN TACH \_\_\_\_\_