

S|S|S

ABSTRACT The present paper analyzes the transformation of seismology from a small academic discipline to a large academic–military–industrial enterprise during the 1960s. In the late 1950s scientists, diplomats, and policy-makers recognized that improved seismological knowledge was crucial for the detection and identification of Soviet underground nuclear-weapon tests. Consequently, the Eisenhower administration initiated a comprehensive research and development program in seismology, known as Project Vela Uniform. Vela Uniform, managed by the Department of Defence’s Advanced Research Projects Agency, increased annual federal support for US seismology by more than a factor of thirty. An analysis of the origins, mechanisms, and consequences of Department of Defense patronage for seismology is at the center of this paper. I emphasize the role of scientific advisory groups and mission agency program managers in negotiating the field’s research directions. I argue that despite massive Department of Defense patronage, academic seismologists did not lose control over their field. They participated actively in the transformation of their discipline, realizing that arms control requirements offered a unique opportunity to modernize their field. This suggests that the case of seismology challenges some of the assumptions of the ‘distortionist’ theory, the dominant historiographical approach to science in the Cold War.

Keywords Cold War, knowledge production, military patronage, Project Vela Uniform, scientific discipline, seismology

The Politics of Seismology:

Nuclear Testing, Arms Control, and the Transformation of a Discipline

Kai-Henrik Barfknecht