

Increasing attention is being focused on aircraft interiors, reflecting growing sophistication of the lightplane owner and a more businesslike outlook on his machine's future resale value

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Dignity In Dressed Up Interiors

Next time you visit the local airport, take a good look at the aircraft around. You'll see tangible evidence of growing sophistication of general aviation and of the tastes of the flying population.

Twenty years ago, the prospective plane owner based his "to buy or not to buy" decision largely on two self-queries: How well will this particular plane perform? and: How well is it suited to my specific needs? Although still major considerations, these factors today are additionally influenced by two more questions: Does it look nice? Is it comfortable to fly in?

The patched-up, grease-spattered, bedraggled bird is becoming a distasteful oddity around the modern airport. Whether in the market for a new or used aircraft, today's buyer is looking for a ship with glossy, well-tended exterior and interior appointments that rival a board director's living room.

General aviation airframe manufacturers are well aware of the growing demand for pleasing interior appearance and comfort. Whether he plans to use his plane for business, pleasure, or both, the prospective aircraft buyer is investing more in that plane than he would in an automobile, for example, and he expects it to be correspondingly more plush.

Each year, manufacturers add more decorative enticements to attract a larger share of the aircraft buying

market. Sales brochures that devote a half page to engineering and performance specifications give many times that amount of space to say "Look how pretty it is inside."

It's the logical order of progress. As

the Model T gave way to the luxuriousness of the Continental, so the airplane's usefulness and improved performance has been complemented with comfort and attractiveness. But what of the used plane that never boasted a

Cooper Industries showroom contains models and samples of interior materials. Customer selects colors and textures he desires, and interior components are made up from standard patterns for his particular aircraft



Sophisticates from the start, today's generation of aviation planes are built with fiercely competitive interior plush and finish. Examples are the luxurious furnishings of the new Piper Twin Comanche (left, with one seat removed for photo) and Cessna Super Skymaster (right)

plush interior, or has one that has dulled and sagged under the rigors of wear and age?

Its owner, be it a Piper *Cub* or a 707, will find a host of aircraft interior decorating specialists throughout the country ready and capably willing to refurbish it or to provide custom-tailored materials with which he can do the job himself.

In an effort to determine what special skills might be required, how interior schemes for redecorating planes are arrived at, how much it costs and whether there are any significant style changes taking place, AOPA solicited opinions from several of the leading aircraft interior companies listed in the User's Guide supplement to this issue of *The PILOT*. Responses received, while varying in degree, all indicated that demands for their services are growing at an unprecedented rate.

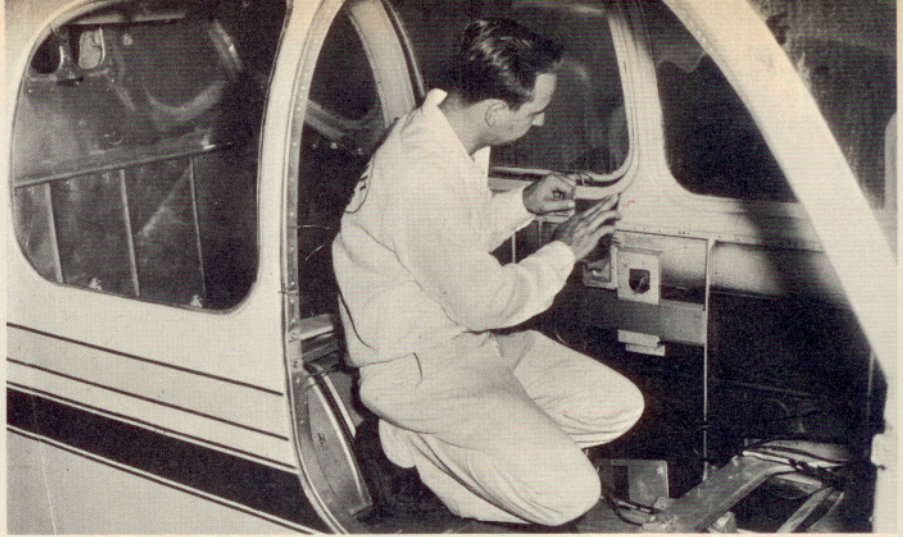
The survey also brought emphasis to the fact that there is more to aircraft interior decorating than just thumb-tacking new material over old, and that the woman's viewpoint is having increasing influence on the style and decor of both corporate and privately owned aircraft. This would indicate that more women are accepting light-plane flying as a practical mode of transportation rather than just as a means for hubby to give vent to his adventurous spirit.

