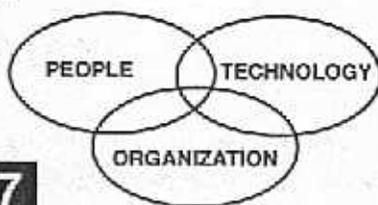




MANPRINT Quarterly

Vol. V, No. 3 Summer 1997



The Director's Corner

The reformed systems acquisition program model, which employs the broad base of governmental experts as Program team members (the Integrated Product and Process Teams), instead of last minute critics at milestone reviews, appears to be working. To facilitate the participation of the MANPRINT community, we have prepared a Handbook that describes the opportunities for participation in TRADOC's Integrated Concept Teams that are developing concepts for material requirements and in the Integrated Product Teams that are responsible for developing and procuring the new, or modified, systems. More information on the Handbook is presented below. In the next edition of the Quarterly, we will describe a new MANPRINT Practitioner's Guidebook.

Jack H. Hiller
Director for Personnel Technologies

A HANDBOOK FOR MANPRINT IN ACQUISITION

"A Handbook for MANPRINT in Acquisition" is now available! Its purpose is to assist individuals responsible for the implementation of the MANPRINT/HSI program to establish and maintain a highly effective, well-integrated effort. The handbook provides information on MANPRINT in general; the acquisition life cycle; the System MANPRINT Management Plan (SMMP); and the missions and composition of MANPRINT Working Integrated Concept Teams (ICTs)/Integrated Product Teams (IPTs). It also provides detailed

(Continued on page 5)

contents

The Director's Corner	1
A Handbook for MANPRINT in Acquisition	1
Meeting of Interest.....	1
MANPRINT Practitioner of the Year	2
MATRIS and Human Systems Integration	6
<i>Barry R. Smith, Jr., and T. Fuller Dean,</i> <i>Defense Technical Information Center</i> <i>(MATRIS Office)</i>	
Transitions	9
FY 98 MANPRINT Training Schedule	9
MANPRINT Information	10

Meeting of Interest



AUSA Annual Meeting

13-15 October 1997

Sheraton Washington Hotel

2660 Woodley Road, at
Connecticut Avenue, NW
Washington, DC 20008

Omni Shoreham Hotel

2500 Calvert Street, NW
Washington, DC 20008

Metro Rail Red Line: Woodley Park/Zoo Station
Non-members of the AUSA may register at the
Sheraton Washington.

MANPRINT Practitioner of the Year

Nominations are now being solicited by the Personnel Technologies (PERTEC) Directorate for recognition by the Deputy Chief of Staff for Personnel as MANPRINT Practitioner of the Year for 1997.

Awards will be granted in four separate categories: Military Practitioner, Materiel/Automated Information System Development, Combat Development/Functional Proponent, and MANPRINT Technology Research and Development or Studies.

In 1995 three individuals were recognized as Practitioners of the Year, and two were recognized as Runners-Up. In 1996 four individuals were recognized as Practitioners of the Year, and two as Runners-Up.

Nominations for the 1997 awards are due to the PERTEC Office NLT 12 December 1997. Nomination packets may be mailed, faxed, or E-mailed. For additional details or information contact MAJ Poling at DSN 225-9215, COM (703) 695-9215, FAX DSN 227-1283, FAX COM (703) 697-1283, E-mail: <polinrl@hqda.army.mil>.



MANPRINT Practitioner of the Year Awards - 1997

Purpose: The DCSPER will recognize selected MANPRINT practitioners whose outstanding accomplishments and contributions merit special recognition by awarding a MANPRINT Practitioner of the Year Award.

Award Categories:

The awards will recognize selected Army MANPRINT practitioners in four categories:

- a. Military Practitioner.
- b. Army Materiel and Automated Information System programs.
- c. Combat Developer and Functional Proponent communities.
- d. MANPRINT Technology Research and Development or Studies.

Award Description:

- Each award will consist of a:
- a. suitably engraved plaque for each category.
 - b. letter of commendation signed by the DCSPER.
 - c. DCSPER Certificate.
 - d. cash award for civilian awardees (resources permitting).

Selection Process:

The DCSPER will convene a review board of general officer and senior executive service officials to consider nominations and recommend recipients. The DCSPER is the final authority for selection. All scores will be confidential, and final voting results provided only to the DCSPER. The DCSPER will approve the final number of awards to be granted.

