



**National Radio Astronomy Observatory**

520 Edgemont Road  
Charlottesville, VA 22903 USA  
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**SUBRECIPIENT AGREEMENT**

SUBRECIPIENT AGREEMENT between the NATIONAL RADIO ASTRONOMY OBSERVATORY, managed by ASSOCIATED UNIVERSITIES, INC. with a location at 520 Edgemont Road, Charlottesville, Virginia, 22903 U.S.A., hereinafter referred to as “NRAO” and **UNIVERSITY NAME** **ADDRESS OF UNIVERSITY**, hereinafter referred to as “Subrecipient.”

The effort relating to **the NRAO Student Observing Support (SOS) research of STUDENT NAME**, contemplated by this Agreement is of mutual interest and benefit to NRAO and Subrecipient and will further the instructional and research objectives of NRAO in a manner consistent with its status as a nonprofit, tax-exempt institution.

**UNIVERSITY NAME** will be a subrecipient to Federal Award number **AST-0836064, “Management and Operation of the National Radio Astronomy Observatory FY 2010-2015,”** awarded to Associated Universities, Inc. by **the National Science Foundation**. The Federal Award is identified under Code of Federal Domestic Assistance (CFDA) number **47.049, Mathematical and Physical Sciences**, for R&D. Subrecipient will be required to follow Federal laws, regulations, and provisions of the federal award in addition to supplemental requirements imposed by NRAO, as detailed in this document.

In particular, NRAO and Subrecipient are required to comply with the regulations of OMB Circular A-133, “Audits of States, Local Government, and Non-Profit Organizations.” NRAO is required to monitor the activities of the Subrecipient as necessary to ensure that Federal award funding is used for authorized purposes and that performance goals are achieved. NRAO must also ensure that subrecipients expending \$500,000 or more in Federal awards during the subrecipient’s fiscal year have met audit requirements in accordance with OMB Circular A-133. If there are audit findings, NRAO will issue a management decision within six months of the Subrecipient’s audit report and ensure that the Subrecipient takes appropriate and timely corrective action. In addition, Subrecipient must permit NRAO and auditors to have access to the records and financial statements as necessary for compliance with OMB Circular A-133.

For awards greater than \$25,000, Subrecipient will be required to complete a Federal Funding Accountability and Transparency Act (FFATA) Subrecipient Profile Questionnaire so NRAO can report subaward information to the FFATA Subrecipient Reporting System (FSRS) website, in accordance with the FFATA Act of 2006, the associated 2008 amendment, and the OMB Memorandum dated August 27, 2010.

NOW, THEREFORE, the parties hereto agree as follows:

Article 1. **STATEMENT OF WORK.**

The Subrecipient agrees to use its best effort to carry out the work defined in the Statement of Work attached as Exhibit 1.

Article 2. **PRINCIPAL INVESTIGATOR.**

The effort will be supervised **under the direction of UNIVERSITY NAME Professor P.I. NAME**. If, for any reason, he/she is unable to continue to serve as Principal Investigator, and a successor acceptable to both NRAO and Subrecipient is not available, this Agreement shall be terminated as provided in Article 21, “Termination.” **Jeff Mangum** of NRAO will oversee the work.

Article 3. **PERIOD OF PERFORMANCE.**

The work shall be conducted during the period **MONTH, DAY, YEAR to MONTH, DAY, YEAR**. This Agreement and the period of performance may be extended by mutual written agreement of the parties.

Article 4. REIMBURSEMENT OF COSTS.

In consideration of the foregoing, NRAO will reimburse the Subrecipient for all direct and indirect costs incurred in the performance of the work as permitted by OMB Circular A-122 (A-21 for Educational Institutions; A-87 for State, Local or Tribal Governments; FAR 31.2 for commercial activities) which shall not exceed the total estimated project cost of **\$TOTAL COST** without written authorization from NRAO. If the Agreement is extended, the dollar value of costs to be reimbursed may be increased by mutual written agreement to cover additional work performed during the extension.

Article 5. PAYMENT.

