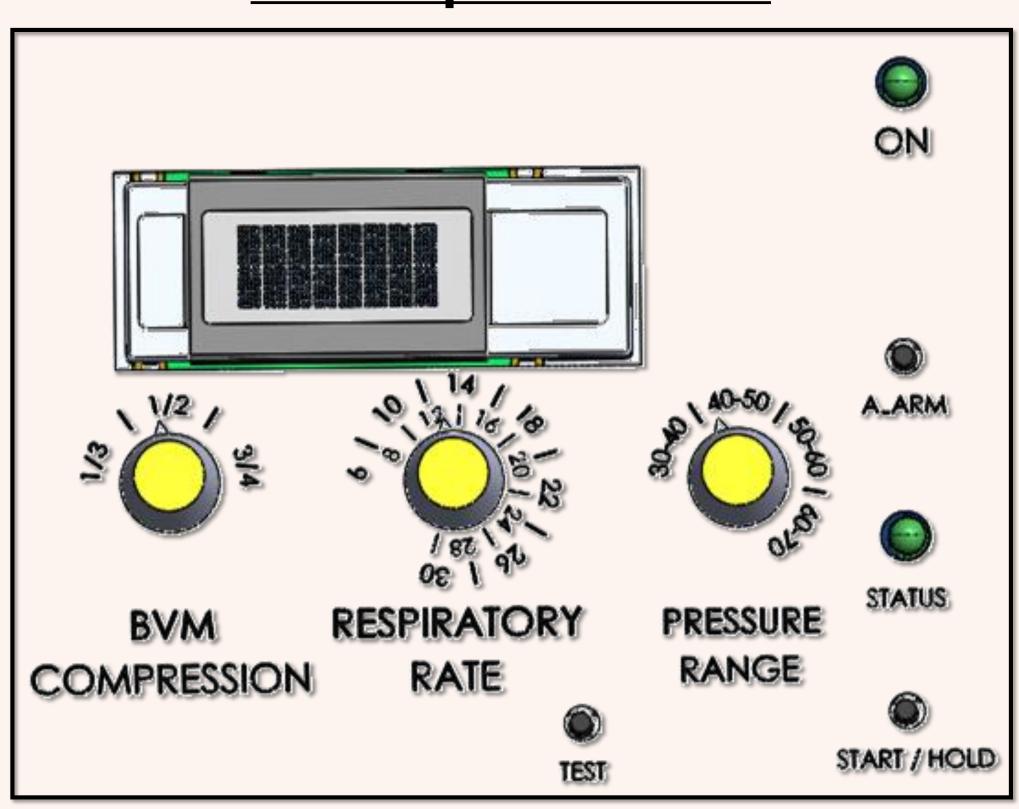
# **Specifications**

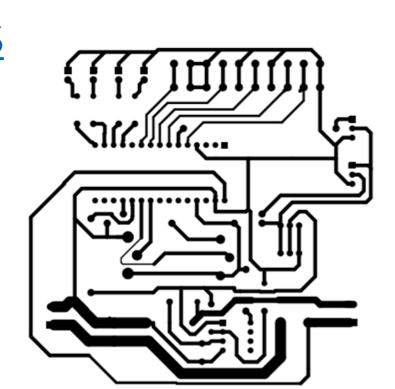
- Volume control ventilation (VCV) machine
- 3 tidal-volume respective to (33%, 50%, 75%) of the bag total volume
- 11 ventilation rates ranging from 6 to 24 cycles per minute
- 5 ventilation steps between 30-70 cmH2O, of not-to-exceed inspirium pressure
- Electrical Source 110/220V
- Batteries Backup (2 hours duration)
- Visual and Vocal Alerts: Batt. On | Low Batt |
  Hose disc. | Vent. rate fail. | Extreme Pressure
- Ventilation pressure continuous monitoring
- IOT-based system, to monitor multiple patients

# **UI-UX Specifications**

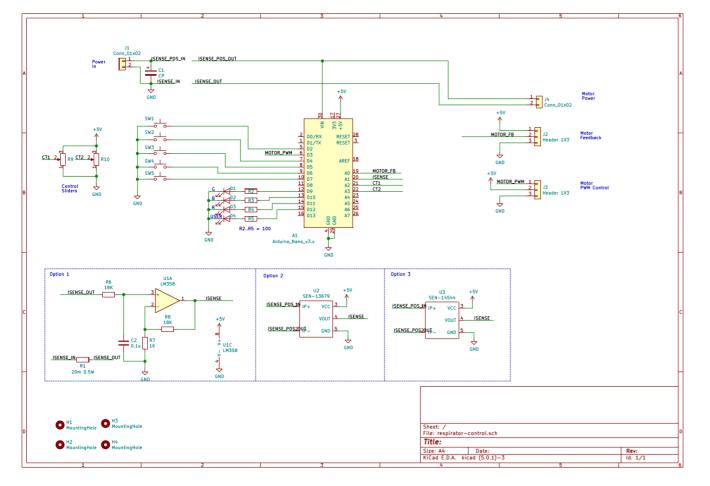


# **Off the Shelf Components**

- Hex Shaft Snowblower motors
- Spark mini Motor Controller
- ArduinoNano
- SparkFun Pressure Sensor







