## ROUTING WIRES THROUGH THE RV-7/-7A & RV-9/-9A CENTER SECTION BULKHEADS<sup>\*</sup>

In the years since the introduction of the RV-7/-7A and RV-9/-9A, there has been a steady rise in the number of systems (read: "goodies") available for installation in a builder's aircraft. Most of these systems require the routing of additional wires, cables, tubes, and sometimes the creation of new or larger holes in the aircraft structure.

This often becomes a problem at the center section bulkheads (F-704 and F-705 for the RV-7/-7A, or F-904 and F-905 for the RV-9/-9A) where the existing routing holes may be insufficient and drilling holes in primary structure may give some a moment of pause.

As a remedy, here are some recommendations:

- Maintain at least 2 diameters (2D) of distance between the center of any new holes and the centers of existing fasteners/holes. For example, the center of a Ø1 in. hole should be at least 2 in. from the center of the nearest fastener or hole. Only one new hole should be drilled in each bay (i.e. left aft outboard, right forward inboard, etc.).
- 2. Be aware of any fuel lines, brake lines, spar bars, wiring, fingers, etc. that might be present on the other side of the part being drilled.
- 3. The horizontal centerline of each bay experiences the least amount of stress: holes should be drilled as close to this line as possible.
- 4. The figures and templates on the following pages provide a rough guide for maintaining the proper 2D distance. Figures and templates are shown and sized for the RV-7/-7A but can also be used for the RV-9/-9A.

\*This FAQ is dedicated to our Tech Support guru Ken Scott, who spent the better part of 15 years asking for this document to be written only to retire shortly before its release.

















