CHEMP code document now found; and AFIT code

1. Refer to - Chapman Thesis ADA 777841 in 1973 – & **AFIT code**
- Air Force Institute of Technology (AFIT) on a computer code to determine survivability of a system with known nuclear vulnerabilities from a variable nuclear threat.
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'The AFIT survivability code capabilities include blast, thermal, x-ray, gamma ray, and neutron effects. The high altitude EMP code presented in this **report is intended to be used in conjunction with the AFIT survivability code.** The EMP (electromagnetic pulse) from a nuclear weapon is usually considered to be a radiating electromagnetic wave of short duration containing many frequencies' . The AFIT companion software is not located as of yet. Thesis does **not** seem to use the CHEMP code/software.

2. Refer to - Louis W. Seiler Jr. Capt Thesis # **ADA 009209** in 1975
A CALCULATIONAL MODEL FOR HIGH ALTITUDE EMP at the Air Force Institute of Technology Wright-Patterson Air Force Base, Ohio. It appears that CHEMP is required to be used in obtaining correct angles and has suggested values listed for selected angle inputs – see page 9 for values and reasoning.
'CHEMP is a computer code originally designed to examine the effects of self-consistency on high-altitude fields by using a particle pushing model for the current calculation and the high-frequency approximation for calculating the fields. CHEMP has been **extended** to study the effects of non forward Compton scattering, varying gamma energies, and elastic nuclear scattering.'
It is needed for our work with Fortran. Seiler seems to have used it to verify Thesis work**.**

Note: Air Force Weapon- Laboratory CHEMP computer code **is not** at the Nat Tech Info Services but **is listed** as **AD0783239** - CHEMP. See attached NTIS search PDF document for the long search trail.

http://ece-research.unm.edu/summa/notes/TheoreticalPDFs/TN181.pdf,