# AJ Aircraft 92" Raven Data Sheet

#### Contents of Kit

- 92" Raven fuselage covered in genuine Ultracote
- Set of Main Wings w/pre-installed hinges and sealed aileron hinge gap
- Set of Horizontal Stabilizers w/pre-installed hinges and sealed elevator hinge gap
- Pre-hinged, removable rudder
- Carbon fiber wing and stabilizer tubes

- Carbon fiber main and tail landing gear
- Color matched fiberglass cowl, wheel pants, landing gear cuffs and canopy
- Heavy duty wheels and steel axles
- Engine mounting templates
- Canister muffler mounts
- Foil main wing bags
- Individual bags of high quality hardware

### Recommended Equipment

- (Gas Engine) Desert Aircraft 70cc w/standard or canister mufflers/Falcon 24x9 prop / optical kill switch or IBEC
- (Electric Motor) Hacker O-80 / Castle 160 ESC
  & BEC pro / 8-12S LiPos / Falcon 24x10 prop
- (6) x Futaba S-9177 400+in. oz. high torque digital metal gear servos for all surfaces
- (1) x standard size servo for throttle
- 7+ Channel Full Range Receiver
- 4" Falcon Carbon Fiber Spinner

- Aluminum Servo Arms:
  - o (4) x 1.75" for ailerons & elevators
  - o (1) x 3.5" double arm for pull/pull rudder
- Servo extensions:
  - o (2) x 6" for receiver to wing
  - o (2) x 6" for ailerons
  - (2) x 12" for throttle & ignition kill or
    (1) x 12" for ESC to receiver
  - o (2) x 48" for elevators

#### Recommended Tools Needed for Assembly

- Blue Painters Tape
- Denatured Alcohol & Paper Towels
- Blue Loctite
- Metric & Standard Allen Wrenches
- Hobby Knife & Fresh Blades
- 30 Minute Epoxy (or Gorilla Glue)
- Thin C/A

- Electric Drill with Assorted Small Bits
- Small Flat Head & Phillips Screwdrivers
- Sanding Block & Sandpaper
- Needle Nose Pliers
- Adjustable Wrench or Socket Set
- Measuring Tape & Ruler
- Fine-tip Sharpie Marker

## Recommended CG Range and Control Throws

- ✓ The center of gravity (CG) for the 92″ Raven is located 2 ¼″ (+/- ½″) measured from the front of the wing tube insert located in the fuselage.
  - ✓ Aileron Control Throws
  - o Low Rates 15 deg. (30% Exp)
  - Mid Rates 35 deg. (40% Exp)
  - High Rates 45 deg. (50% Exp)

- ✓ Elevator Control Throws
- Low Rates 15 deg. (30% Exp)
- o Mid Rates 35 deg. (50% Exp)
- o High Rates 45 deg. (60% Exp)
- ✓ Rudder Control Throws
- Low Rates 15 deg. (30% Exp)
- Mid Rates 35 deg. (40% Exp)
- High Rates Max Throw (50% Exp)