The construction of my ICP

Here I 'll try to sketch the way I builded my ICP. As I mentioned earlier in other PDF's and on the site, the panels I made do have the correct measurements but I used not the correct font and especially in case of rotaries I sometimes placed the words a few mm (counter) clockwise, just to match the positions of the 12 step rotaries I used.
For the ICP I made was based on the first drawings of Pegasus, the measurements of the ICP housing and therefor the ICP panel are not the same as the real stuff.
(Pegasus has published a 3D plan of the center console where these measurements are correct.)

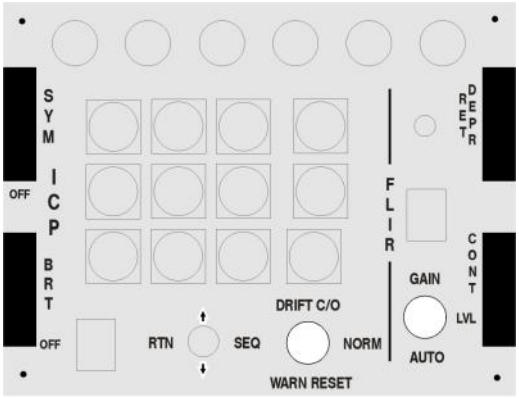
I decided to stick with the first drawings. In the first place I 'm happy when the ICP knobs are a little less in danger when visiters climb into the pit. The switches and knobs are still at a very comfortable distance, for me there was another advantage in using these drawings because it resulted in a little more space for the ICP to construct. Believe me you have to put quiet a few electronics in this space.

The first decision I made was that I would place the panel at the front of the center console.
As always I started with the panels published at xflight.de.
Just print the panel at 103% and you have the correct measurements. In this case I had to measure the ICP front and take that as the border for the panel to construct.

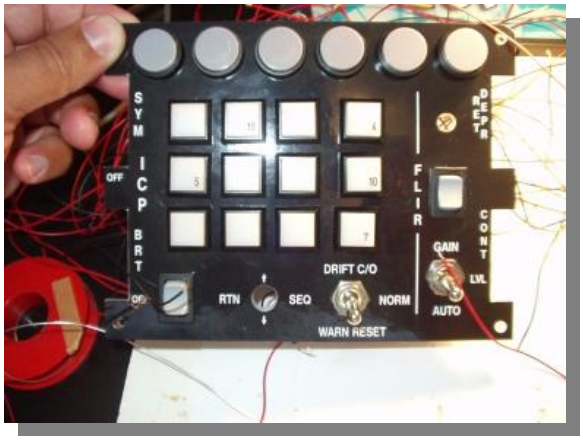
On the left the panel as it has to be.
On the right the original picture was stretched so it will fit in my middle console.

On the picture on the right I draw the words and circles where I have to cut away some material.

The next step is to print the finished panel in gray scale on a big paper label. Then it will become easy to stick it on the plexi glass and cut away the necessary.



After this step you end up with something like this.

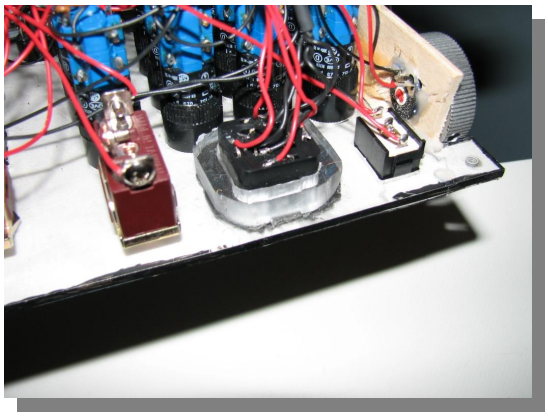


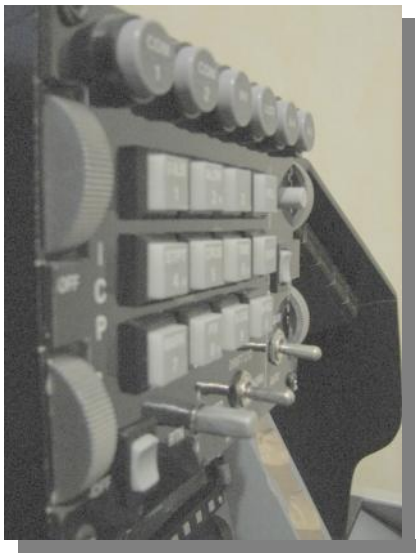
For the buttons and switches I used ordinary ones as you may find them in the electronics shop in your neighborhood.

For the square pushbuttons I used the ones with a little light bulb inside.
These are in my opinion expensive buttons ($12,-- each), but I could buy some stripped industrial panels with these guys installed on them.

The round push buttons were also standard ones from the shop. A little to big but gray and on my somewhat over sized panel no problem for me.

