

## The Human Dimension of R&D



**The Soldier Oriented Research & Development (SORD) Program is designed to provide the scientific & technological edge necessary to ensure that the Army can best recruit, select, assign, train, lead and develop soldiers, sustain their careers, and organize and equip them to enable them to carry out their missions and roles anywhere and anytime.**

**The DCSPER is the ARSTAFF proponent for SORD IAW AR 70-8**

# Who Performs Human Dimension R&D for the Army?

- **The “Human Dimension” of R&D falls under the Soldier Oriented Research & Development (SORD) Program managed by the DCSPER (AR 70-8). PERTEC monitors this program for the DCSPER.**
- **The principal R&D agencies that carry out TLS work for the Army are the Army Research Institute (a Directorate of PERSCOM) and the Human Research Engineering Directorate (part of the Army Research Laboratory & AMC)**

# Current Resourcing of Human Dimension for TLS

- **ARI and HRED currently receive @\$40M each year (out of a \$1.4B annual budget) from the Science & Technology programs administered by the Office of the Assistant Secretary of the Army for Acquisition, Logistics and Technology to conduct R&D for the Army in the areas of manpower, personnel, training and human factors. This work is viewed by ODCSPER as constituting the “human dimension” of Army R&D activities.**

# What do these resources buy for the Army?

- **Research is carried out to answer the following questions/issues?**
  - **Are the current methods & techniques used to recruit young men and women for service in the Army optimal?**
  - **Are the aptitude tests administered to potential recruits measuring the “right stuff?”**

# What do these resources buy for the Army? (Continued)

- **Research is carried out to answer the following questions/issues?**
  - **Are the initial entry and follow-on training programs appropriately designed to develop soldiers who possess “common skills?”**
  - **What mix of virtual, constructive, and live simulation is optimal for training soldiers in units to perform to standard?**

# What do these resources buy for the Army? (Continued)

- **Research is carried out to answer the following questions/issues?**
  - **How can first term enlisted attrition be reduced from its present level of @34% to a lower - and less costly level?**
  - **What incentives are needed to increase the retention of qualified soldiers and their families?**

# What do these resources buy for the Army? (Continued)

- **Research is carried out to answer the following questions/issues?**
  - **Are we making full and complete use of the USAR and NGB to accomplish assigned missions?**
  - **What unique selection, training and retention requirements are associated with Army aviation and Special Operations Forces?**

# What do these resources buy for the Army? (Continued)

- **Research is carried out to answer the following questions/issues?**
  - **What are the human factors issues associated with designing new weapons and information systems?**
  - **What new methods and techniques can be designed to assist in the testing and evaluation of new systems under the full array of operational conditions?**



# Why do we need a SORD program?

- **The SORD program forces the Army to address the “human dimension” of military conflict.**
- **The SORD program is based on the position that the Army is centered on its people.**
- **The SORD program, while funded at levels way below that for materiel, provides significant payoffs.**

# Examples of SORD Payoffs

- **The SORD program designed new selection and classification tests for enlisted soldiers.**
- **The SORD program developed the precursor to the MILES training system and the AAR system used at the Combat Training Centers.**
- **The SORD program developed family support programs for both the AC and USAR that were used during ODS/S as well as in Bosnia.**

# Examples of SORD Payoffs

- **The SORD program has developed new simulations that enable weapons systems designers to “see how soldiers will fit with their equipment,” saving both time and money for Program Managers.**
- **The SORD program has developed prototype training programs that have been adopted by TRADOC for use throughout the Army.**

## A Current - FY99 Example

- **The Army is investing heavily in digitizing elements of the force. However, scant attention has been paid to who will operate and maintain this technologically advanced equipment; how the operators and maintainers will be trained; and how the Army will retain its trained personnel while civilian contractors are offering them significant salary increases with fewer requirements for high PERSTEMPO & OPTEMPO. SORD is now being carried out to address these issues. -- Better late than never!**

# SORD - The Bottom Line

- **The SORD program is an integral part of the Army's RDT&E investment strategy.**
- **The program forces attention to the soldier, the leader, the unit, and the interface between the above and the materiel, doctrine and organizational developments being implemented as we move beyond Force XXI to the Army After Next.**
- **The SORD program enables the ODCSPER to impact the Army's total R&D efforts by emphasizing the "people" side of the equation.**