Payment to Subrecipient shall be made as follows: monthly on an approved invoice. All payments by NRAO shall be net, and free and clear of all taxes, duties and other levies.

Article 6. ACCOUNTS AND RECORDS.

The Subrecipient agrees to maintain books, records, documents, and other evidence pertaining to all costs and expenses to the extent and in such detail as will properly reflect all net costs, direct and indirect, of labor, materials, equipment, supplies and services, and other costs, and expenses of whatever nature incurred in the performance of this work.

Article 7. EXAMINATION OF RECORDS. (For agreements exceeding \$25,000)

This article is applicable if the amount of this Agreement exceeds \$25,000 and was entered into by means of negotiation, including small business restricted advertising, but is not applicable if this Agreement was entered into by means of formal advertising.

1. The Subrecipient agrees that the Director of the National Science Foundation and the Comptroller General of the United States, or any of his duly authorized representatives shall, until the expiration of three years after final payment under this Agreement have access to and the right to examine any directly pertinent books, documents, papers, and records of the Subrecipient involving transactions related to this Agreement.
2. The Subrecipient further agrees to include in all his subcontracts hereunder a provision to the effect that the subcontractor agrees that the Director of the National Science Foundation and Comptroller General of the United States, or any of his duly authorized representatives shall, until the expiration of three years after final payment under the subcontract, have access to and the right to examine any directly pertinent books, documents, papers, and records of such subcontractor, involving transactions related to the subcontract. The term "subcontract" as used in this article excludes (1) purchase orders not exceeding \$25,000 and (2) subcontracts or purchase orders for public utility services at rates established for uniform applicability to the general public, plus any applicable reasonable connection charge.
3. The periods of access and examination described in a. and b. above, for records which relate to (1) appeals under the "Disputes" article of this Agreement, (2) litigation or the settlement of claims arising out of the performance of this Agreement, or (3) costs and expenses of this Agreement to which exception has been taken by the Comptroller General or any of his duly authorized representatives, shall continue until such appeals, litigations, claims, or exceptions are disposed of.

Article 8. TRAVEL.

Travel costs shall be paid in accordance with NRAO Travel policies and procedures but may not exceed those expenses authorized under OMB Circular A-122 (A-21 for Educational Institutions; A-87 for State, Local or Tribal Governments; FAR 31.2 for commercial activities).

Article 9. U.S. GOVERNMENT PROPERTY.

The Subrecipient assumes the risk of, and shall be responsible for any loss of or damage to U.S. Government property in its possession, except for reasonable wear and tear, and except to the extent that such property is consumed in the performance of this Agreement. The term "U.S. Government property" shall be taken to mean property, title to which is vested in the U.S. Government.

Article 10. TECHNICAL DATA.

1. Ownership of, and the right to register copyright to documents related to computer hardware and software and associated documentation (hereinafter "Documents") shall remain in NRAO. The Subrecipient shall be granted a nonexclusive, nontransferable, royalty-free license to use Documents, but only for Subrecipient's own internal purposes. The Subrecipient further agrees not to provide or otherwise make available Documents, or any copy or modification thereof in any form to any third party, except as may be permitted in writing by NRAO. As used herein "modification" shall mean any source tapes, listings or other documentation in any identifiable or separately usable form included in any program developed by Subrecipient in machine readable or printed form, where such source tapes, listings, or other documentation remains essentially the same in both form and function as when originally provided by NRAO to the Subrecipient.
2. All technical data other than Documents resulting from the research program under this Agreement shall be the property of NRAO; however, a copy of all such technical data shall be provided to the Subrecipient upon request, and, subject to Article 12 hereof, Subrecipient shall have the right to use and disclose all such technical data as it sees fit.

Article 11. PUBLICATIONS.

