INNOVATIONS IN TRAINING DEVICE TECHNOLOGY

DR. H. H. WOLFF
Conference General Chairman
Technical Director, Naval Training Device Center

It is again a pleasure to welcome all of you to a Naval Training Device Center/Industry Conference.

I think that the two previous conferences have led to a better understanding of the Naval Training Device Center's and the Training Device Industry's problems.

They have provided information on operation procedures and on organization and we had a fruitful exchange of ideas in technological and other professional areas. We want to use this year's conference to discuss old problem areas in more detail, to discuss new problem areas and to look further ahead, especially in the field of technology.

For this reason we selected as the theme of this third conference, "Innovations in Training Device Technology." This choice was influenced by two facts.

First, the replies we received on a questionnaire that was sent out to the training device industry showed that "Innovations in Technology" was a subject that many of you liked to see as a major part of our conference agenda.

Secondly, we feel training device technology and training system concepts have not made the progress that the times demand. We still have not made a significant step towards reducing the qualifications required for the first level of maintenance. Automatic failure indicators and self-healing systems are almost non-existent in today's training devices.

At the same time personnel available for maintenance both are decreasing in numbers and will be less prepared to undertake maintenance and repair tasks requiring professional experience.

Another personnel problem that is rapidly increasing in importance is the decreasing availability of qualified instructors. At present, the average student-to-instructor ratio in Navy training is considerably lower than even in the graduate level education programs in our colleges.

Modern technology properly utilized should enable us to increase this ratio considerably and I urge the industry to come forward with new system concepts that free the instructor from repetitive tasks without giving the trainee the feeling of losing the personal contact with the instructor.

I was therefore pleased when our Conference Coordinator, Doug Copeland, proposed this main conference theme.

As you have already observed in the program, over a third of this year's agenda are devoted to the research program area. This marks the first time that so large a portion of the agenda will be devoted to this important program. In addition, both the trainer industry and the government will devote a considerable portion of their contributions to this conference to the discussion of new and improved procedures and techniques. We have also followed your suggestions in other areas.

Our future procurement plans are now published in the Commerce Business Daily.

We have, after only two years, updated the Bulletin On Integrated Logistic Support. This bulletin was prepared with Industry as a partner.

In order for the Naval Training Device Center to keep pace with advances in technology and to respond to innovations without taking the risk of applying an unproven state-of-the-art, we have established a microelectronics committee that is concerned with integrated circuits,

monolithic systems, bi-polar systems, partitioning, and small, medium and large scale integrations; all problems that are gradually invading the field of training devices.

As you know, we have to become still more cost effective. We have to reduce government spending without reducing our military potential, but rather increasing it at the same time.

We are expected to do our utmost within the state-of-the-art, not only to be cost effective as far as lifetime ownership of our equipment is concerned, but, as I mentioned before, also manpower effective as far as operation and maintenance is concerned. I realize that this last demand is extremely difficult to fulfill, but unless all of us, NTDC and the training device industry, pick up this challenge and do our utmost to further new training concepts in new training devices, training device technology will fall behind other technological areas.

I want to specifically refer to the area of unsolicited proposals. We receive many unsolicited proposals during a year but only very few of these show progressive thinking or show an understanding for the problems I have outlined to you or even address the age-old training device problem of nonprogrammed visual simulation.

Your attention is directed to the eight papers in our program which are related to the subject of visual simulation. I want to close these brief remarks on the theme of this conference with the hope that industry will answer our call for innovation in training device technology, in general, and in visual simulation, in particular.

TRAINING DEVICES IN TODAY'S ARMY

COLONEL ROBERT E. PHELPS
Acting Commander
U. S. Army Participation Group

Colonel Lester H. LeVine Commanding Officer of the U. S. Army Participation Group at the Naval Training Device Center, addressed the Conference last year and was scheduled to speak to you this morning. Unfortunately, he has been hospitalized for almost a month and is unable to be here today.

In behalf of Colonel LeVine and all members of the U. S. Army Participation Group, I, too, would like to extend to you a warm welcome to our Third NTDC/Industry Conference. We have noted that more than one-half of you are with us for the first time. It is also gratifying to note the broader representation in this year's Conference. More than one-third of the companies represented here this year are participating for the first time. Together with our Navy colleagues, we sincerely hope that this Conference will be rewarding for all of us from a professional viewpoint and that it will stimulate increased efforts by your companies to help us solve the increasingly complex training requirements of our respective services.

I welcome the opportunity to speak to you today. I will talk to you briefly about the U. S. Army Participation Group and how we interface with the Navy here at the Center, a few of our current training-device projects, and some that will be coming along in the near future. Also, I will present our candid estimate of the potential for use of training devices in the Army.

The Army Participation Group was established as a result of an agreement in 1950 between