

**Cooperative Technical Agreement**

REGISTRO DE CONTRATOS

between

TOMO 17 PAGINA 100

**University of Puerto Rico at Mayagüez**

CONTRATO NUM. 2008-00054

**Strong Motion Program**

and the

**U.S. Department of Interior**

**U.S. Geological Survey**

**1. PURPOSE**

The agreement is established between the University of Puerto Rico at Mayagüez, a Commonwealth Institution, hereinafter referred to as "UPRM" and the U.S. Department of Interior, U.S. Geological Survey, hereinafter referred to as USGS, to maintain a continued cooperative effort for technical assistance to acquire critical strong-motion recordings of damaging levels of earthquake shaking on the ground and in structures for purposes of improving public earthquake safety.

Whereas, the USGS is authorized to perform Cooperative Technical Assistance with other Federal agencies; units of State or local government; private corporations, industrial organizations; public and private foundations; nonprofit organizations (including universities) under the Stevenson-Wydler Act (15 U.S.C. §3710a as amended);

Whereas, the Technical Cooperation contemplated by this agreement will serve the mission of the USGS, because it will facilitate the acquisition of critical strong-motion recordings needed to achieve its goals for the Earthquake Hazard Reduction Program;

Whereas, the Technical Cooperation is of value to the UPRM, a Commonwealth Land, Sea and Space Grant University, that among other things provides Civil Engineering and Surveying support for the commonwealth's Strong Motion Program, as well as technical and scientific training opportunities for its students;

Now therefore be it resolved, that the parties hereto agree to a cooperative technical exchange in support of the successful installation, operation and maintenance of the Puerto Rico Strong-Motion Program (PRSMMP) as specified in subsequent paragraphs.

*Jame  
Perez*

**2. PERIOD OF PERFORMANCE**

The term of this agreement shall extend for five years, from July 1, 2008 or at the time that the last signature is obtain, whichever is second, to June 30, 2013. The agreement shall be extendable upon mutual agreement by both parties for periods up to 5 years and revocable at any time upon 30 day notice by either party.

**3. FISCAL INFORMATION FOR BILLING**

Billing cycle for technical assistance provided by USGS to UPRM shall coincide with annual billing cycles of USGS and UPRM.

Rates for technical assistance shall be established at the beginning of the fiscal year for budget planning purposes but actual invoices shall be based on actual services rendered.

#### 4. SCOPE OF WORK:

**UPRM:** The Coordinator for the UPRM Strong-Motion Program will provide at the beginning of each fiscal year a Technical Assistance Plan.

**USGS:** The USGS will provide seismic instrumentation experts to consult with UPRM Strong-Motion Program coordinator and staff and inspect and service field seismic instrumentation identified in the Technical Assistance Plan. The USGS technical staff will perform the inspection and maintenance tasks on an as needed basis by mutual agreement and as identified in the annual Technical Assistance Plan.

USGS normal maintenance of stations includes inspection, functional testing, and verification of proper function using standard procedures in accordance with current National Engineering Strong-Motion Program (NESMP) operational guidelines. All test records will be collected, evaluated, and permanently transferred to UPRM for archival. As needed, maintenance will include such activities as installation of new rechargeable batteries, replacement of recording media, and minor field repairs.

Routine maintenance of digital recorders connected to NESMP strong-motion data center via dial-up telephone connection or other telemetry shall include: 1) near real time state of health monitoring of recorder, sensors, and telemetry; 2) download of instrument periodic function tests; 3) maintenance of sufficient on site memory in recorders to ensure that the shaking of the main earthquake can be recorded at the site in the event that telemetry fails during the event, and; 4) near real time recovery of digital seismic recordings with preliminary processing, archival, and dissemination of recordings of engineering interest.

For sites with telephone telemetry UPRM agrees to provide the name and contact information of an individual at each facility who can help troubleshoot any telephone service problems.