It is anticipated that the Subrecipient may publish information regarding technical developments and/or research findings made by Subrecipient employees under this Agreement. For such publications, Subrecipient agrees to submit a copy of the proposed publication to NRAO, preferably at least thirty (30) days prior to, but in no case later than simultaneously with submission for publication. NRAO may request reasonable changes and/or deletions be made in any proposed publication. The Subrecipient will consider such changes but retains the sole right to determine whether such changes or deletions will be made. In addition, the Subrecipient is responsible for:

1. Acknowledgment of Support

The Subrecipient is responsible for assuring that an acknowledgment of NSF support:

- a. is made in any publication (including World Wide Web sites) of any material based on or developed under this project, in the following terms:

"This material is based upon work supported by Associated Universities, Inc./National Radio Astronomy Observatory and the National Science Foundation under Cooperative Agreement No. (NSF grant number)."

- b. is orally acknowledged during all news media interviews, including popular media such as radio, television and news magazines.

2. News Releases

The Subrecipient is strongly encouraged to consult with and notify the NSF Program Officer or his/her designee prior to issuing news releases concerning NSF-supported activities.

3. Disclaimer

The Subrecipient is responsible for assuring that every publication of material (including World Wide Web pages) based on or developed under this award, except scientific articles or papers appearing in scientific, technical or professional journals, contains the following disclaimer:

"Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation."

4. Copies for NSF

The Subrecipient is responsible for assuring that the cognizant NSF Program Officer is provided access to, either electronically or in paper form, a copy of every publication of material based on or developed under this award, clearly labeled with the award number and other appropriate identifying information, promptly after publication.

5. Metric System

All reports and publications resulting from this NSF award are encouraged to use the metric system of weights and measures.

Article 12. COPYRIGHTABLE MATERIAL

1. Definitions.

“Subject writing” means any material that:

- a. is or may be copyrightable under Title 17 of the United States Code, and
- b. is produced by the Subrecipient or its employees in the performance of work under this Agreement.

“Subject writings” includes such items as reports, books, journal articles, software, sound recordings, video tapes, and video discs. “Subject writings” do not include adaptations of, modifications to, and improvements on material produced in the performance of work under this Cooperative Agreement so long as the adaptation, modification, or improvement is not performed under this Cooperative Agreement.

2. Copyright Ownership, Government License. The Subrecipient is permitted to own the subject writings and copyrights therein. The Subrecipient agrees that if it or anyone else does own copyright in a subject writing, the Federal Government will have a nonexclusive, nontransferable, irrevocable, royalty-free license to exercise or have exercised for or on behalf of the United States throughout the world all exclusive rights provided by copyright. Such license, however, will not include the right to sell copies or other methods of recording the copyrighted work to the public.

3. Delivery of Subject Writings. The Subrecipient agrees to deliver to NRAO, on written request, two copies of any subject writing. The Subrecipient may identify portions of any subject writing that it believes to be exempt from disclosure under the Freedom of Information Act and request that NRAO and National Science Foundation not disclose those portions outside the United States Government.

4. Subrecipient Action to Protect Government Interests. The Subrecipient agrees to acquire, through written agreement or an employee relationship, the ability to comply with the requirements of the preceding ARTICLES and, in particular, to acquire the ability to convey rights in a subject writing to a foreign participant if directed by NRAO. The Subrecipient further agrees that any transfer of copyright or any other rights to a subject writing, by it or anyone whom it has allowed to own such rights, will be made subject to the requirements of this ARTICLE.

Article 13. PATENT RIGHTS

1. Definitions

a. “Invention” means any invention or discovery which is or may be patentable or otherwise protectable under Title 35 of the United States Code, or any novel variety of plant which is or may be protected under the Plant Variety Protection Act (U.S.C. 2321 et seq.).

b. “Subject invention” means any invention of the Subrecipient conceived or first actually reduced to practice in the performance of work under this agreement, provided that in the case of a variety of plant, the date of determination (as defined in Section 41(d) of the Plant Variety Protection Act, 7 U.S.C. 2401 (d)) must also occur during the period of agreement performance.

c. "Practical application" means to manufacture in the case of a composition or product, to practice in the case of a process or method, or to operate in the case of a machine or system; and, in each case, under such conditions as to establish that the invention is being utilized and that its benefits are to the extent permitted by law or Government regulations available to the public on reasonable terms.

d. "Made" when used in relation to any invention means the conception or first actual reduction to practice of such invention.

