

56 Newport, WA Component Upgrade: Evaluation of the Replaced Digitizers (Geotech Dr24) and Infrasound Sensors (Martec MB2000) and Implications for Planning Future Maintenance and Upgrades

Since the Comprehensive Nuclear-Test-Ban Treaty was opened for signature in 1996, nearly 80% of the infrasound network has been certified as operational and sending data to the International Data Centre (IDC) in Vienna. Several of the stations have been in operation for close to 15 years. With new advancements in digital recording technology and sensor design, some station operators have started the process of upgrading the digitizers and sensors for stations under their control. This past year station IS56 Newport, WA upgraded its digitizers from Geotech DR24s to the new Smart24, and infrasound sensors from Martec model MB2000 to the Chaparral Physics model 50A. This upgrade offered the opportunity to evaluate the replaced components to determine the quality of the data residing at the IDC for this station. By reviewing the test results of the “aged” hardware against the minimum station requirements set for International Monitoring System (IMS) stations, we will provide information the Provisional Technical Secretariat (PTS) IMS Division staff can use to help make station maintenance and hardware upgrade decisions.

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