

## VentAid: A Low Cost Ventilation Aid for COVID-19 Patients using Off-the-Shelf Component A Proposal

### Goal:

- ✓ Low Cost
- ✓ Easy to Manufacture/Assemble (very short Turn Around Time)
- ✓ Very Basic in Nature (but with Provision of Future Expansion using Modules)
- ✓ Manual Mechanical Inlet Air Pressure Control
- ✓ Flow Control (Inhale/Exhale Timing Control)
- ✓ Repetition Rate Control
- ✓ Safe (built-in Alarm System)

### Limitation:

- Not I.C.U./I.C.C.U. Ready
- Patient Flow Pattern can't be Programmed
- No Backup Power (but System Failure Alarm using Battery Power can be added.)
- Uses Pressurized Air/O<sub>2</sub> Supply available in Most of the Modern Hospitals, thus does not have own Air/O<sub>2</sub> Source (can be used with any other Pressurized Air Source including Compressor though.)