e. "Small business firm" means a domestic small business concern as defined at Section 2 of Public Law 85-536 (15 U.S.C. 632) and implementing regulations of the Administrator of the Small Business Administration. For the purpose of this clause, the size standard for small business concerns involved in Government procurement and subcontracting/subawarding at 13 CFR 121.3-8 and 13 CFR 121.3-12, respectively, will be used.

f. "Nonprofit organization" means a university or other institution of higher education or an organization of the type described in Section 501(c)(3) of the Internal Revenue Code of 1954 (26 USC 501(c)) and exempt from taxation under Section 501(a) of the Internal Revenue Code of 1954 (25 USC 501(a)) or any nonprofit scientific or educational organization qualified under a State nonprofit organization statute.

## 2. Allocation of Principal Rights

The Subrecipient retains the entire right, title, and interest throughout the world to each subject invention subject to the provisions of this clause and 35 U.S.C 203. With respect to any subject invention in which the Subrecipient retains title, the Federal Government shall have a non-exclusive, non-transferable, irrevocable, paid-up license to practice or have practiced for or on behalf of the United States of the subject invention throughout the world.

## 3. Invention Disclosure, Election of Title and Filing of Patent Applications by Subrecipient

a. The Subrecipient will disclose each subject invention to the National Science Foundation within two months after the inventor discloses it in writing to Subrecipient personnel responsible for patent matters. The disclosure to the National Science Foundation shall be in the form of a written report and shall identify the agreement under which the invention was made and the inventor(s). It shall be sufficiently complete in technical detail to convey a clear understanding to the extent known at the time of disclosure of the nature, purpose, operation, and the physical, chemical, biological or electrical characteristics of the invention. The disclosure shall also identify any publication, on sale or in public use of the invention and whether a manuscript describing the invention has been submitted for publication and, if so, whether it has been accepted for publication at the time of disclosure. In addition, after disclosure to the National Science Foundation, the Subrecipient will promptly notify the National Science Foundation of the acceptance of any manuscript describing the invention for publication or of any on sale or public use planned by the Subrecipient.

b. The Subrecipient will elect in writing whether or not to retain title to any such invention by notifying the National Science Foundation within two years of disclosure to National Science Foundation. However, in any case where publication, on sale or public use has initiated the one-year statutory period wherein valid patent protection can still be obtained in the United States, the period for election of title may be shortened by the National Science Foundation to a date that is no more than 60 days prior to the end of the statutory period.

c. The Subrecipient will file its initial patent application on invention to which it elects to retain title within one year after election of title, or, if earlier, prior to the end of any statutory period wherein valid patent protection can be obtained in the United States after a publication, on sale or public use. The Subrecipient will file patent applications in additional countries or international patent offices within either ten months of the corresponding initial patent application, or six months from the date when permission is granted by

the Commissioner of Patents and Trademarks to file foreign patent applications where such filing has been prohibited by a Secrecy Order.

d. Requests for extension of the time for disclosure, election, and filing under subparagraphs (a), (b), and (c) may, at the discretion of the National Science Foundation, be granted.

#### 4. Conditions When the Government May Obtain Title

The Subrecipient will convey to the National Science Foundation, upon written request, title to any subject invention:

a. If the Subrecipient fails to disclose or elect title to the subject invention within the times specified in paragraph (c) above, or elects not to retain title, provided that the National Science Foundation may only request title within 60 days after learning of the Subrecipient's failure to disclose election within the specified times.

b. In those countries in which the Subrecipient fails to file patent applications within the times specified in paragraph 3 above; provided, however, that if the Subrecipient has filed a patent application in a country after the times specified in 3 above but prior to its receipt of the written request of the National Science Foundation, the Subrecipient shall continue to retain title in that country.

c. In any country in which the Subrecipient decides not to continue the prosecution of any application for, to pay the maintenance fees on, or defend in a reexamination or opposition proceeding on, a patent on a subject invention.