Voting members consist of:

Assistant Deputy Chief of Staff for Personnel, Board President

Deputy Chief of Staff for Combat Developments, U.S. Army Training and Doctrine Command

Director for Personnel Technologies, ODCSPER

Deputy Chief of Staff for Research, Development, and Acquisition, AMC (AMCRDA)

Vice Director, Office of the Director of Information Systems for Command, Control, Communications and Computers (DISC4)

Assistant Deputy Chief of Staff for Operations and Plans, Force Development (DAMO-FD)

Director Assessment and Evaluation, Office of the Assistant Secretary of the Army (Research, Development and Acquisition) (SARD-ZD).

The Personnel Technologies Directorate (DAPE-MR) will tabulate votes, prepare certificates and letters for DCSPER signature, procure plaques, arrange presentation of the awards at an appropriate forum, and provide public affairs coverage and information.

Eligibility:

Nominees—

- a. may be any MANPRINT practitioner or developer.
- b. may be any grade or rank, military or civilian. Must be a U.S. Government employee (e.g., contractor personnel are not eligible).
- c. must be serving in a MANPRINT-related capacity.

Evaluation Criteria:

Criteria are as listed below and described in the Nomination Format:

- a. MANPRINT innovations.
- b. Program/R&D/Study complexity.
- c. Personal qualities (e.g., leadership and ingenuity).
- d. Individual's specific personal involvement in the MANPRINT program.
- e. Meeting or exceeding agreed-upon program/R&D/study MANPRINT objectives/requirements.

Nomination Process:

- a. Nominations in materiel or automated information system programs must be approved by the Program Executive Officer (PEO) or materiel developer commander prior to submission. Nominees submitted by the combat developer/functional proponent must be favorably recommended by the appropriate general officer or civilian equivalent in the individual's chain of command.
- b. Nominations sponsored by a PEO or Commanding General other than the nominee's parent organization will be submitted through the nominee's parent organization for concurrence.
- c. DAPE-MR will forward nomination packets

to the review board members prior to formal board review.

d. Each nomination packet will include the following information:

- (1) Information as required in the Nomination Format below.
- (2) A biographical sketch of the nominee.
- (3) A proposed citation suitable for a DCSPER Certificate.
- (4) A 100-word unclassified summary of the nominee's outstanding achievements, suitable for use as a press release.

Nomination Format:

MANPRINT Practitioner of the Year Award

- 1. Name and Grade
- 2. Job Title
- 3. Program/Organization
- 4. Assignment Date
- 5. A brief statement of the nominee's assigned responsibilities. This information may be extracted from:
 - a. Military: DA Form 67-8-1, Significant Duties and Responsibilities.
 - b. Civilian: DA Form 7222-1, Significant Duties and Responsibilities.
- 6. CRITERIA: (This description should not exceed two single-spaced typed pages).
 - a. MANPRINT INNOVATIONS: (1) application of MANPRINT practices and techniques in new and inventive ways; (2) application of MANPRINT practices and techniques that have resulted in significant MANPRINT accomplishments for the program (describe in some detail); (3) development of innovations for conducting MANPRINT; (4) completion of a study showing how to improve MANPRINT practices and procedures or Lessons Learned.
 - b. PROGRAM/R&D/STUDY COMPLEXITY: (Describe in some detail the overall complexity of the program, R&D effort, or study; i.e., NDI,

(Continued on page 4)

MANPRINT Practitioner of the Year

(Continued from page 3)

COTS, New Start, Joint, etc. Describe the general mission requirements of the program and Acquisition Category (ACAT), scope of the study, significance of the R&D effort.)

c. **PERSONAL QUALITIES:** (Leadership skills, ingenuity, managerial skills and innovations, community involvement, professional development, published works, etc.)

d. **PERSONAL INVOLVEMENT:** (Description of specific level of involvement in the

MANPRINT program.)

e. **MEETING OR EXCEEDING AGREED UPON PROGRAM/R&D/STUDY MANPRINT OBJECTIVES/REQUIREMENTS:** (Describe in some detail the level to which the nominee's efforts have contributed to the program's ability to meet or exceed MANPRINT objectives, to what degree the R&D effort or study has contributed to achieving MANPRINT objectives or requirements.)

MANPRINT Practitioners of the Year - 1995

LTG Theodore G. Stroup, Jr. presided over an award ceremony on 1 February 1996 in the Pentagon to recognize those individuals selected as MANPRINT Practitioner of the Year for 1995. Winners were selected by a board of seven General Officer and Senior Executive Service officials who have an interest or direct affiliation with MANPRINT and system acquisition. Winners were selected by the board based on nomination packets submitted by their chain of command. This was the first year for the award presentation.