Recorder or sensor malfunctions that cannot be resolved in the field will cause the malfunctioning unit to be removed by USGS for factory servicing. If available, a temporary UPRM or USGS replacement will be installed, while the removed unit is being repaired. The repaired unit will be reinstalled at a future service visit.

Post-earthquake services will be performed only after earthquakes of "engineering significance" (as determined by the USGS and UPRM), unless otherwise instructed by the UPRM Technical Contact. Post-earthquake service involves site visits to recover of strong-motion recordings from analog recorders and digital recorders for which telemetry could not be used to recover data and all normal maintenance services listed above plus routine processing of digital recordings for dissemination via the NESMP data center. USGS will maintain station metadata needed for proper use of the recorded data as either compiled by USGS personnel or provided by the UPRM Technical Contact.

#### 5. ESTIMATE OF COSTS

The USGS standard interagency charge schedule for 1) Routine site-visit maintenance service, 2) Routine telemetry service, 3) Routine maintenance digital recordings w/o telemetry 4) Routine maintenance Analog Film recordings, 5) Post earthquake data

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2*

recovery and service visits, 6) New installations/upgrades, and 7) Other services is included as addendum 1. This charge schedule is subject to annual change dependent on changes in USGS operating costs due to inflation. Of this charge schedule, charges for the cooperative UPRM-USGS Technical Assistance Agreement specified herein, charges pertaining to Routine site-visit maintenance are expected to be most applicable. UPRM costs to be provided to USGS for Technical Assistance for the first year shall not exceed \$20,000, and it will be paid from the account #6-26870 of the Strong Motion Program. A top limit amount and the new account number will be established for subsequent years at the corresponding Technical Assistance Plan. Services should be rendered upon request.

**6. TITLE TO EQUIPMENT:**

Each party shall retain title to any/all equipment used or furnished by it during the seismic assessment unless other terms have been negotiated between the Parties. In the event that UPRM provides funding to the USGS to purchase equipment in the US or while in Puerto Rico for repair and maintenance of its seismic stations, such equipment will become the property of UPRM.

**7. TERMINATION:**

This Agreement may be terminated by either party on 30 days written notice to the other party.

**8. PUBLICATIONS/ REPORTS:**

Either party will be free to publish the non-proprietary results of the research of the Principal Investigators conducted under this Agreement.

**9. INTELLECTUAL PROPERTY:**

All rights in inventions, discoveries, or software created in the course of the Statement of Work shall be the individual property or joint property of the institution employing the respective researcher(s) who made the invention or discovery. Such inventions or discoveries shall be reported by the researcher according to his institution's policy on patents and copyrights. In the event that there are joint discoveries the Parties agree to begin to negotiate a separate commercialization agreement within 60 days of any notice from either party that a commercialization agreement is requested.

**10. NOTICES:**

Any notice required to be given or which shall be given under this Agreement shall be in writing and delivered to the parties as follows:

UPRM	USGS
Technical	Technical
Dr. José A. Martínez-Cruzado,	Dr. Roger D. Borchardt
Director of the Puerto Rico Strong Motion Program	Chief, National Engineering Strong Motion Program
University of Puerto Rico at Mayagüez	US Geological Survey
Civil Engineering & Surveying Department	345 Middlefield Road, MS 977

*Game  
Javier  
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PO Box 9041	Menlo Park, CA 94025
Mayagüez, PR 00681	Phone: 650-329-5619
Phone: (787) 832-4040, ext. 3401	Fax: 650-329-5163
Fax: (787) 831-2745	<a href="mailto:borcherdt@usgs.gov">borcherdt@usgs.gov</a>
<a href="mailto:martinez@uprm.edu">martinez@uprm.edu</a>	
	Administrative
	Lourdes A. Gardner, Administrative Officer
	US Geological Survey
	345 Middlefield Road, MS 977
	Menlo Park, CA 94025
	Phone: 650-329-4852
	Fax: 650-329-5163
	<a href="mailto:lgardner@usgs.gov">lgardner@usgs.gov</a>

**11. INDEPENDENT CONTRACTOR:**

For purposes of this Agreement and all services to be provided hereunder, each party shall be, and shall be deemed to be, an independent contractor and not an agent or employee of the other party. Each party shall have exclusive control over its employees in the performance of the work. While in field locations employees shall adhere to the safety and technical requirements imposed by the Party controlling the work site.