To properly satisfy the new trend in customer desires, a good aircraft interior shop needs a broad array of uniquely skilled craftsmen—sheet metal workers, carpenters or cabinet makers, painters, electricians, seamstresses and upholsterers. In addition, the shops must be fully equipped for any and all types of forming, welding and finishing work, humidity control, sewing and even rug surging.

Interior schemes are largely selected in color and texture combinations that the aircraft owner desires, but professional aircraft styling consultants employed by interior shops usually play no mean role in helping to formulate those desires. Because of their expertise in engineering requirements, the suitability and durability of various refurbishing materials, and a knowledge of styling trends and aircraft resale potential, their advice is worth listening to.

The consultant too requires the help and counsel of various technicians qualified to advise on weight and balance considerations as well as FAA regulations governing modification of aircraft.

For the more exotic redecorating jobs, nearly all companies employ a designer whose job it is to draw up a basic floor plan, indicating colors and types of materials that would be most appropriate on the basis of intended



Complete interior job necessitates stripping the cabin to bare metal, including removal of flooring and fixtures, scraping and smoothing of old paint

Photo by Don Downie

aircraft use and what the customer is willing to spend. Drawn to scale and including such factors as total weight of material, soundproofing and wearability qualities, the plan is submitted to the customer for his approval. The designer and the client then work together to resolve any differences before the project is ever begun.

A total interior redecorating job, one company said, starts from the outer skin. It includes development of appropriate engineering data for each individual aircraft, the drawing up of layout and design, reworking or replacement of seats and other fixed furnishings, attention to baggage area and closet storage (if appropriate) and installation of side paneling and headliners. Woodwork, if any, is completely stripped and refinished. Hardware items are replaced, repainted or re-anodized. New lighting and air outlets also may be installed.

The primary consideration in selection of interior redecorating materials is weight. For structural installations

—seats, arm rests, etc.—honeycomb or balsa core materials which provide greater strength at comparatively less weight are most commonly used. Upholstery materials favored today are predominantly nylons with Scotchguard soil protection. Nylon too is the preferred rug material because it does not stretch. Rug pads and padding for seats and arm rests are usually made of polyfoam because it is lighter and deteriorates less rapidly than foam rubber.

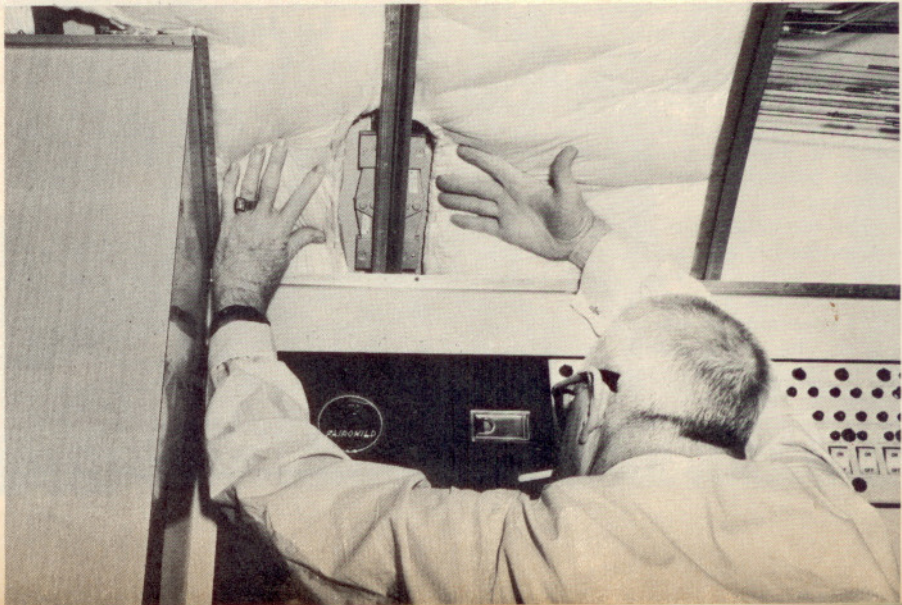
Headliners and side paneling most frequently are finished in vinyl, which in its modern designs matches virtually any decor and is easy to maintain. Vinyls also are most popular for arm rest and seat coverings. Their leather-like quality provides a rich appearance and they have good wearing qualities. Curtains are made of nylon material with sunproof backing to prevent fading.

