**✈️ Cargo Fit Checker – Workflow Guide**

**1. Select Aircraft Type**

* Use the **dropdown at the top left** to choose the aircraft (CJ or Legacy).
* This sets the correct cargo hold dimensions, door size, and restrictions (e.g., tunnel on CJ, taper on Legacy).

**2. Add Baggage Items**

1. Go to the **“Add Baggage”** section.
2. Choose a **preset type** (carry-on, suitcase, golf clubs, ski bag, etc.), or select **Custom** to enter your own length, width, and height.
3. Enter the **quantity** of this bag type.
4. Click **“Add Item”** → the item(s) will appear in the **Current Baggage Load** list.

**3. Manage the Baggage List**

* The **Current Baggage Load** section shows each item:
  + Index number
  + Bag type
  + Dimensions (L×W×H)
  + Flex factor (if applicable)
* To **remove a single item**, click the ❌ button beside it.
* To **clear everything** at once, use the **“Clear Baggage List”** button above the selector.

**4. Check Fit / Pack**

When your baggage list looks correct:

1. Click **“Check Fit / Pack”**.
2. The app runs three checks:
   * **Fit Results**: Does each bag individually fit through the door and inside the hold?
   * **Overall Cargo Packing Feasibility**: Attempts to arrange all bags using multiple strategies.
   * **Suggested Placement Positions**: Table of oriented dimensions and coordinates (x,y,z) for each bag.

**5. Visualize the Load**

* A **3D visualization** of the cargo hold is displayed:
  + Black outline = cargo walls
  + Gray block = restricted area (CJ near the door)
  + Light blue prism = long tunnel (CJ) or tapered space (Legacy)
  + Colored boxes = individual bags (legend shows type + section)
* Rotate, zoom, and pan to inspect fit.

**End Result:** You can quickly confirm:

* Bags fit through the door,
* They can all be placed inside without overlap,
* Where each item goes, and
* How efficiently the hold is being used.