N65641
2005 Cessna 172R
Overview and Transition Guide

Equipment:

- Radios: King KX155A Nav/Com
- Transponder: King KT76
- Audio Panel: King KMA26
- GPS: King KLN94 (Approved for IFR en-route and approach, non-WAAS)
  - Note the GPS/VOR toggle switch above the OBS dials.
- King KMD550 Multi-Function Display (serves as an "extra monitor" for the GPS)
- King KAP-140 Auto-Pilot (Same as in the Diamond)

Performance

- Engine: Lycoming IO-360-L2A 180hm (de-rated to 160hp)
- De-rated engine means lower RPM settings than you may be used to on the C172N's
- V-speeds and cruise speeds within 5 knots of C172N's
- Fuel burn slightly higher (10 GPH) than the C172N's, but EGT and fuel flow gauges make for much more accurate leaning.
- Fuel Capacity: 53 gal usable/56 total (vs. 40 gal usable/43 total on the C172N's)
- Gross weight: 2,450 lbs (vs. 2,300 lns for the C172N's)
- Useful load: 743 lbs (vs. 828 lbs on 03F and 823 lbs on 75903) – leave off some fuel for extra load

Key Differences

PREFLIGHT:

- **Fuel Sumps**: There are 13 of them! A GATs jar is highly recommended.
- **Oil Levels:** 5-8 quarts on the dipstick, rather than the 4-6 used on the C172N's
- **Landing Light**: Located on the left wing rather than the nose. Less vibration on the wing should extend the life of our light bulbs.
- There is an **Annunciator Panel** located above the Airspeed Indicator that must be tested as part of preflight. Similar to the Diamond, and report any INOP lights to the maintenance officer.
- N65641 has **Wheel Fairings** so checking tire pressure and brake condition is difficult.
- No need to slam the doors; new latch system allows you to gently pull the door closed and operate the handle.

ENGINE START

- This plane is **fuel injected**, so priming is accomplished via the fuel pump rather than the old-fashioned primer. Follow the checklist – the fuel pump will flood the engine quickly!
- **Hot Starts**: can be difficult as the C172R is prone to vapor lock.

IN FLIGHT

- Higher gross weight means a smoother ride than the older Cessnas.
- Lower RPM setting and newer sound-dampening make for a quieter ride too.
- **Leaning** Same procedure as on the C172N's, but with much greater accuracy due to the EGT and Fuel Flow guage
- **Fuel Pump:** Only used for engine starts and certain fuel emergency procedures. Unlike the Archer, it is not used for takeoff's and landings.

LANDING

- V-speeds pretty much the same as the other C172's.
- Slightly nose-heavy vs. the other C172's.
- **Only 30-degrees of flaps** makes for easier go-arounds and less required back-pressure on landing, but you don't have the extra 10-degrees to bail you out if you're high on final.

Resources:

King KLN94 GPS

- Quick Reference Guide (http://www.aerotech.net/KLN94QR.pdf)
- Pilot's Guide (http://www.aerotech.net/KLN94.pdf)

King KMD550 Multi-Function Display

- Quick Reference Guide (http://www.aerotech.net/KMD550QR.pdf)
- Pilot's Guide (http://www.aerotech.net/KMD550.pdf)

King KAP-140 Auto Pilot

- Manual (http://www.aerotech.net/KAP140Manual.pdf)