# Emergency ventilation initiative coming out of Israel

### Who is behind it?

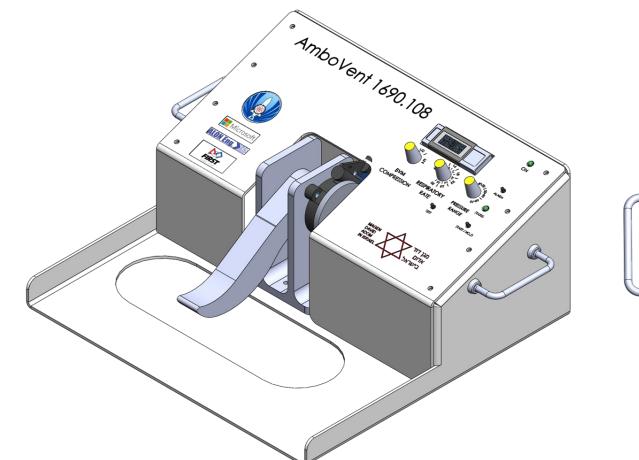
Lead by the CTO & innovation leader of the Israeli Air-Force 108 Electronic Depot and backed by a large community of innovators behind him

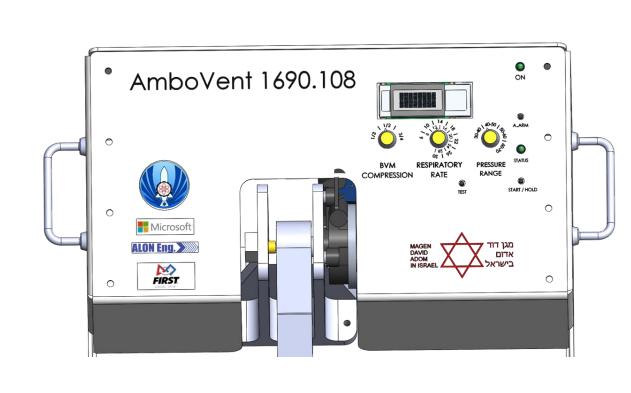
#### To include:

40 Professional Volunteers - <u>Israel's national EMS</u>, Physicians from leading Israeli hospitals such as <u>Tel Aviv Sourasky</u> and <u>Hadassah JLM</u> as well as other medical centers, Engineers, <u>First Israel</u> mentors and students, The <u>Haifa Technological Center Rafael</u> and <u>Israel Aerospace Industries</u>, IAF Unit 108, <u>The garage program by Microsoft Israel</u> and others..

# **AmboVent 1690.108**

# Automatic, Controlled Resuscitator Device





# Emergency ventilation alternative system

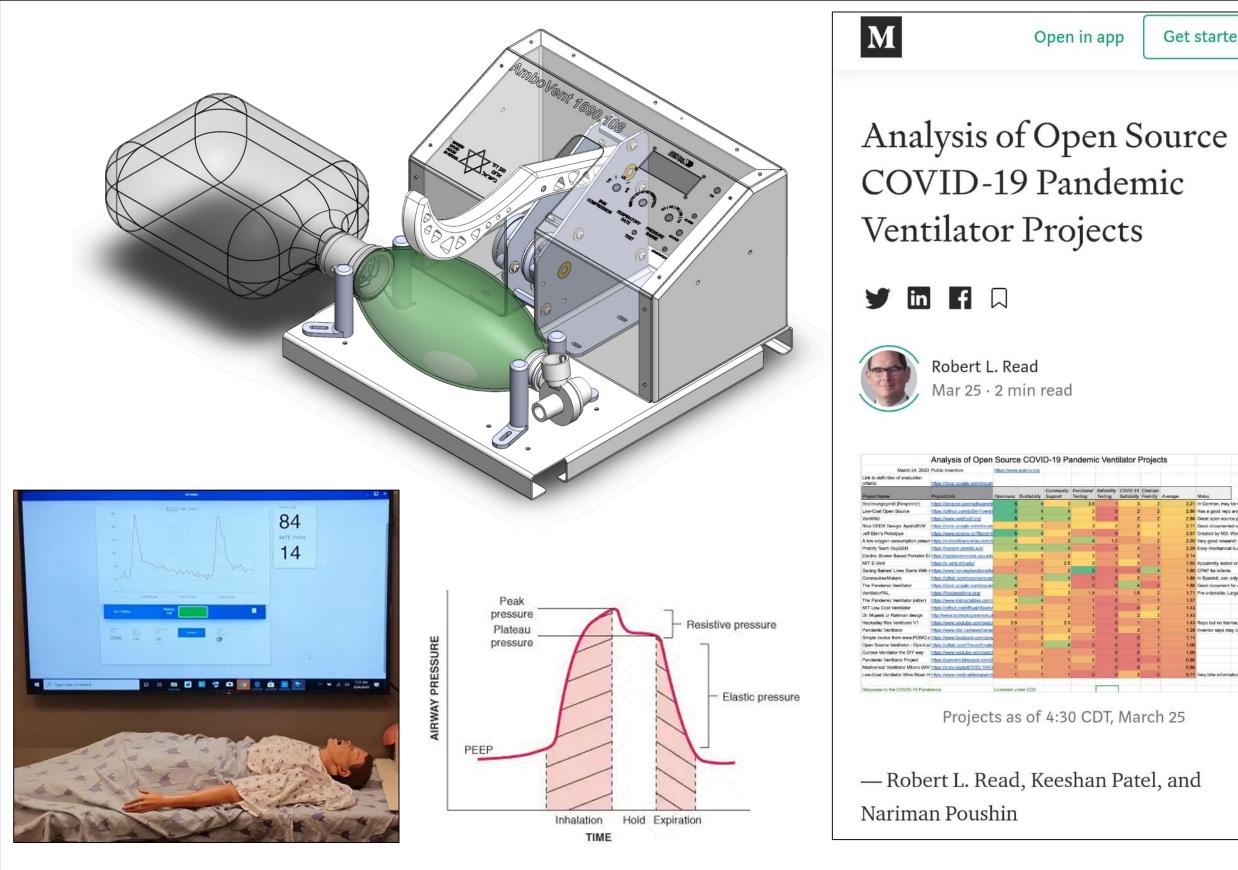
Global Partnership for the Greater good Leading Open Source Code Mentality Initiative

