

Work Station On Wheels

By Richard Giovanoni

This Ice Gocart Brings Home Economy Of Organization Rather Than Mileage

This past Christmas, when I added a printer to my TRS-80 Color Computer, it became obvious that I would have to consolidate my work area. Too many cables and cords, and space was becoming a problem. Two of my sons were home from college: it's amazing how they consume food and space in an exponential relationship to their presence. Necessity, then, was the mother of my prototype portable computer center, Ice Gocart.

Now my total operation is contained within a four-square-foot area. It's on wheels and I can retreat to any leftover space in the house. The computer, printer, recorder, tapes, notebooks and magazines have all been stacked and shelved in a converted stereo cabinet. (The cheap kind that go for about \$20 on sale.) The overall

setup is shown on page 2 of the plans.

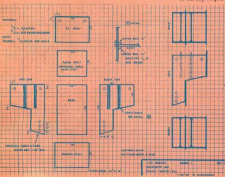
Since this was my prototype, a good deal of the construction was dictated by what odds and ends I had on hand. This included the stereo cabinet which no longer was in use. As it turned out, the system has worked so well that I haven't even taken the time to finish it up properly. The pristine beauty of its rough hewn plywood remains intact for all to admire.

Construction

Building the Gocart was done in two stages, the base and the equipment-holding upper section.

It all started with the basic stereo cabinet; it set the size, and because it was available, meant the project could be completed sooner. Five major modifications were needed to fill my requirements.

- 1) Metal reinforcing angles were added to all four corners on the back of the cabinet to make the unit more solid.
- 2) I added the casters along the bottom, using eight of them mounted on pieces of scrap one inch board. I figured eight of them were needed to distribute the load and provide stability.
- 3) The second sliding shelf was installed four inches down from the top. In my case this is a piece of half inch plywood, 20 x 15 inches. Strips of half-inch quarter round molding make up the rails as shown in Detail A on page 1 of the plans.
- 4) A 1½ inch hole was cut in the middle of the back panel about two inches down from the top so the recorder cord and cable could be brought out to the power outlet and computer.



- 5) To provide support for the TV, an end support, 12 inches wide was added to the left side between the upper and lower shelves. By inserting the extra shelf as shown, I picked up a place for my notebooks and other miscellaneous stuff that I tend to accumulate.

Once this task was complete I could attack the construction of the equipment bay shown in the plans on page 1.

I figured out how to stack up the rest of the equipment so that I could get at, and see everything in the most efficient manner for me. I'm right handed, over six feet, and a lousy typist, all of which influenced my set up and some of the vertical dimensions.

Page 1 of the plans shows the layout of the pieces that make up the equipment bay. They were all cut out of half inch plywood. After the rails for the sliding shelves have been put on with glue and brads the sides can be assembled to the base. I used glue and four penny finish nails. By slipping in the shelves at this time the proper spacing can be maintained while the TV shelf is hammered home. At this point the unit is solid as a rock. The printer shelf is installed last. All those 1/4 inch holes are for getting the cables and cords routed to the proper place and still keeping them out of the way.

The completed bay was lined up on top of the base and clamped in place while I drilled 1/4 inch holes at each end down through the top shelf of the base. Quarter-inch bolts and wing nuts installed through these holes make everything secure and allow for easy removal.

The easel holds papers or magazines when typing programs. The location is a must for me. As a hunt and peck, two-fingered typist I have to have the copy as close to the keyboard as possible. That's one of the main reasons for my "in-line" arrangement of the equipment. This setup also makes it easier to check the text against the screen when trying to find typing bugs.

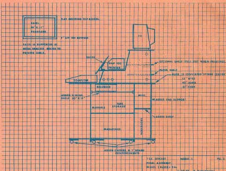


My daughter, Mary, at the controls. The overall arrangement is shown with the BW portable I use most of the time. The recorder shelf is in the stored position.

To attach the easel I used an old bracket that I found in my junk box. I bent it to about a 60 degree angle and then bolted it to the front edge of the printer shelf. The easel was then attached with another bolt to the other leg of the bracket. I found that it was best for me to adjust the location of the easel so that the lower edge just rests on the top of the computer case.

The easel is a piece of leftover pegboard. I glued half-inch flat molding strips along the top and sides. A piece of one inch inside corner molding serves as a lip that forms the paper rest.

A short extension cord with three outlets is attached to the back of the cabinet near the computer end. Printer, computer and recorder power cords, fed through those 1/4 inch holes along the sides, all plug in here. It is close to my left hand so that I can unplug the computer easily at the end of a session. The excess length of the cables and cords are coiled and secured with garbage bag ties and tie



out of the way on the base of the equipment bay under the printer and paper shelves.

As an example of routing, the cable from the RF modulator feeds down through the hold in the right side of the TV shelf, out the top hole in the right side, back in through the bottom hole and then to the computer port, with the excess coiled up. This path keeps it out of the way of the printer and the paper feed.

I added the optional storage shelf above the paper tray because the space was there to use. When the printer is in use I slide this shelf back out of the way.

If I had to do it over, I would make the printer shelf a couple inches deeper (as shown by the dotted lines on the plan) to give me a little more clearance for my DMP 800 printer. Obviously, this particular shelf has to be sized to whatever printer you may have. Next time I would use ball-type casters; it would be much easier when moving over carpeted areas. I am still trying to figure out how to add a built-in light.

I'm really happy with the setup and hope that it contains some ideas useful to others.

MATERIAL:
 2 in. PLYWOOD
 2 in. DIA. ROUND BOLDS
 40012
 75382828 1/4 HOLES FOR WAILS



NOTICE: CABLE & COORD HOLES ARE 3/32 DIA.

ASSEMBLE WITH 44 FINER SAND & GLUE

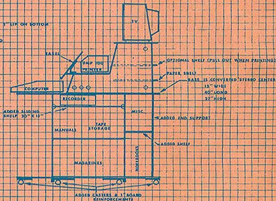
J. C. DOGART MODEL 1 PG. 2
 EQUIPMENT BAY
 SCALE: 1/8" = 1"
 1-24-68 R. GIBBONS



1/4" MOLDING TOP & SIDE

1/2" LIP ON BOTTOM

BASE IS SUPPORTED BY METAL BRACKETS ATTACHED TO PRINTER SHELF.



J. C. DOGART MODEL 1 PG. 2
 FINAL ASSEMBLY
 SCALE: 1/8" = 1"
 1-24-68 R. GIBBONS