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Uneasy Alliances: Consideration of Military Sites by the Laser Interferometer Gravitational-Wave Observatory (LIGO)

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This paper explores how physicists of the Laser-Interferometer Gravitational Wave Observatory (LIGO) attempted to locate their research on former Cold War sites, LIGO's negotiations with the administrators of these sites such as the U.S. military, and LIGO's response to claimed national security concerns tied to the sites. As the Cold War wound down, governmental and military sites active during the Cold War were either abandoned or use of the sites restructured or reduced and in many instances placing them in the holdings of the Bureau of Land Management. In addition to exploring the unaddressed history of LIGO's site selection history and analyzing LIGO's experience with consideration of placement of a large-scale interferometer within these decommissioned spaces, this paper will also explore how the Cold War history morphed such sites into technical landscapes. Specifically, this paper will show that in the case of LIGO, these spaces were originally considered because they were perceived as wilderness or public land available to conduct nationally funded basic research and inexpensive due to government ownership of the land. However, in trying to locate their research, LIGO learned that the sites were heavily regulated and controlled by remnants of the Cold War. Thus, this paper concludes that although government lands may be less costly, such land may be nonetheless difficult to access due to each party's perceived administrative roles the land.