

stage is 97% (there is a 3% chance it will fail), the overall reliability (OAR) is equal to $(0.97)^5$ which equals 0.86 or 86%.

The value for OAR for the United States used in the accompanying tables is 80%. This means reliability at each stage of missile operation is assumed to be around 96%. The OAR used for the Soviets in the tables is 70% which assumes a 93% reliability at each stage. (Of course, postulating the same value for each of the five stages is also a simplifying assumption designed to average the probability, not to suggest an actual equal reliability at each stage.) To illustrate the potential for overestimating OAR, the French Ariane commercial booster failed recently for the third time in 15 attempts. A rough calculation of its OAR, assuming that it was used as a military launcher, puts it at around 70%. American commercial satellite launches have a near identical success rate. Since these are launches carefully prepared and checked to the last detail, the OAR for missiles stored in silos over long periods of time and subject only to routine maintenance must be treated with scepticism.

General Observations About Table 2A and 2B

It can be seen from Tables 2A and 2B that speaking generally, in all classes of weapons, the accuracies (CEPs) of American delivery systems are greater than those of the Soviets. Similarly, the SSKP's of American warheads are better than their Soviet counterparts. Granted that American missile reliability is conservatively estimated to be superior to that of the Soviets, the TKPs of the American strategic force are noticeably superior to those of the Soviets. Finally, the counter military potential of each class of warhead, considered as CMP per warhead is clearly in the American favour, but (and here one must recognise the warning given earlier about the dangers of aggregating CMP) the total CMP of ICBMs favours the Soviet Union because the Soviets have a larger number of ICBM warheads (as opposed to the overall total of ballistic missile warheads).

In the case of the Soviet Union, the question raised by American strategists and politicians concerns the reasons for the deployment of the