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### **MEVDP/PC**

#### **A Primary Radiation Transport Code-Complex Geometry for PC**

**MEVDP/PC** (Modified Elemental Volume Dose Program) generates ordered path-length Aerial densities for primary electron, electron-bremsstrahlung, and secondary particle radiation transport calculation. It also generates standard-material Aerial -density distribution functions for proton and heavy ionizing nuclear radiation. The primary and secondary Aerial-density functions can be used for particle transport calculations to compute emergent fluxes and energy deposition. The code system has been successfully run with the Apollo command and service modules and the Lunar module, which are represented by 1000 elemental volume shield configuration.

**MEVDP/PC** has the computerized Anatomical Model Man, which is a detailed representation of the radiation transport properties of the human body. It is to be used for computation of the Aerial density distribution of specified locations in the body. This information is applicable to dose calculations in natural, weapon, reactor, and other radiation environments. The model has two configurations standing and seated. Over 2200 individual geometrical shapes have been used to depict the external conformation, the skeleton, and the principal organs. The exterior dimensions are those of the 50th percentile Air Force man; the skeleton and organs were scaled from life-size models to conform to the exterior. The model includes variations of material density and fractional composition by weight due to the principal chemical elements contained in muscle, bone, bone marrow, and organ tissue.

We at Galaxy Advanced Engineering, Inc. (GAE) have taken steps to make this code available on your PC platform or %100 compatible under PC/DOS or MS/Windows 95/98/2000/XP/ME and NT operating system. To obtain the code and more information, please contact our company or call us at 650-740-3244.