



# “WRAIR Forward”

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## COMMANDER’S CORNER

At the U.S. Army Medical Research Unit in Europe, we are actively engaged in determining how to measure operations tempo (OPTEMPO). Once we have determined how to measure OPTEMPO, we can assess its impact on unit and soldier readiness (including the family), and then identify effective strategies for lessening its impact. We began our assessment by first defining OPTEMPO as the “number of military missions or activities.” Using this broad definition, we have determined that the most appropriate measure of OPTEMPO depends on the military environment. In garrison, for instance, the number of hours soldiers are required to work was found to be a useful measure (among others) of OPTEMPO. During training exercises, the number of days of the training event was important. For military deployments, the number and length of the deployment was important. We also found that long, unpredictable work hours in garrison affect soldier and family readiness to the same extent that multiple military deployments affect readiness. Focus, therefore, should not be limited to only the study of military deployments, but should include a careful analysis of OPTEMPO measures in garrison and during training exercises. In short, our research over the past two years has clearly demonstrated that OPTEMPO can be measured and its impact on soldier and unit readiness can be quantified.

-MAJ Carl A. Castro

## USAREUR OPTEMPO Project

During the 6th data collection in support of the OPTEMPO/PERSTEMPO Study, the USAMRU-E assessed eight units in garrison, two units in the training environment, and one unit deployed to Kosovo.

The most recent OPTEMPO technical brief (IPR5), completed and presented to USAREUR in December, 2000, focuses on soldiers’ experiences during training. A total of 330 soldiers from five units were assessed while they participated in training activities at the Combat Maneuver Training Center (CMTC) in Hohenfels and Gunnery in Grafenwoehr. Surveys were administered and interviews were conducted on average 16 days into the training exercise.

- Overall workload increased for units in the training environment compared to previous levels in Garrison.
- Soldiers with positive attitudes about their training exercise reported greater soldier pride, operational and military readiness, and leadership than did soldiers with

negative attitudes. They also reported fewer symptoms of depression, physical symptoms, greater well-being, and less use of caffeine and tobacco compared to soldiers holding negative attitudes.

Dolan, C. A., Huffman, A. H., Adler, A. B., & Castro, C. A. (2000, December). **USAREUR/7A OPTEMPO and PERSTEMPO Study. Special Topic: Training Environment (IPR 5).** Briefed to MG Campbell, CofS, USAREUR; MG Hickerson, DCSPER, USAREUR; & BG Ursone, Command Surgeon, USAREUR.

## Research Team Participates in Operation Victory Strike



Ms. Huffman listening to a soldier participating in Operation Victory Strike (Poland).

This fall a USAMRU-E research team was able to observe and study a combat arms troop in a high OPTEMPO environment. From 15-19 October 2000, MAJ Castro and Ms. Huffman deployed to Drawsko

Posmorskie, Poland, to follow one of the OPTEMPO study units during Operation Victory Strike. The research team administered surveys, and conducted interviews with an Apache Troop with the 11<sup>th</sup> Aviation Regiment.

## Consensus Work Group

To enhance international research cooperation, the USAMRU-E hosted its first consensus workgroup entitled, “Common survey measures.” Scientists from four countries met in Heidelberg 28-29 November for detailed discussions about survey measures to be used in military research. The workgroup reviewed and identified survey items and scales to address major research areas, including personnel tempo, military readiness, mission attitudes, cohesion, and medical readiness. A compact disk (CD) of the workgroup discussions will be distributed to researchers throughout Europe.

Consensus workgroup participants were LTC Reinhard Mackewitsch and Ulrich vom Hagen, Sozialwissenschaftliches Institut der Bundeswehr, Germany; Stephan Flemming, Directorate of Strategic Human Resource, Canada; LTC Jon van Tintelen and LTC Ton Swanenberg,

Royal Dutch Army's Behavioral Sciences Division, The Netherlands; Professors Jon Laberg and Bjørn Johnsen, University of Bergen, Norway; and USAMRU-E science staff members MAJ Castro, Dr. Adler, Dr. Dolan, Ms. Huffman, CPT Thomas, and Dr. Wright.