There were three different categories of competition: *Matériel Developer*, *Combat Developer*, *Military*. Two Runners-Up were selected, one each from *Matériel Developer* and *Combat Developer* Categories.

Winners:

Combat Developer Category, **Mrs. Elizabeth Redden**, Chief, Human Research and Engineering Directorate Field Element, U.S. Army Research Laboratory, U.S. Army Infantry Center, Fort Benning, GA, for her work with Infantry Systems.

Matériel Developer Category, **Mr. Richard McMahon**, Physical Scientist, Human Research and Engineering Directorate, U.S. Army Research Labo-

ratory, Aberdeen Proving Ground, MD for his work with the FOX NBC Reconnaissance Vehicle program.

Military Category, **Major Alfred A. Coppola, Jr.**, Chief, Logistics Management Division, Crusader Project Office, Picatinny Arsenal, NJ, for his excellent work as Assistant Project Manager for MANPRINT for the Crusader Project.

Runner-Up, Combat Developer Category, **Mr. Dennis Lipscomb**, Directorate for Combat Developments, U.S. Army Armor Center and School, Fort Knox, KY, for his work as MANPRINT manager for Armor systems.

Runner-Up, Matériel Developer Category, **Mr. Richard Zigler**, Senior Planner - Soldier Survivability, Survivability/Lethality Analysis Directorate, U.S. Army Research Laboratory, Aberdeen Proving Ground, MD, for his work in the establishment of Soldier Survivability as the seventh domain of MANPRINT.

Winners were presented with an engraved plaque, a DCSPER Certificate, and a Letter of Commendation from LTG Stroup. Runners-Up were presented with a DCSPER Certificate and a Letter of Commendation from the DCSPER.

MANPRINT Practitioners of the Year - 1996

LTG F. E. Vollrath, the Deputy Chief of Staff for Personnel, presided over an award ceremony on 14 April 1997 in the Pentagon to recognize those individuals selected as MANPRINT Practitioner of the Year for 1996.

There were four categories of competition: *Materiel Developer, Combat Developer, Military, and MANPRINT Technology Research and Development or Studies*. Two Runners-Up were selected, one each from *Materiel Developer* and *Combat Developer* Categories.

Winners:

Combat Developer Category, **Mr. Kenneth C. Reynolds**, Chief, Human Research and Engineering Directorate Field Element, U.S. Army Research Laboratory, U.S. Army Air Defense Artillery School, Fort Bliss, Texas, for his work with Air Defense Systems: MEADS, National Missile Defense, THAAD, Avenger, and Stinger.

Materiel Developer Category, **Ms. Cynthia L. Blackwell**, Human Factors Engineer, U.S. Army Natick Research Development and Engineering Center, Soldier Systems Command, for her work with Force XXI initiatives to include Land Warrior, Air Warrior, and Mounted Warrior.

Military Practitioner Category, **LTC Lauris Taylor Jones III**, Acquisition Officer, Army Digitization Office, Headquarters, Department of the Army,

for his work in establishing MANPRINT requirements and considerations within Battlefield Digitization programs.

MANPRINT Technology Research and Development or Studies, **Dr. Donald B. Headley**, Human Research and Engineering Directorate, U.S. Army Research Laboratory, for his work in developing guidelines for use in determining human performance decrements as a function of heat levels within ground combat vehicles.

Runner-Up Combat Developer Category, **Mr. William M. Fritch, Jr.**, Chemical Engineer, U.S. Army Chemical and Biological Defense Command, Aberdeen Proving Ground, Maryland, for his work in support of the U. S. Army Chemical School and the M40, M42, and M17 Protective Mask programs.

Runner-Up Materiel Developer Category, **Mr. Michael J. Barnes**, Research Psychologist, Human Research and Engineering Directorate Field Element, U.S. Army Research Laboratory, Fort Huachuca, Arizona, for his work in support of the Joint Tactical Unmanned Aerial Vehicle and the Commander's and Staff Visualization Research Tool.

Winners were presented with an engraved plaque, a DCSPER Certificate, and a Letter of Commendation from LTG Vollrath, the DCSPER. Runners-Up were presented with a DCSPER Certificate and a Letter of Commendation from the DCSPER.

