

inordinate. Disappointingly, nothing came of these early proposals for personnel limits.

### **Exercise First Look**

Between 1963 and 1966 the Field Operations Office of the USA Arms Control and Disarmament Agency carried out a series of field trials (known as *Cloud Gap*), as part of a program to develop and test techniques for verification of conventional ground and air forces<sup>8</sup>. The objectives of the last trial of the series, named Field Test 4, included estimation of personnel inventory. The locales of the tests were barracks compounds and local training areas, barracks area complexes, and major training areas. Some of the inspectors were given free access to all buildings and areas with the exceptions of specified "sanctuaries", some were forbidden access to the interiors of buildings other than those open to the public. The effectiveness of evasion was tested, but only for equipment. Different categories of information were declared to the inspectors: accurate, false, and true. Averaged over the whole trial, the inspectors managed to count about 60 percent of the troops actually present, and their estimate of the total number was close (104 percent) to the true figure for the barracks complexes, low (78 percent) for the major training areas, and high (126 percent) for the barracks compounds.

The investigations were extended with a major joint exercise named Field Test 15, or *First Look*, carried out in cooperation with the British, in 1968<sup>9</sup>. The members of the verification teams combined the methods of "human observers, long-range detection systems, and aerial means of observation." It is noteworthy that the review of records was not one of the methods used in this test. The success in estimating the number of company equivalents was poor, with the estimates being seriously lower than the actual figure. The accuracy of estimating equipment levels was comparable, except that the unattended sensors proved able to detect nearly all vehicles, and all aircraft.

The authors of the WEU paper drew the following conclusions about this exercise:

"a) The average error made by each inspection team in estimating the battle order was 20 percent, even for the small teams which had "limited" access to the establishments. Certain teams with "restricted" access had a 50 percent error rate.

"b) The large teams with restricted access did better than small teams with restricted access. The large teams with limited access did no better than small teams with limited access.