## **Validation and Tests**

- Supports <u>Rapidly Manufactured</u>
  <u>Ventilator System specifications</u>
- Evaluated in <u>Tel Aviv Sourasky</u> hosp.
- Tested in <u>Flex</u> labs
- Calibrated in <u>Rambam</u> hospital



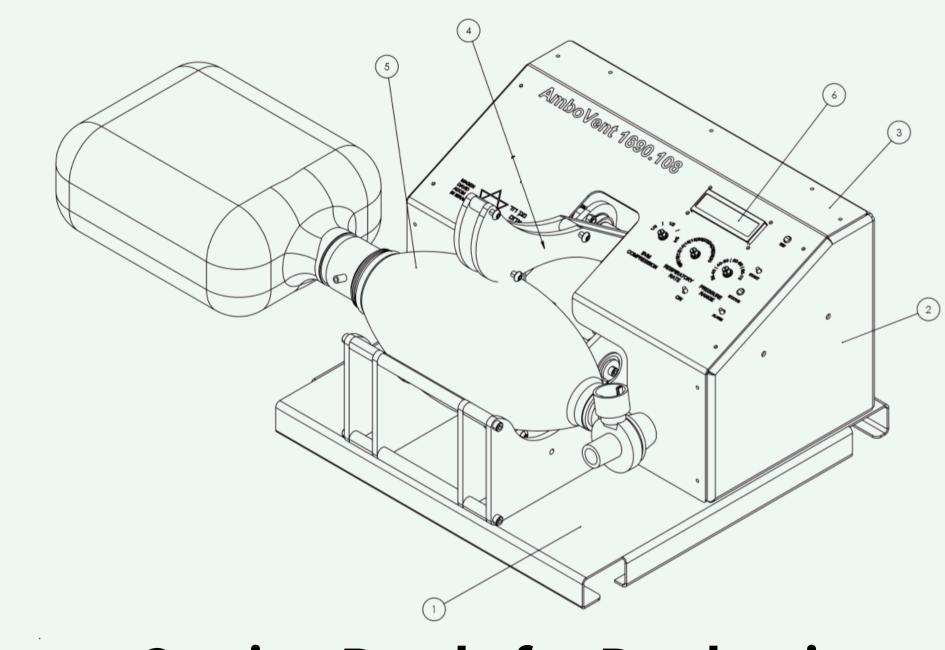




Rated by <u>Robert Lee Reed</u> as the leading solution in this category, among 40 other initiatives

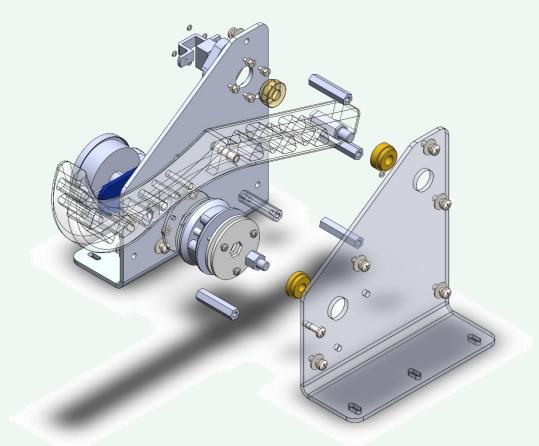
### **Documentation**

- Files are available in an ANSI-metric standard
- Mechanical model design source-code files are provided in a Parasolid format (.X\_T)



# **Getting Ready for Production**

- Materials: Aluminum, Akulon-nylon6
- Metallic painting capacities
- FDM based 3D printing machines
- Factory assembling capabilities
- CNC, Punch, Bend manufacturing Capabilities
- Printing on Lexan



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