A Handbook on MANPRINT in Acquisition

(Continued from page 1)

advice on the activities that should be accomplished in each life cycle phase, and discusses the DCSPER MANPRINT Assessment process. It has been updated to reflect the guidance contained in the latest approved DoDD 5000.1, DoDR 5000.2-R, and AR 602-2 ("Manpower and Personnel Integration [MANPRINT], the Army's Human Systems Integration Process for Systems Acquisition"). To receive a copy please send a request to Mrs. Peggy Simmons

at the Personnel Technologies (PERTEC) office, DSN 225-7035, COM (703) 695-7035, FAX (703) 697-1283, E-mail: <simmons@hqda.army.mil>. Electronic copies are available now, along with a limited number of hard copies. Also, in the near future, a copy will be posted on the PERTEC section of the Office of the Deputy Chief of Staff for Personnel, Department of the Army (DCSPER DA), Web site, at <<http://www.odcsper.army.mil/>>.

MATRIS and Human Systems Integration

Barry R. Smith, Jr. & T. Fuller Dean
Defense Technical Information Center (MATRIS Office)

MATRIS is a DoD automated information system which:

- advances the coordination of Manpower, Personnel, Training, Simulation, Human Factors, Safety, and Biomedical Technology Research and Development (R&D),
- provides detailed information on related Program Element, Project, Work Unit, and Studies & Analysis records,
- produces standard and tailored *ad hoc* reports for program documentation, and
- offers both online and assisted user access to the database.

In tracking people-related R&D within the DoD, MATRIS has been particularly responsive to the growing information needs of the Human Systems Integration (HSI) community within all Services. This includes programs which address the interrelated design/development/acquisition/implementation requirements of DoD man-machine systems (e.g., MANPRINT (Army)). To alleviate the problems of information dissemination and duplication of effort across Services, MATRIS prepared a special HSI report in early 1991 in an attempt to facilitate information flow within the Manpower, Personnel, and Training (MPT)/HSI R&D community, and to share knowledge by gathering in one place useful data related to these vital common efforts.

In addition, the Designing for the User Subgroup of the DoD Human Factors Engineering Technical Group had produced a *Directory of Design Support Methods* (DDSM) containing HSI records which are now available in MATRIS as a separate, searchable record type. This annotated Directory of human factors design support tools and techniques, originally

developed by DoD, NASA, and industry members of the Technical Group, has been updated on an annual basis at MATRIS. It contains references to human factors databases, handbooks, data guides, texts, journals, military standards, prototype and interface design tools, analytic techniques, and computer simulation software, and describes the methods to be used, their purpose, products, and availability.

Recently, MATRIS has put the DDSM up on the Internet, and it can be accessed at:

<http://dticam.dtic.mil/hsi/>

To help people contribute new information, MATRIS created a DDSM Submission Form (see Figures 1-3). This tool allows the contributor to submit his/her Design Support Method on a simple 3-page form. Contributors also have the choice to submit their Method on a computer disk or fill out the form at our web site. Instructions accompanying the form explain this in greater detail.

The HSI database and DDSM are also an outgrowth of original "Liveware" data. Any past contributors to "Liveware" are welcome to update their records by contacting us or filling out a submission form.

Because the Methods are unclassified and unlimited, anybody with material pertaining to the DDSM may contribute. MATRIS welcomes all who have an interest in the HSI field.

For more information or to obtain a DDSM and/or a form by mail, contact Mr. T. Fuller Dean, MATRIS Office, DTIC-AM, 53355 Cole Rd., San Diego, CA 92152-7213; (619) 553-7007 / DSN 553-7007

E-mail: ddsm@dticam.dtic.mil

HSI / LIVEWARE SUBMISSION FORM

Refer to the HSI/LIVEWARE Submission Guide for instructions and codes. If more room is needed, use the back.)

OVERALL CATEGORY:

STATUS:

DISTRIBUTION CODE:

ORGANIZATION SOURCE:

SPONSOR:

POINT OF CONTACT INFORMATION:

Last Name: _____ First Name: _____ Middle Initial: __ Title/Rank: _____

Commercial Phone: _____ DSN Phone: _____ FAX Number: _____

Street Address: _____

(If military, include organization's code)

City: _____ State: __ Zip Code: _____ Country: _____

E-mail Address: _____

TITLE:

GENERAL OVERVIEW:

Figure 1: Sample HSI / LIVEWARE Submission Form, Part 1

APPROPRIATE USES:

EQUIPMENT REQUIRED:

INPUTS REQUIRED:

PROCESSING TECHNIQUES:

OUTPUT:

USES OF OUTPUT:

DOCUMENTATION:

ALTERNATIVE/COMPARABLE APPROACHES:

STAGE OF DEVELOPMENT:

VALIDATION:

COMMENTS:

Figure 2: Sample HSI / LIVEWARE Submission Form, Part 2

(Continued on page 8)

(Continued from page 7)

HSI / LIVEWARE SUBMISSION FORM (Continued)

PURPOSE AND ACQUISITION PHASE:

Mission Areas served by the program: Land Sea Air C3I

Program System Areas:

Personal Equipment Vehicles Aircraft Ships C3I
 Combat Systems Weapons Other _____

Applicable Acquisition Phase:

- Need/Requirements
- Concept Development
- Project Definition
- Design and Development
- Production
- Modification/Decommissioning

LIVEWARE FUNCTIONAL DOMAINS ADDRESSED:

- Integration
- Manpower
- Personnel
- Training

If applicable, **Instructional Systems Development (ISD)** steps:

- Analysis Development Implementation
- Design Evaluation

Safety

Applicable Safety domain category:

- Human Safety Equipment Safety

Health Hazards

Applicable Health Hazards domain categories:

- Psychological Physical

Human Factors Engineering

Applicable Human Factors Engineering domain categories:

- Mission, Function, Task Analysis Task Performance and Workload
- Human-Machine Interface Design Information Transfer
- Workspace Design and Anthropometry Test and Evaluation
- Environment, Life Support Equipment, and Habitability

Human Survivability

Figure 3: Sample HSI / LIVEWARE Submission Form, Part 3

Transitions

Farewell

LTC R. David Watkins retired effective 30 June 1997 with 20 years in the U.S. Army. LTC Watkins joined the DCSPER staff, MANPRINT Directorate, in December 1993. Dave worked a variety of projects. He was instrumental in the update of AR 602-2, establishing the MANPRINT Practitioners' Award, and providing the DCSPER position on various ASARC systems. Dave will be missed by all of us, and we wish him well in his pursuit of a second career.

Welcome

Major (P) Russell Poling joined the Personnel Technologies Directorate and the MANPRINT Division at the end of June. In late August Russ was notified that he had been selected for promotion to Lieutenant Colonel. Russ and his family, wife Pam and son Michael, came to the area from Montreal, Canada, where Russ was assigned as the G3 Exercises Staff Officer for U.S. Army Personnel Exchange Program, Canada. The Polings are living in Alexandria. Russ has already completed the MANPRINT Action Officer Course and is working on identifying MANPRINT training concerns for both practitioners and users. Russ can be reached at Commercial (703) 695-1115; DSN 225-9215; E-mail is: <polinrl@hqda.army.mil>.

Dr. Robert Holz was officially made Deputy Director, Personnel Technologies Directorate on 2 September 1997 following an almost 4 month detail. Bob has already made his mark on the Directorate, both in terms of its Soldier Oriented Research mission (he serves as the current Acting Chief of that Division), where he arranged a half day Strategic Review of Army Soldier Oriented Research and Development for the DCSPER, and in the MANPRINT Division, where he recently served as the Chairman of the MANPRINT Training Steering Committee. Bob brings a wealth of knowledge and expertise to his position. He has 25 years of experience with the Research & Development Community (Army Research Institute) and has worked directly in areas of immediate concern to MANPRINT and the systems acquisition process. Bob and his wife Pat live in Alexandria. He can be reached directly on Commercial (703) 697-1608; DSN 227-1608; E-mail is: <holzrf@hqda.army.mil>.



FY 98 MANPRINT Training Schedule



MANPRINT Action Officer Course

<u>CLASS #</u>	<u>DATES</u>	<u>LOCATION</u>
98-701	21 Oct - 30 Oct 97	Fort Leonard Wood, MO
98-001	26 Jan - 5 Feb 98	Fort Lee, VA
98-703	21 Apr - 30 Apr 98	TACOM, Warren, MI
98-702	2 Jun - 11 Jun 98	Fort Belvoir, VA
98-002	3 Aug - 13 Aug 98	Fort Lee, Va

MANPRINT Applications Course

<u>CLASS #</u>	<u>DATES</u>	<u>LOCATION</u>
98-706	7 Oct - 9 Oct 97	TACOM, Warren, MI
98-701	18 Nov - 21 Nov 97	Fort Belvoir, VA
98-705	8 Dec - 12 Dec 97	Fort Gordon, GA
98-702	12 May - 15 May 98	Fort Leonard Wood, MO
98-703	23 Jun - 26 Jun 98	Rock Island, IL
98-704	22 Sep - 25 Sep 98	Fort Bragg, NC

POC: Ms. Diana Lueker, (703) 325-3241, DSN 221-3241