Progress during the reporting period: (1) Brought SRO data for events recorded in Hot Creek Valley from Scripp's Prime to Seismology Laboratory. Because of difficulties in reading prime tape format on the PDP 11/70, it was decided to analysis data on the prime,(2) Reanalyzed regional data across NTS.
1 February 1984

Quarterly Research and Development Status Report
No. 4
1 July 1983 - 30 September 1983

ARPA Order: 4397
Program Code: 3D60
Name of Grantee: University of Nevada - Reno
Grant Expiration Date: 30 September 1984
Amount of Grant: $203,692
Grant Number: 49620-83-C-0012
Principal Investigators: Keith F. Priestley, Alan S. Ryall
Program Manager: Keith F. Priestley
Short Title of Work: ATTENUATION IN THE WESTERN GREAT BASIN

Sponsored by
Advanced Research Projects Agency (DOD)
ARPA Order No. 4397
Monitored by AFOSR Under Grant 49620-83-C-0012

A DIVISION OF THE UNIVERSITY OF NEVADA SYSTEM
1. Research Program and Plan

(a) Operate three wideband, digital seismic stations in the western Great Basin as a dispersed network.

(b) Use data from these stations to examine variations in $m_b$ and $t^*$ from area to area in the western Great Basin.

(c) Investigate ways in which high-quality digital stations may be used to improve seismic verification at regional distance ranges.

(d) Study variations in the attenuation operator for multiple $S$ recorded at western U.S. stations.

(e) Study $m_b/M_s$ relationships for Mammoth earthquake sequence.

2. Status of Project

(a) Progress During the Reporting Period:

   (1) Brought SRO data for events recorded in Hot Creek Valley from Scripp's Prime to Seismology Laboratory - because of difficulties in reading Prime tape format on the PDP 11/70, it was decided to analysis data on the Prime.

   (2) Reanalyzed regional data across NTS.

(b) Major Equipment Purchased During Reporting Period: None.

(c) Change in Key Personnel During the Reporting Period: None.

(d) Trips, Meetings, Papers Given During the Reporting Period:

   (1) Priestley's travel:

      (a) to LaJolla, Calif. to copy SRO tapes.

      (b) to Switzerland and Germany to attend CCSS and IUGG meetings; presented paper on southern Nevada data.

   (2) Ryall's travel:

      (a) 7/27-28 DARPA panel meeting to review TTBT procedures + research. Washington, D.C.

      (e) Problems Encountered: Reading Prime data format.

      (f) No deviation in the planned effort to achieve the objective of the contract is anticipated.

      (g) Fiscal Status:

         1. Amount currently provided in contract: $203,692
2. Expenditures and commitments to date: $34,863

3. Estimated funds required to complete this work: $203,692

4. Estimated date of completion of work: 30 September 1984