#### 5. Minimum Rights to Subrecipient

a. The Subrecipient will retain a non-exclusive, royalty-free, license throughout the world in each subject invention to which the Government obtains title except if the Subrecipient fails to disclose the invention within the times specified in paragraph 3. above. The Subrecipient's license extends to its domestic subsidiaries and affiliates, if any, within the corporate structure of which the Subrecipient is a party and includes the right to grant sublicenses of the same scope to the extent the Subrecipient was legally obligated to do so at the time the agreement was awarded. The license is transferable only with the approval of NRAO except when transferred to the successor of that party of the Subrecipient's business to which the invention pertains.

b. The Subrecipient's domestic license may be revoked or modified by the NSF via NRAO to the extent necessary to achieve expeditious practical application of the subject invention pursuant to an application for an exclusive license submitted in accordance with applicable provisions of 7 CFR Part 404 and NSF licensing regulations (if any). This license will not be revoked in that field of use or the geographical areas in which the Subrecipient has achieved practical application and continues to make the benefits of the invention reasonably accessible to the public. The license in any foreign country may be revoked or modified at the discretion of NSF and NRAO to the extent the Subrecipient, its licensees, or its domestic subsidiaries or affiliates have failed to achieve practical application in that foreign country.

c. Before revocation or modification of the license, NRAO will furnish the Subrecipient a written notice of its intention to revoke or modify the license, and the Subrecipient will be allowed 30 days (or such other time as may be authorized by NRAO for good cause shown by the Subrecipient) after the notice to show cause why the license should not be revoked or modified. The Subrecipient has the right to appeal, in accordance with applicable regulations in 37 CFR Part 404 and NRAO regulations (if any) concerning the licensing of Government-owned inventions, any decision concerning the revocation or modification of its license.

#### 6. Action to Protect Government's Interest

a. The Subrecipient agrees to execute or to have executed and promptly deliver to NRAO all instruments necessary to: (1) establish or confirm the rights the Government has throughout the world in those subject inventions to which the Subrecipient retains title, and (2) convey title to NRAO when requested under

paragraph 4 above, and to enable the Government to obtain patent protection throughout the world in that subject invention.

b. The Subrecipient agrees to require, by written agreement, its employees, other than clerical and non-technical employees, to disclose promptly in writing to personnel identified as responsible for the administration of patent matters and in a format suggested by the Subrecipient each subject invention made under agreement in order that the Subrecipient can comply with disclosure provisions of paragraph 3. above, and to execute all papers necessary to file patent applications on subject inventions and to establish the Government's rights in the subject inventions. The disclosure format should require, as a minimum, the information requested by 3.a. above. The Subrecipient shall instruct such employees through the employee agreements or other suitable educational programs on the importance of reporting inventions in sufficient time to permit the filing of patent applications prior to U.S. or foreign statutory bars.

c. The Subrecipient will notify NRAO of any decision not to continue prosecution of a patent application, pay maintenance fees, or defend in a reexamination or opposition proceeding on a patent, in any country, not less than 30 days before the expiration of the response period required by the relevant patent office.

d. The Subrecipient agrees to include, within the specification of any United States patent applications and any patent issuing thereon covering a subject invention, the following statement:

“This invention was made with Government support under (**identify the agreement**) awarded by Associated Universities, Inc./National Radio Astronomy Observatory under a Cooperative Agreement from the National Science Foundation. The Government has certain rights in this invention.”

e. The Subrecipient or its representative will complete, execute and to NRAO a confirmation of a License to the United States Government and the page of a United States patent application that contains the Federal support clause within two months of filing any domestic or foreign patent application.

#### 7. Subawards

The Subrecipient will include this clause, suitably modified to identify the parties, in all subawards, regardless of tier, for experimental, developmental, or research work. The subawardee will retain all rights provided for the Subrecipient in this clause, and the Subrecipient will not, as part of the consideration for awarding the subaward, obtain rights in the subawardee's subject inventions.

