

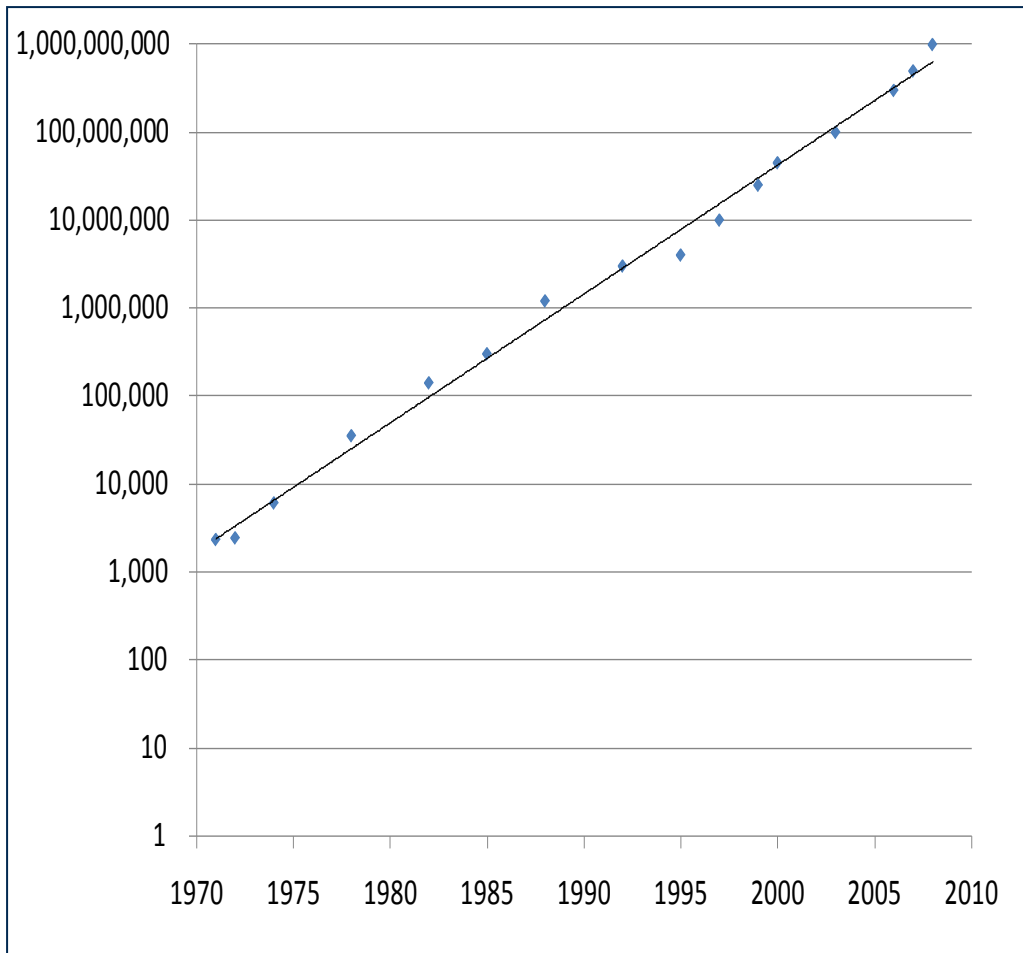
# *Past is Prologue*



*“Fossil fuels resemble capital in the bank. A prudent and responsible parent will use his capital sparingly in order to pass on to his children as much as possible of his inheritance. A selfish and irresponsible parent will squander it in riotous living and care not one whit how his offspring will fare.”* 14 May 1957 — **Admiral Hyman Rickover, Naval Reactors**

# Moore's Law, and Energy

Transistor Count



- Observation (1965):  
Number of transistors on integrated circuit doubles every two years
- Enhanced capability typically increases the demand for energy
- Advances in technology can be steady and almost inexorable

The Navy must find a way to keep the march of technology and improved efficiencies from just requiring more energy.

