

I Want To build My Own Airplane

Part 4: The Id, the Ego & the Super Ego or Freud Meets Bernoulli

"My kit has arrived, and I've got this crate sitting in my workspace. I've cracked the top open and looked at a mass of stuff; aluminum, paper, welded components, a conglomerate bag of hardware! Enough! Can I really do this? Am I ready for it? Does the outward confident posture (shown to my family members and friends) really cover my feeling of "What have I got myself into?"

LET'S LOOK AT SOME HARD FACTS:

At a forum at AirVenture Oshkosh, Jean and I explored some of the issues that we faced building Jean's RV-9A. We considered two companions that always seemed to lurk around us and our work. One we called '**Super Dave**'. Boisterous, aggressive, compulsive, 'pass-the-buck' type; an exhibitionist! The other was our well known friend, **Murphy**; determined, sneaky, shifty, cunning, destructive and possibly deadly! Both of these two guys seemed to be present far too often. Both, we had to face with determination and effort. Both became quite familiar to us.

1. MONEY:

In Part 1 we briefly considered the capital investment of our project. Now let's take a harder, closer look at this factor. Let's see, the kit costs \$15,000. Now for a budget estimate we will multiply this by 4 to arrive at a base cost of \$60,000.

So how does this work? The kit is \$15,000. Keeping an engine in mind, we carry a budget figure of \$20,000 for a USED, zero-time Lycoming O-320 or O-360. (Perhaps we should bite for a new Lycoming at \$35,000?) You did say a constant speed propeller didn't you? Add \$12,000 with governor. Glass cockpit? Add a basic \$10,000. Then dual Nav/com's., GPS tracking autopilot? Encoding transponder? ELT, intercom, miscellaneous steam gauges? Guess what? add another \$20,000. Leather upholstery, auto-shop paint; another 10 grand. Shipping and handling charges, GST and PST. Hey wait a minute! What happened to that budgeted 60 grand?

2. TIME:

You also want to consider the hard reality of the time commitment. Do not for a moment believe that you, as

a first time builder, will fit into the kit factory representative's claim of 'X' number of hours for an 'average' builder. A 'first-time' builder isn't 'average'. Multiply the 'average' build time by 3 or 4.

Here's where our friends Dave and Murphy come in. Here's what they whisper in your ear:

Super Dave: "You can do it for less in both time and money than anyone else, because of your natural ability, superb learning skills, shopping, and bargaining skills and time-management expertise!"

Murphy: We'll make sure to turn those abilities listed, into liabilities!

Reality: In order to meet your budget in both money and time you will need a good degree of self-discipline and effort. You may very well need to forgo elaborate avionics, fancy upholstery, and a flashy paint scheme. You may need to select a good used engine with time to overhaul, in lieu of a new one. And you may decide that initially you will do with less and then re-fit as time and money allows. You will need to discipline yourself to a regulated work schedule.

We all start out by expecting to build the perfect aeroplane. Somewhere during the first thirty minutes of building we start to face reality and settle down to building the very best that our assets and capabilities allow, and to be happy and satisfied with this. I know several builders who keep screwed-up component parts for mental reminders. It is said that the 'difference between a perfect and a very good aeroplane is twice the time and twice the money'. Better to build a simple, good, VFR, non-aerobatic aeroplane, than to conjure up possibilities into a dream that never sees completion. Most experienced builders advise to keep it simple and save the money for av-fuel.

3. YOUR HEALTH AND SAFETY:

Like many things in life, there is a balancing act between compulsion and common sense. Take the necessary time to research health hazards like chemical toxins in paints and primers. Toxins are cumulative and if you do not heed warnings, you will reach a point where your body cannot tolerate even a minor amount of additional

(Continued on page 7)

(Continued from page 6)

toxic fumes without severe respiratory problems. The object is not to pack it in before the project is completed.

With hand and power tools, use caution and common sense. Learn the proper use, care and safety considerations on your newly acquired tools. Don't let desire to build, interfere with your desire to keep your fingers complete and pointing in their proper direction.

