

represent an intense period of testing. One cause of this fervent pace was not doubt to test the backlog of designs developed during the moratorium.

The TTBT was signed on 3 July 1974, prohibiting tests having a yield exceeding 150 kt. As stipulated in Article I, the ban would not take effect until 31 March 1976.⁶ The interesting period of time is therefore the 21 months between July 1974 and March 1976; during that time the USA conducted 34 tests and the Soviet Union 29, of which 5 may have been PNEs.

In the US case, numerous officials have stated that the warhead designs for the Minuteman III (335 kt), the MX (300 kt), the Trident II (450 kt) and the B83 strategic bomb (1.2 Mt) were tested at their full yield prior to 31 March 1976. By comparing the known yields of those warheads with yield estimates of certain tests during the period, it is possible to speculate on which tests were for which warheads. It seems to be the case that no new warhead introduced into the stockpile, with the exception of the above four, has a yield greater than 150 kt, thus implying that new warheads may not be certified for the stockpile unless they have been tested at full yield.

In the Soviet case, according to one analyst, several high-yield tests (c.2-3.5 Mt) conducted during this period were for the single-re-entry vehicle ICBM modifications (SS-17 mod. 2, SS-18 mod. 1 and SS-19 mod. 2), and a series of 500-kt tests were probably for later modifications of these MIRVed missiles (SS-17 mod. 3, SS-18 mod. 4 and SS-19 mod. 3).⁷

NOTES AND REFERENCES

- ¹ DOE Nevada Operations Office, NVO-209 (Rev. 7), Jan 1987. Announced tests are notified by the Nevada Operations Office, Las Vegas, Nevada. If a test is to be announced it is done approximately 48 hours before the scheduled time. Occasionally a test is announced after it has taken place.
- ² More detail must be obtained from other sources. It is useful to know the exact time of the explosion as well as the co-ordinates of where it took place. The purpose of the test is given in vague terms, such as "weapon related" or for "weapon effects." The exact purpose of the test is not divulged, nor in recent years is the exact yield.
- ³ For valuable information about the dozen tests conducted in Australia, see *A History of British Atomic Tests in Australia*, prepared by Dr. J.L. Symonds, Department of Resources and Energy (Australian Government Publishing Service: Canberra, 1985).
- ⁴ Department of Scientific and Industrial Research, Geophysics Division, Wellington, New Zealand.
- ⁵ Twenty of the first 23.
- ⁶ Submission for ratification was held in abeyance until the companion Peaceful