The cost of complete new interiors varies as greatly as performance char-

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In larger business aircraft, soundproofing is emphasized in redecorating. Here a craftsman installs noise-reducing insulation material in the overhead of a corporate plane

Photo by Richardson





Assembly line production of tailor-made interior components. Several interior shops specialize in such work, allowing the aircraft owner to install it himself and save the cost of a custom job

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acteristics of the diverse aircraft that make up the general aviation fleet. Generally, it will range from about \$200 for an austere two-place training plane to as much as \$90,000 for a corporate *Gulfstream* or *Convair*, interior shops report.

While it isn't likely that corporate aircraft owners of title have any overwhelming urge to arm themselves with leather cutters and upholstery tacks, the private owner of the light twin- or single-engine plane may be inclined to do it himself and put the cost of labor back into his own pocket.

Fine, say aircraft interior shop officials. But before tackling the job, one must take into consideration FAA requirements for engineering data on furniture attachments, electrical load analysis, stress and load factors, weight and balance data and, of practical importance, total aircraft "downtime." They point out too that the "do it yourself" advocate or even a skilled home decorator may be unaware of such restrictive features as FAA's fire protection requirements for materials used in aircraft interiors. Therefore, a beautiful "done by hand" job may render a plane unairworthy.

There are alternatives to putting the plane into a custom interior shop for its internal facelifting. At least one interior shop has hit on a happy compromise to help plane owners make their craft "eyeworthy" without endangering airworthiness. They can do the work themselves or have it done in any local maintenance shop.

Almost 20 years ago, Airtex Products of Morrisville, Pa., began to offer by mail order various preformed light-plane interior components that could be easily installed by the nonprofessional interior decorator. Its test program proved so successful that it now makes a complete line of foam cushion sets, headliners, wall panels, carpets, bag-

gage compartment liners, anti-glare cowl pads and other interior components for nearly every make and model of currently active light aircraft. They come in a wide range of colors and materials. The choice of sets, or combination of sets, is left entirely to the taste and wishes of the customer.

Airtex's business is based on the supposition that most lightplane owners prefer to avoid the expense and inconvenience of taking their aircraft to sometimes distantly located custom shops for minor interior rejuvenation. Company officials believe that their interior components, made to the customer's order from standard patterns, eliminate that cost and inconvenience and at the same time add immeasurably to the plane's resale value.

Airtex offers complete tailor-made interior redecorating sets that range from less than \$100 for most two-place planes to about \$200 for four-place aircraft. Individual components can be bought separately at proportionate prices.

Although the frequency with which aircraft interiors should be redone is a matter that depends entirely on the individual owner, most craftsmen indicate that an interior seven or more years old has seen its day, both from the point of style and durability, in most climates. In practice, however, they find that customers want to have the internal face lifted more frequently than that. Most interior shops reported that their regular customers bring their planes in at four or five-year intervals, or when they are getting ready to trade up.

Airport operators voice no regrets over the demise of the disreputable looking aeronautical clunkers that used to clutter their fields. They regard the sleek, tastefully appointed successors of those unkempt relics as a tangible indication that general aviation is achieving the dignity it deserves. ●