

Practical Considerations of Conversion by the US Military

**Adopting the International System of
Units for Radiation Measurements in
the United States**

COL Cuellar and LTC Reyes

Disclaimer

- Any mention of trade names or commercial products is for identification only and does not constitute endorsement or recommendation by the Department of Defense or any of its military services.
- While policies will be discussed, the views and opinions are of the presenters and not official positions of the Department of Defense or any of its military services.

DOD Occupational Ionizing Radiation Protection Program

- DOD Instruction number 6055.08 dated 2009
 - References 10 CFR part 20
 - Uses traditional units and SI in parenthesis.

DOD Joint Operational Doctrine

- Joint Publication 3-11 dated 2013
 - Uses SI units and conversion factors
 - Primarily uses centigray for easily converting to rad

Service Guidance

- Air Force
 - AIR FORCE INSTRUCTION 48-148 2014
 - Uses SI units and traditional in parenthesis
- Army
 - DA Pamphlet 385-24 2015
 - Uses traditional units and SI in parenthesis
- Navy / Marines
 - NAVMED P-5055 2011
 - Uses traditional units and SI in parenthesis

Service Personal Dosimetry

- Three Independent Dosimetry Centers
- All report doses in traditional units per CFR

Radiation Detection

- Current equipment
 - Some display in both units or just traditional
 - Some display in only SI units
- Future joint equipment
 - For use in 2018 and beyond
 - Ability to display in both units

Training

- Joint Medical training uses both
- Army and Air Force operational training uses both
- Navy uses traditional only

OPERATION TOMODACHI

- Response to Fukushima incident
- Documented issue in after action reports
- Recommendation to use SI units only in future operations
- Similar and related issue with the use of micro- and milli- prefixes

Questions?