

Abstract: Two of us from Lamont were part of a major review of technical issues related to the Test Ban Treaty by the National Research Council that was published earlier this year. Major findings are:

- Seismic and radionuclide monitoring have improved substantially during the past decade.
- The U. S. has the technical capabilities to maintain a safe, secure, and reliable stockpile of nuclear weapons into the foreseeable future without nuclear explosion testing.
- Russia & China are unlikely to be able to deploy new types of strategic nuclear weapons that fall outside the design range of their nuclear-explosion test experience without several multi-kiloton tests to build confidence in their performance. Such multi-kiloton tests would be detectable even with evasive measures.

In my talk I will concentrate on the first finding.