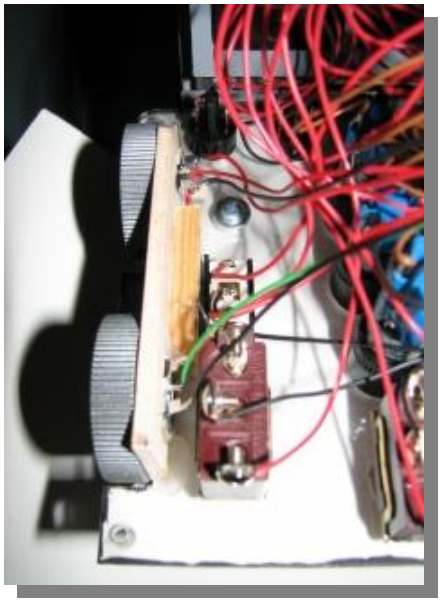
For the switch that has to move in four directions I used a simple hat switch from an older thrustmaster stick. Some other sticks will do fine to, but this one makes a click at the end of the direction where it is moved in. I glued the little box of the knob in a little frame so it could be screwed on the backside of the panel, or like I did glued it in place with some double sided tape. I thought when someone jumps in the pit a little to enthusiastic the knob will be pushed inside and will not break.

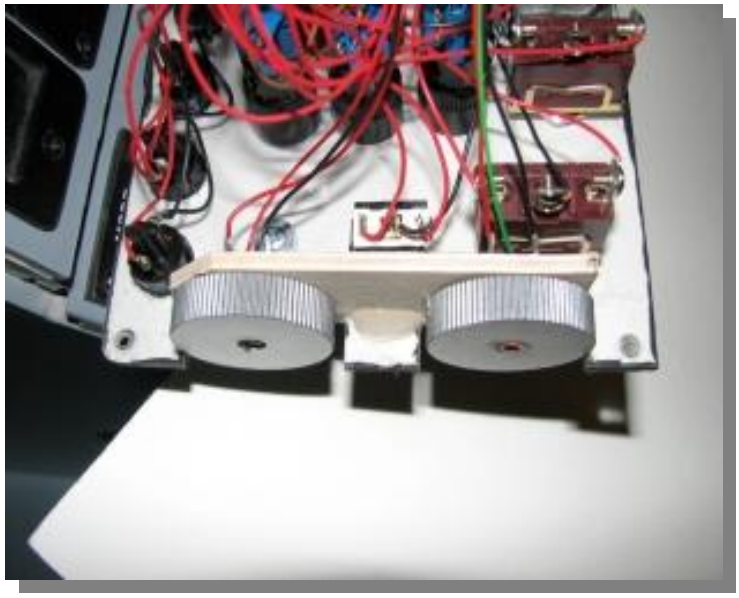




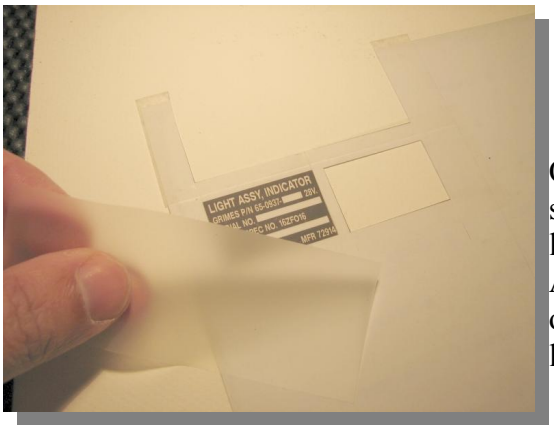
Made the handle out of a peace of plexi glass and painted it.
To install the handle onto the knob I drilled a little hole into the handle and in the little stick on the knob. Placed a small peace of metal inside and glued this all together.

Bought for the wheels four little potentiometers and glued them into a little wooden frame.
Now it is easy to glue this on the backside of the panel. I used some hot glue.

