

VI.

CONCLUSIONS AND RECOMMENDATIONS

The conference participants agreed unanimously that the week's deliberations had provided a valuable forum for an exchange of views and information. As someone put it, the problem of accidental nuclear war reminds one of the parable of the four blind men and the elephant. The computer scientist, the strategist and the social scientist, the European, the Russian and the North American, each see the problem through the prisms of their various disciplinary and national perspectives. Bringing the different viewpoints together was not only instructive, but generated an unexpected convergence of ideas. Two examples of this are noteworthy.

First, it was clear that there was considerable agreement between the mathematicians and computer scientists on the one hand, and the strategists on the other, that the reduced warning times arising from the deployment of short-flight time weapons systems had had a severe impact on the ability of the command system to cope with false alarms. Three streams of research – one based on mathematical modelling, a second founded on the known limits of computers and artificial intelligence systems in duplicating human reasoning, and a third grounded in a detailed examination of the command systems and nuclear alert procedures – resulted in very similar conclusions.

Second, there was also a great deal of convergence concerning the type of national behaviour that was most likely to avert the risk of inadvertent war. A “firm-but-fair” (or “tit-for-tat”) strategy, combining firmness with conciliation, appeared to be the most efficacious in avoiding crises. Once a crisis had developed, however, threats were found to be dysfunctional in avoiding escalation to war. These conclusions were buttressed by three different sets of research findings: by the Russett/Huth studies of extended deterrence, the Leng studies of crisis behaviour, and Rapoport's research into the computer simulation of conflict behaviour.

But agreement at the conference extended well beyond specific research findings and conclusions. Believing the danger of accidental war to be critical, the conference participants drafted a statement in which they sought to voice their concerns. They unanimously concluded that

the danger of accidental nuclear war is substantial and increasing for the following reasons among others:

1. deteriorating global political relations coupled with lack of real progress in disarmament and arms control, and the high frequency of international crises;
2. escalation of the arms race leading to the development and deployment of destabilizing weapons systems and technologies;