## Research Team Deploys to Kosovo

The USAMRU-E deployed a team of scientists (Dr. Adler and CPT Thomas) to Camp Bondsteel, Kosovo, on a data collection mission as part of the USAREUR OPTEMPO study from 16-19 November 2000. The team surveyed soldiers, collected unit objective outcome data, and conducted interviews. The team also accompanied soldiers from A CO, 501 MI BN on patrol in the town of Ferizaj.

## Briefing for Surgeon General, U.S. Army

Major Castro briefed LTG Peake, Surgeon General, U.S. Army, and Commander, U.S. Army Medical Command, on the unit's research.

Castro, C. A. (2000, December 6). **Medical Research Findings from USAMRU-E, 1997-2000**. Prepared for LTG James B. Peake, Surgeon General, U.S. Army, and Commander, U.S. Army Medical Command.

## Annual IMTA Conference

Unit members presented three papers at the annual conference of the *42nd International Military Testing Association (IMTA)* held in Edinburgh, UK.

Castro, C. A., & Adler, A. B. (2000, November). The impact of operations tempo: Issues in measurement.

Huffman, A. H., Adler, A. B., Castro, C. A., & Dolan, C. A. (2000, November). Retention and the U.S. Army officer in Europe.

Thomas, J. L. (2000). Validating the WRAIR Stressor-Strain-Performance Model: Evidence for two classes of moderators.

## Force Health Protection Program

Command interest in the Department of Army's Force Health Protection Program continues, with the completion of several psychological screenings this quarter, and other screenings on-going or planned for the near future.

Two technical briefs on the psychological screening program were completed. The first brief summarized findings from the pre-deployment psychological screening of 1,803 soldiers conducted in April-June 2000 for rotation 1 of the 1AD to Kosovo. The second brief included more than 3,500 soldiers from the IID re-deployment screening conducted during the same time period. Findings from the technical brief for the 1AD pre-deployment screen indicated that the force was basically healthy, and that the screening procedure effectively identified those soldiers in need of follow-up. Consistent with previous findings, deployment

length was linked to higher rates of distress. Of interest was the finding that soldiers receiving a mental health referral reported the highest rates of family and clinical history problems.

Adler, A. B., Wright, K. M., Huffman, A. H., Martinez, J. F., & Castro, C. A. (2000, November). **Pre-deployment Psychological Screening of 1AD Soldiers Deploying to Kosovo**.

Wright, K. M., Huffman, A. H., Adler, A. B., & Castro, C. A. (2000, December). **Re-deployment Psychological Screening of IID Soldiers Deployed to Kosovo**.

## USAMRU-E Publications

Bliese, P. D., & Castro, C. A. (2000). Role clarity, work overload and organisational support: Multilevel evidence of the importance of support. **Work and Stress, 14 (1)**, 65-73.

Castro, C., Biennu, R., Huffman, A., & Adler, A. (2000, December). Soldier dimensions and operational readiness in U.S. Army forces deployed to Kosovo. **Revue Internationale des Services de Santé des Forces Armées, 73 (4)**, 191-200.

Martinez, J., Huffman, A., Adler, A., & Castro, C. (2000, September). Assessing psychological readiness in U.S. soldiers following NATO operations. **Revue Internationale des Services de Santé des Forces Armées, 73 (3)**, 139-142.

## Site Visit to SOWI, Strausberg

At the invitation of COL Lohmann, Commander, Sozialwissenschaftliches Institut der Bundeswehr (SOWI), LTC Mackewitsch, SOWI staff, Major Castro, Dr. Adler and Ms. Golembe conducted meetings and briefings as part of a scientific exchange in December.

## WRAIR Staff Assistance Visits

LTC Weishaar, Chief, Division of Biometrics; CPT Brooks, Chief, Personnel; CSM Dickerson; and Ms. Diane Mills, Civilian Personnel (Heidelberg, 1-5 October 2000).

COL Jarboe, Deputy Director, WRAIR (Heidelberg, 19-20 October 2000).

## Hail & Farewell

- CPT Jeffrey Thomas, Research Psychologist, formerly of the Division of Neuropsychiatry, WRAIR, joined the unit on 10 October 2000.
- Dr. Carol Dolan was awarded a nonpersonal services contract as Principal Investigator, effective 1 November 2000 through 31 October 2001; Ms. Shelley Robertson was awarded a nonpersonal services contract as Research Assistant, effective 20 December 2000 through 31 July 2001.

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