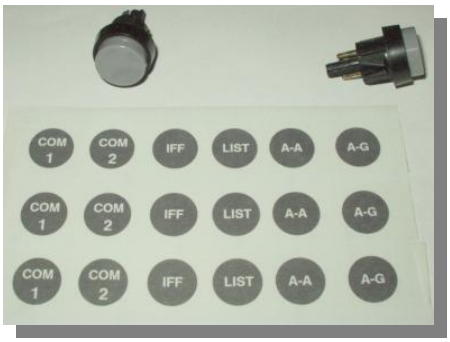


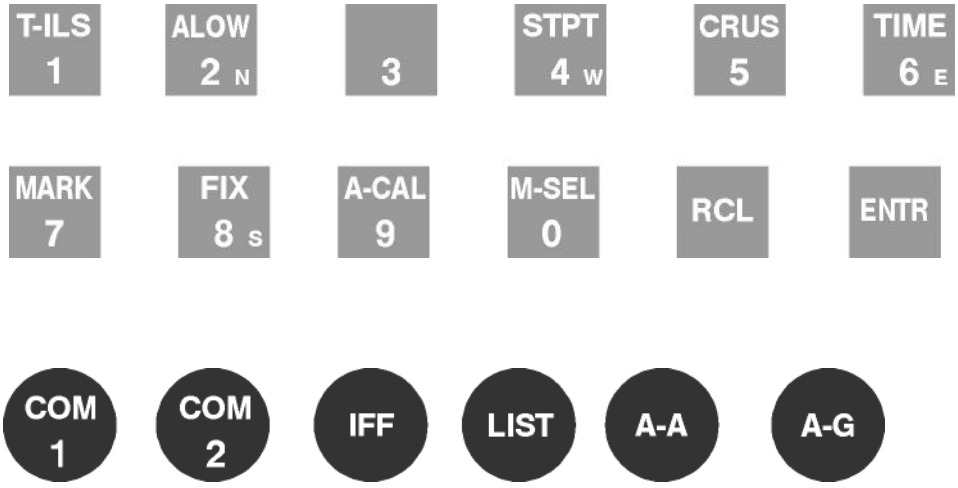


We have to put some text onto the buttons.
Print the text on address labels. On top of these printed labels I added a transparent label, the ink will be save for the sweaty hands when flying without gloves ;-) , and the end result will have a plastic look.

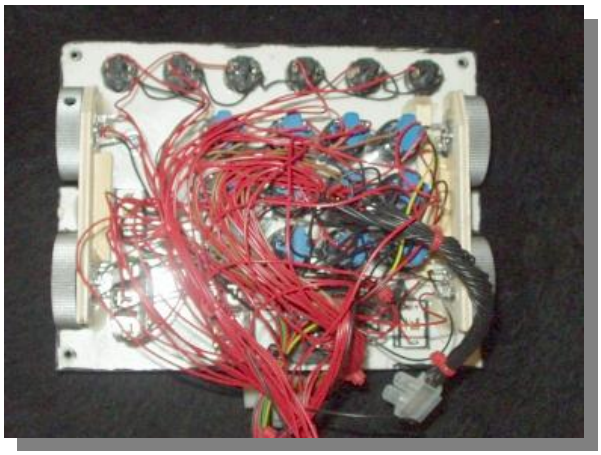


On the left a sample of this label making.
A label to be used on the indexer lights.

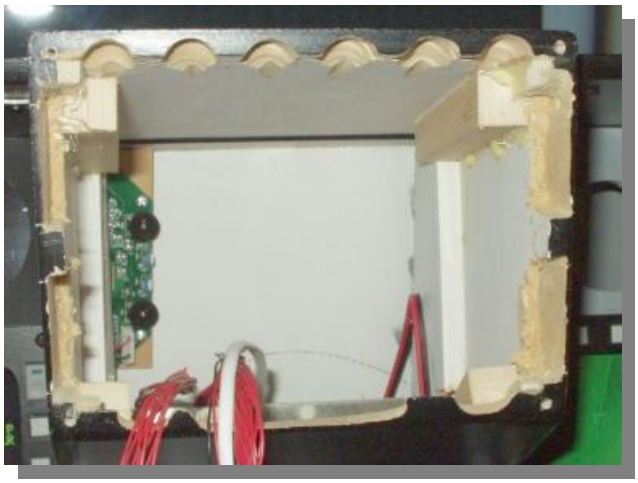




After soldering and screwing a few wires onto the back of the panel you will end up with..... this.

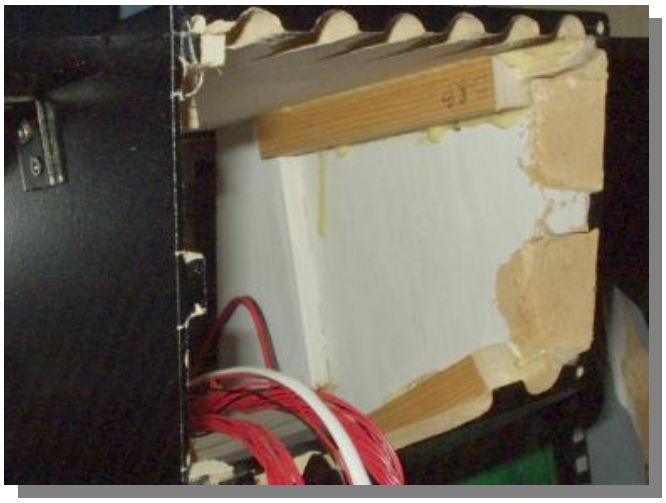


Then it is time to cut away a few material where the panel will have to be mounted. I mean this ;-).



In the corners of the box I glued four pieces of wood just for strength . Keep in mind there is not to much room, so to the front site I removed as much wood as possible.

On the picture you see the moment just before the placement of the panel. It is clear you have to cut away mdf at several places to make the panel fit.
It just depends on the switches you actually will use how much and where you will have to remove some material.



From another angle.

The connection with the wires on the panel is made by using some 25 pin serial connectors. So the ICP panel can be removed easily.

With some light

The ICP isn't easy to make because of the little room you have to put all the knobs and wheels.

For I was lucky to walk into some really cheap used buttons, the total cost of this ICP was only $30,--. A great strategy is to put in some cheap buttons in first place and replace them when you spot them on e-bay or other great places.
Believe me after you've started the pitbuilding madness, you'll look for usable knobs and bolts everywhere.

As always I keep asking all the others in this loony hobby, make some little pdf's with the pictures you make on the road, and share them with others.

They may make improvements and so we can build our dreams faster and maybe cheaper.

Keep them flying,

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