COUNTERMEASURE READINESS LEVELS

BASIC RESEARCH

RESEARCH TO PROVE FEASIBILITY

COUNTERMEASURE DEVELOPMENT

COUNTERMEASURE DEMONSTRATION

COUNTERMEASURE OPERATIONS

1. PHENOMENON OBSERVED AND REPORTED, PROBLEM DEFINED

2. HYPOTHESIS FORMED, PRELIMINARY STUDIES TO DEFINE PARAMETERS, DEMONSTRATE FEASIBILITY.

3. VALIDATED HYPOTHESIS, UNDERSTANDING OF SCIENTIFIC PROCESSES UNDERLYING PROBLEM.

4. FORMULATION OF COUNTERMEASURES CONCEPT, BASED ON UNDERSTANDING OF PHENOMENON.

5. PROOF OF CONCEPT TESTING AND INITIAL DEMONSTRATION OF FEASIBILITY AND EFFICACY.

6. LABORATORY/CLINICAL TESTING OF POTENTIAL COUNTERMEASURE IN HUMAN SUBJECTS TO DEMONSTRATE EFFICACY OF CONCEPT FOR SPECIFIC PROBLEM.

7. INTEGRATED EVALUATION WITH HUMAN SUBJECTS IN CONTROLLED LABORATORY CONDITIONS SIMULATING OPERATIONAL SPACE FLIGHT ENVIRONMENT.

8. VALIDATION WITH HUMAN SUBJECTS IN ACTUAL OPERATIONAL SPACE FLIGHT TO DEMONSTRATE EFFICACY AND OPERATIONAL FEASIBILITY.

9. COUNTERMEASURE FULLY FLIGHT TESTED AND READY FOR OPERATIONAL IMPLEMENTATION.