

ABSTRACT

This thesis presents a new design for controlling and regulating the output of a DC defibrillator by using some "New Technology" devices. The thesis is divided into two sections:

I. Defibrillators and Defibrillation, this section is intended to supply the reader with some basic concepts pertaining to defibrillation and defibrillators.

Topics covered include the normal cardiac cycle, causes of fibrillation, defibrillation methods, type of defibrillators, and defibrillator requirements.

II. New Defibrillator Design, this section deals with the actual defibrillator design and how the desired output waveform is achieved. This section also discusses the strengths and problems with this design.