

II.

TECHNOLOGY OF SDI AND ITS IMPLICATIONS FOR DOCTRINE

1. Introduction

Chairing the Friday afternoon session was Stuart Smith, Chairman of the Science Council of Canada, a body which makes recommendations to the government on policy regarding science and technology. He set the stage by pointing out that the new technology could have a number of purposes, depending on how well it worked. If its purpose was military, the technology had better work. If its purpose was diplomatic, as a bargaining chip for example, then "it's okay if it only has the possibility of working, so the other side thinks it's worth trading off something it has." If it was only an industrial strategy or a research strategy, then only parts of it had to work (although this may be a very expensive way of stimulating industry and/or research). Finally, if the purpose was merely political, in the everyday, vote-getting sense of the word, then none of it ever had to work, as long as it sounded good. He argued from this line of reasoning that, if we could determine how good SDI technology is, we would have a much better idea what the strategic purpose is.

Gerold Yonas, Chief Scientist of the SDI Organization, presented a brief review of the history of SDI and an overview of the technology.*

The idea of pursuing a ballistic missile defence (BMD) with an extensive research programme was first suggested by President Reagan in March, 1983. He set up two panels to study the issue and announced the formation of the Strategic Defense Initiative (SDI) in 1984, with an initial funding level of about US \$1.4 billion.

SDI is considered to be a "prudent hedge" in the face of Soviet research in strategic defence. The Soviet Union, said Dr. Yonas, would continue to be a "determined and resolute opponent". They would not make it easy; they would respond. Any US research programme must take account of possible Soviet countermeasures, in order to prepare a realistic evaluation of the feasibility of defence systems.

* For a more detailed presentation of SDI technology, see Appendix II.