If you listen to **Super Dave**, he'll say; "Just get on with it! This little job does not justify concerns about details!" **Murphy** won't say anything. He'll just make sure that you'll screw-up in the details!

Reality:

Our world is predicated on time-management, deadlines, efficiency, and production. If these factors follow you into this wonderful hobby, you will 'screw-up'. That's a given. I've found that if I set my goal on 'completion', I will inevitably do it twice or more times until I meet my self-imposed standard of quality. If, however, I approach each component of the project with an attitude of 'I don't care how long it takes, I will do the very best I can with this individual piece of work', I will not only be happy with the outcome, but also find that the time consumed is far less than re-doing it, as is often required.

4. YOUR DREAM:



As stated earlier, we all start out to build the perfect aeroplane. This euphoria is usually short-lived. Then reality sets in and we mature to where we are content with our own abilities. We reach an emotional balance that allows us to build an aircraft to our own 'best' ability and its resultant satisfaction; perhaps not perfect, but good, safe, and satisfying.

Do not underestimate the learning curve and the development of your building skills. As you progress you will be the one raising your own bar on quality control. You may, from time-to-time, measure your work against someone else's, and that's good, but you will find that, as in golf, you are your own competitor.

Your product, when completed, (as well as during the building phases) represents your dream, and provides incredible satisfaction and personal pride. Let no one deride these values. And when someone else, a peer or a tire-kicker, looks at your product and simply says, "It's excellent, or it's beautiful", it will be worth it in spades. Emotion plays a large roll in this our hobby. Without it, we probably wouldn't be building our own aeroplane!

Super Dave will run with your ego and passion. **Murphy** will keep you humble!

5. YOU:

Most of us are amazed at the incredible change in ourselves as we progress through this adventure. A student in one of the EAA SportAir Workshops, when asked what

(Continued from page 7)

he had learned the first day replied; "I've learned more about me than I would have ever imagined".

We come into this hobby with a load of baggage developed over the years in our vocations and avocations. Now we are faced with an entirely new paradigm. Our thoughts and actions change to accommodate this new world. We have a certain amount of willingness, as well as a good deal of reluctance and resistance to personal change.

We now suddenly encounter a new person inside of us that we didn't recognize or see before. This new person isn't necessarily someone we embrace or even like, but we soon realize the necessity of ridding ourselves of the crutch of denial, and facing this new individual with truth and forthrightness. Someone stated it as; "confidence, not arrogance". And with acceptance and discipline we begin to like and respect this new being. We find that we can get off our butts and do the necessary research to achieve the knowledge and skills required for success. We find that we begin to accept and demand a level of quality control commensurate with, and sometimes exceeding industry standards. We begin to appreciate the art as well as the science of the venture. And we find ourselves reaching out to others with a helping and encouraging hand.

This journey involves learning, comparing, developing skills with tools and materials, meeting expectations of yourself, your partner and family. It involves honesty,

and you, will create a new awareness and a new joy in your working together. As a side note: Jean always said we should decide before any work session as to who would be at fault for any mistake made.



I encourage you not to be lazy in your quest for learning and research. Make use of the EAA SportAir Workshops to learn new skills. (I have never heard a single student say that the effort was not worth the benefits received.) Surf the many excellent websites of builders (see www.Drinkymooseworks.com) who share their successes and frustrations. Meet with builders at your local EAA Chapter. Attend airshows and fly-ins and speak to builders and enjoy the camaraderie that exists for all of us. Plan to attend AirVenture Oshkosh, held this year from July 24 through 30. If not Oshkosh, make one of the EAA Regional Fly-ins. See your EAA Sport Aviation magazine or logon to www.eaa.org for information.



The Drinkwaters (see www.Drinkymooseworks.com) at Sportair in Regina.

hard work, humour, frustrations, unexpected twists and turns, and above all acceptance of yourself and your loved ones, and your individual and collective abilities. It does not involve boredom.

This hobby as shared between your partner, your family