order to facilitate calculations, it leaves open the possibility that missiles fired in anger on untested trajectories might uniformly miss their target.[14]

The uncertainty involved in estimating Soviet CEPs is much higher because these estimates are primarily the product of a large number of fragments of information that must be pieced together. This problem was demonstrated recently in the CIA revised estimate (referred to above) of the CEP of the SS-19. The original 1977 estimate had been based on test firings and projected improvements, and the CIA revised this estimate on the basis of new information.[15] Using the same intelligence, the Defense Intelligence Agency maintains the previous estimate, raising the question of how much interpretation goes into threat assessment and how reasonable or consistent those threat assessments are. As one observer noted recently, relying only on CEP "clearly leads to higher assessments of Soviet ICBM accuracy than would be obtained in conflict or could be relied upon by Soviet military planners."[16]

Countermilitary Potential

Because of the nature of the equation (CMP varies inversely with CEP^2) CMP is highly sensitive to missile accuracy. As missiles become more accurate, and CEP decreases, CMP grows by substantially larger and larger amounts. Tsipis notes that CMP has "a maximum numerical value beyond which its magnitude has no physical meaning"[17] This occurs when the CEP of a missile is less than the radius of the crater the explosion creates because at that point the probability of kill of the missile or warhead becomes 1.00 or 100%.[18]

To illustrate the difficulty involved when accuracies approach 100%, both

[14] Steve Smith "Problems of Assessing Missile Accuracy" RUSI vol. 130 No. 4 p. 37

[15] B. Keller, "US Study Finds a Soviet ICBM Is Less of a Threat to Missile Silos", New York Times July 19, 1985, p. 1

[16] Smith, op. cit. p. 39

[17] Tsipis, Arsenal p. 307

[18] Ibid p. 307