



Department of the Air Force
Scientific Advisory Board

DEPARTMENT OF THE AIR FORCE HEADQUARTERS AIR FORCE WASHINGTON DC

Test Range Compatibility Study

Abstract

The Air Force's Western Test Ranges are an essential resource for the U.S., critical to establishing and maintaining the U.S. military's technological edge. These ranges are irreplaceable, and demands for their use continue to grow.

However, property on and nearby these ranges is also attractive for other purposes, including the installation of alternative energy facilities. It is important to assess how such proposed developments on or near these test ranges could affect present and potential test range capabilities, in order to understand in advance, the compatibility of such proposed developments with test range uses.

The study will:

- 1) Document existing and potential capabilities and uses of certain Air Force Western Test Ranges.
- 2) Establish a set of critical range technical characteristics based on existing and potential range instrumentation and capabilities under test.
- 3) With respect to potential uses of on-site and adjacent land,
 - Identify phenomena associated with possible local developments that could influence the test range environment, thereby degrading the critical range technical characteristics.
 - Establish guidelines concerning what levels of such phenomena from local developments would be compatible with these critical range technical characteristics.
 - Identify representative development projects whose phenomena have the potential to affect these critical range technical characteristics and assess their effect on critical range technical characteristics.
 - Identify any current or potential Air Force testing operations that might have negative effects on potential development projects.
- 4) Identify and assess technology and operational options in the near-, mid-, and far-term that could mitigate any harmful effects of possible development projects on these critical range technical characteristics.