Neither party shall have authority to make any statements, representations, or commitments of any kind, or take any action, which shall be binding on the other party, except as may be explicitly provided for herein or authorized in writing. Neither party may use the name of the other in advertising or other form of publicity without the written permission of the other.

*Jame  
Jorge  
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**12. GOVERNING LAW/HOLD HARMLESS:**

The validity and interpretation of this Agreement and the legal relation of the parties shall be governed by US Federal Law, the laws of Puerto Rico and the laws and regulations of the University. Each party agrees to be responsible for the activities, including the negligence of their employees or agents. USGS responsibility for the payment of claims for loss of property, personal injury or death caused by the negligence or wrongful act or omissions of a USGS employee, while acting within the scope of their employment is limited to provisions of the Federal Tort Claims Act, 28 USC §§2671-80 and C.F.R. 10.

**13. ENTIRE AGREEMENT:**

This Agreement contains all of the terms of the parties and supersedes all prior agreements and understandings related thereto. This Agreement can be changed or amended only by a written instrument signed by the parties. Due to the specialized nature of the work this contract is non-assignable by both parties.

**14. DISPUTES:**

The signatories to this Agreement shall expend their best efforts to amicably resolve any dispute that may arise under this Agreement. Any dispute that they are unable to resolve shall be submitted to the Director or his designee of the USGS and to the Chancellor of Collaborator, or his designee for resolution.

**15. MISCELLANEOUS PROVISIONS:**

Pursuant to the Ant-Deficiency Act, 31 U.S.C. §1341 (a)(1), nothing herein contained shall be construed as binding the USGS to expend in any one fiscal year any sum in excess of its appropriations or funding in excess or what it has received for the reimbursable work contracted for by Sponsor.

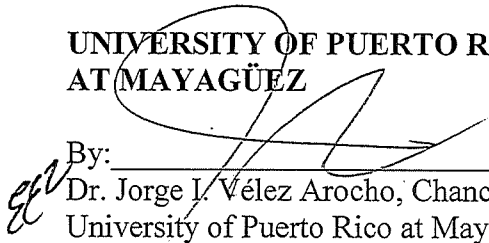
IN WITNESS WHEREOF, the parties have caused this agreement to be executed, the last date listed below.

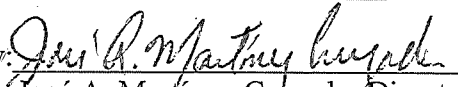
**U.S. GEOLOGICAL SURVEY**

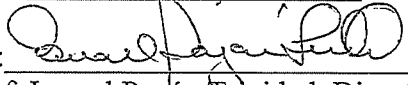
By: \_\_\_\_\_  
Dr. Michael D. Carr  
Chief Scientist  
Western Earthquake Hazards Team  
US Geological Survey

Date: \_\_\_\_\_

**UNIVERSITY OF PUERTO RICO  
AT MAYAGÜEZ**

By:  \_\_\_\_\_  
Dr. Jorge I. Vélez Arocho, Chancellor  
University of Puerto Rico at Mayagüez  
Date: \_\_\_\_\_

By:  \_\_\_\_\_  
Dr. José A. Martínez-Cruzado, Director,  
Puerto Rico Strong Motion Program  
Date: June 20, 2008

By:  \_\_\_\_\_  
Prof. Ismael Pagán Trinidad, Director,  
Department of Civil Engineering &  
Surveying  
Date: June 23, 2008