#### 8. Reporting on Utilization of Subject Inventions

The Subrecipient agrees to submit on request periodic reports no more frequently than annually on the utilization of a subject invention or on efforts at obtaining such utilization that are being made by the Subrecipient or its licensees or assignees. Such reports shall include information regarding the status of development, date of first commercial sale or use, gross royalties received by the Subrecipient, and such other data and information as the NRAO may reasonably specify. The Subrecipient also agrees to provide additional reports as may be requested by NRAO or NSF in connection with any march-in proceedings undertaken by the NRAO in accordance with paragraph (10) of this clause. As required by 35 U.S.C. 202(c)(5), NRAO and NSF agree it will not disclose such information outside the Government without permission of the Subrecipient.

#### 9. Preference for United States Industry

Notwithstanding any other provision of this clause, the Subrecipient agrees that neither it nor any assignee will grant to any person the exclusive right to use or sell any subject invention in the United States unless such person agrees that any products embodying the subject invention or produced through the use of the subject invention will be manufactured substantially in the United States. However, in individual cases, the requirement for such an agreement may be waived by NRAO upon a showing by the Subrecipient or its assignee that reasonable but unsuccessful efforts have been made to grant licenses on similar terms to potential licensees that would be likely to

manufacture substantially in the United States or that under the circumstances domestic manufacture is not commercially feasible.

#### 10. March-in Rights

The Subrecipient agrees that with respect to any subject invention in which it has acquired title, NRAO has the right in accordance with procedures in 37 CFR 401.6 and NSF regulations at 45 CFR 650.13 to require the Subrecipient, an assignee, or exclusive licensee of a subject invention to grant a nonexclusive, partially exclusive, or exclusive license in any field of use to a responsible applicant or applicants, upon terms that are reasonable under the circumstances, and if the Subrecipient, assignee, or exclusive licensee refuses such a request, NRAO has the right to grant such a license itself if NRAO determines that:

- a. Such action is necessary because the Subrecipient or assignee has not taken, or is not expected to take within a reasonable time, effective steps to achieve practical application of the subject invention in such field of use;
- b. Such action is necessary to alleviate health or safety needs which are not reasonably satisfied by the Subrecipient, assignee, or their licensees;
- c. Such action is necessary to meet requirements for public use specified by Federal regulations and such requirements are not reasonably satisfied by the Subrecipient, assignee, or licensee; or
- d. Such action is necessary because the agreement required by paragraph 9. of this clause has not been obtained or waived or because a licensee of the exclusive right to use or sell any subject invention in the United States is in breach of such agreement.

#### 11. Special Provisions for Awards with NonProfit Organizations

If the Subrecipient is a nonprofit organization, it agrees that:

- a. Rights to a subject invention in the United States may not be assigned without the approval of NRAO, except where such assignment is made to an organization which has as one of its primary functions the management of inventions, provided that such assignee will be subject to the same provisions as the Subrecipient;
- b. The Subrecipient will share royalties collected on a subject invention with the inventor, including Federal employee co-inventors (when the agency deems it appropriate) when the subject invention is assigned in accordance with 35 U.S.C. 202(e) and 37 CFR 401.10;
- c. After payment of patenting costs, licensing costs, payments to inventors, and other expenses incidental to the administration of subject inventions, the balance of any royalties or income earned and retained by the Subrecipient during any fiscal year on subject inventions under this or any successor Agreement containing the same requirement, up to any amount equal to 5 percent of the budget of the facility for that fiscal year, shall be used by the Subrecipient for the scientific research, development, and education consistent with the research and development mission and objectives of the Subrecipient, including activities that increase the licensing potential of other inventions of the Subrecipient. If the balance exceeds 5 percent, 75 percent of the excess above 5 percent shall be paid by the Subrecipient to the Treasury of the United States and the remaining 25 percent shall be used by the Subrecipient only for the same purposes as described above. To the extent it provides the most effective technology transfer, the licensing of subject inventions shall be administered by Subrecipient employees on location at the Subrecipient.
- d. It will make efforts that are reasonable under the circumstances to attract licensees of subject invention that are small business firms and that it will give a preference to a small business firm when licensing a subject invention if the Subrecipient determines that the small business firm has a plan or proposal for marketing the invention which, if executed, is equally as likely to bring the invention to practical application as any plans or proposals from applicants that are not small business firms; provided that the Subrecipient is also satisfied that the small business firm has the capability and resources to carry out its plan or proposal. The decision whether to give a preference in any specific case will be at the discretion of



the Subrecipient. However, the Subrecipient agrees that the Secretary of Commerce may review the Subrecipient's licensing program and decisions regarding small business applicants, and the Subrecipient's will negotiate changes to its licensing policies, procedures, or practices with the Secretary when the Secretary's review discloses that the Subrecipient could take reasonable steps to implement more effectively the requirements of this paragraph 11.d.

