A Steel Drum Project

I guess truth be known, I am a person with too many hobbies, a kind of jack of all trades hobby related. Although I like to think I have mastered a few, again the truth is that that they have mainly mastered me…or at least taught me a thing or two as we go along, which can work out ok, as I like to learn.

So my hobbies are Astronomy where I’ve built my own observatory, designed the electronics, written the control programs, dealt with frustrating night time weather and occasionally taken a picture of a galaxy. Then there’s the bee keeping, wood turning on my lathe, building a Baroque Lute, I’d better stop there.

My latest project came into being because having lots of spare time, I decide to Join Maggs Atwell’s Silver Seas Steel Pan Band. I play (!) a steel drum and occasionally I manage to play in tune and in time with fellow band members. It’s great fun and we rehearse at St Catwg’s on Fridays, 6 til 7 pm. New members are welcome… In order to practice in between the Friday sessions, I had the idea of building a drum simulator. It’s a prototype, evolving as it goes along.

A close up of a drum

AI-generated content may be incorrect.The picture here is the real steel drum that I play and chose to simulate. The simulator idea came to me as a low cost option for creating a drum which also combined some of my other hobbies such as electronics (where I can blow up almost any electrical circuit) and programming (where I suppose I did have some formal training about 50 years ago).

You can see it has ten notes on its sides and seven in the bottom. As I’m not much good at metalwork (my former 11 year old pupils in an Oxfordshire school which shall remain nameless, will attest to this…), I decided to make the simulator out of plywood. A crazy idea I hear you say, as quite rightly if you hit a piece of plywood with a drumstick, it makes a non-musical dull thud.

So this is where the electronics and computer programming bit comes in. For those who are into the programming / electronics, I’ve included a brief ‘techy appendix’ at the end which explains the design and computing process. Before I describe how the electronics bit works, I’ll explain a bit about the wooden ‘drum’ simulator construction. I needed the simulator to have the notes approximately the same size as the real drum and also to be in the same general position, so when I practice a tune I can hit all the right notes….the Morecambe & Wise sketch always comes back to me when I’m practicing….So here is what I built from plywood, in the early stages of construction in my garage.