\*\* denotes items that are suggested to assemble the practice projects: "RV TRAINING PROJECT-1" and/or "TOOL BOX KIT" and/or "VAN'S LIGHT BOX SIGN KIT."

#### Aircraft Specialty Tools for the RV-7, RV-8, RV-9

(scroll down for RV-10, RV-14 additions) •3X Rivet Gun\*\* (2X or 3X for QuickBuild) •Non-Swivel Click-type Air Regulator •1" Dia. Flush Set \*\* •1/8" Cupped Set 3.5" \*\* •1/8" Double Offset Cupped Set (Not needed for QuickBuilds) •Back Rivet Set \*\* •Bucking bar (Tungsten or multiple shapes) Microstop Countersink Cage\*\* •#40 Countersink - 3/32" Rivet \*\* •#30 Countersink – 1/8" Rivet •#6 Countersink – #6 Screw •#8 Countersink – #8 Screw •#10 Countersink – #10 Screw •#40 Straight Flute Reamer •#30 Straight Flute Reamer •¼" Straight Flute Reamer •7.9mm Straight Flute Reamer •5-10 #40 Jobber Drill Bits (for 3/32" rivets) \*\* •5-10 #30 Jobber Drill Bits (for 1/8" rivets) \*\* •#19 Jobber Drill Bit •#12 Jobber Drill Bit •#10 Jobber Drill Bit •#21 Jobber Drill Bit

•#28 Jobber Drill Bit •¼" Jobber Drill Bit •"D" Jobber Drill Bit •"N" Jobber Drill Bit •12" #40 Drill Bit •12" #30 Drill Bit •Deburring Set – Large Holes •Hex Shank Deburring Bit – Small Holes •3M Cut & Polishing Wheel 6" •3M hand pads •Cleco Pliers \*\* •325 Cleco Fasteners – 3/32" \*\* (\*\* 30 required, 150 if QB, 500 if 10/14) •175 Cleco Fasteners – 1/8" \*\* (\*\* 10 required, 75 if QB) •10 Cleco Fasteners – 3/16" •4 Cleco Clamps – 1/2" Jaws •4 Cleco Clamps – 1" Jaws •Hand or Pneumatic Squeezer and 3" Yoke •1/8" Universal Cupped Set •Flat Set 1/2" x 1/8" \*\* •Flat Set 3/8" x 1/8" •3/32" Rivet Dimple Die \*\* •3/32" Rivet Small Dia. Female Die •3/32" Rivet Close Quarters Dies (pop rivet operated) •1/8" Rivet Dimple Die •#6 Countersink – #6 Screw •#8 Screw Dimple Die •#10 Screw Dimple Die •Unibit 1/4" - 3/4" by 1/16ths •Fluting Pliers

•10" Curved tool File
•22" Reach Skin Dimpling Tool (C-frame)
•Back Rivet Plate
•Hand Seamer Pliers

# Specialty Tool Additions for RV-10, RV-14

•3/32" Squeezer Cup Set
•3/32" Cup Rivet Set 3.5"
•Special Bar for RV-10 & RV-14
•Jobber Drill 5/16"
•Jobber Drill #17
•Jobber Drill #34
•6" Drill #27
•6" Drill #33
•Countersink Cutter – #12 Pilot
•RV-14 Safety Pin Squeezing Tool for Elevator (14 only)
•RV-14 Modified #40 Countersink for Elevator (14 only)
•RV-14 Economy Modified 3/32" Male Die for Elevator (14 only)

# Specialty Tools Needed Late in the Project (borrow if possible)

- •Tube Bender
- •Tube Flaring Tool
- •Wire Crimping Tools
- •Ft.-Lb Torque Wrench
- •Angle Die Grinder and Cutoff Discs (for plexi and fiberglass)

# **Optional Speciality Tools**

•Angle Drill Attachment & Threaded Drill Set 6 pc.

Dimple Die Organizer
Rivet Measuring Gauge
3/32" Pin Punch
1/8" Pin Punch
Edge Former Tool
In-Lb Torque Wrench

#### Standard Shop Tools (available at local hardware stores)

Drill (Air or Cordless) \*\*
Metal Snips: Left & Right \*\*
Pop Rivet Tool \*\*
24" Stainless Rule
Slow, Lightweight, Cordless Screwdriver (for deburring)
Sharpie Ultra Fine Point Permanent Markers \*\*
Removable Scotch Magic Tape & Tape Dispenser
Hearing Protector
Safety Glasses
File Card / Brush
Standard files
Standard Sockets, Wrenches, Screwdrivers
Steel and Composite Hammers
Air Tool Oil
Air compressor (3-5cfm @ 90 psi) & Hose

# Optional Shop Tools (available at local hardware stores)

•Drill Press

•Band Saw

•Belt or Disc Sander

•Vise

# Specialty Tool Additions for RV-3, RV-4, RV-6

•Fan Spacing Tool

- •Double the number of drill bits
- •Nut Plate Drill Jigs #8
- •Omit #6 Countersinks and Dies above
- •Air Drill is a must
- •Angle Drill Attachment and Bits