## 12. Communications

All communications required by this Patents Rights clause should be sent to:

Patent Assistant; Office of the General Counsel; National Science Foundation; 4201 Wilson Boulevard; Arlington, VA 22230

## Article 14. NOTICE AND ASSISTANCE REGARDING PATENT AND COPYRIGHT INFRINGEMENT

1. The Subrecipient shall report to the National Science Foundation and NRAO, promptly and in reasonable written detail, each notice or claim of patent or copyright infringement based on the performance of this Agreement of which the Subrecipient has knowledge.
2. In the event of any claim or suit against the U.S. Government on account of any alleged patent or copyright infringement arising out of the performance of this Agreement or out of the use of any supplies furnished or work or services performed hereunder, the Subrecipient shall furnish to the U.S. Government, when requested by NRAO or NSF, all evidence and information in possession of the Subrecipient pertaining to such suit or claim. Such evidence and information shall be furnished at the expense of the U.S. Government except where the Subrecipient has agreed to indemnify the U.S. Government.

## Article 15. CONFIDENTIALITY OF SUBRECIPIENT'S INFORMATION.

Subrecipient may wish, from time to time, in connection with work contemplated under this Agreement, to disclose confidential information to NRAO personnel. To protect the confidentiality of such information, Subrecipient may ask NRAO employee(s), who has/have the right to refuse to accept such information, to sign a confidentiality agreement with Subrecipient. Such a request shall not extend to other NRAO personnel. NRAO will not be responsible for any failure of individual performance under such confidentiality agreements.

## Article 16. EQUAL OPPORTUNITY

1. If, during any 12-month period (including the 12 months preceding the award of this Agreement), the Subrecipient has been or is awarded nonexempt Federal Contracts/awards and/or subcontracts/sub awards that have an aggregate value in excess of \$10,000, the Subrecipient shall comply with subparagraphs 2.a. through 2.k. below. Upon request, the Subrecipient shall provide information necessary to determine the applicability of this article.
2. During performing of this Agreement, the Subrecipient agrees as follows:
  - a. The Subrecipient shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin.
  - b. The Subrecipient shall take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, or national origin. This shall include, but not be limited to, (1) employment, (2) upgrading, (3) demotion, (4) transfer, (5) recruitment or recruitment advertising, (6) layoff or termination, (7) rates of pay or other forms of compensation, and (8) selection for training, including apprenticeship.
  - c. The Subrecipient shall post in conspicuous places available to employees and applicants for employment the notices that explain this article.
  - d. The Subrecipient shall state, in all solicitations or advertisement for employees placed by or on behalf of the Subrecipient, that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.

- e. The Subrecipient shall send, to each labor union or representative of workers with which it has a collective bargaining agreement or other Agreement or understanding, the notice advising the labor union or worker's representative of the Subrecipient's commitments under this article, and post copies of the notice in conspicuous places available to employees and applicants for employment.
  - f. The Subrecipient shall comply with Executive Order 11246, as amended, and the rules, regulations, and orders of the Secretary of Labor.
  - g. The Subrecipient shall furnish to AUI and the National Science Foundation all information required by Executive Order 11246, as amended, and by the rules, regulations, and orders of the Secretary of Labor. Standard Form 100 (EEO-1), or any successor form, is the prescribed form to be filed within 30 days following the award, unless filed within 12 months preceding the date of the award.
  - h. The Subrecipient shall permit access to its books, records, and accounts by the awarding agency or the Office of Federal Contract Compliance Programs (OFCCP) for the purpose of investigation to ascertain the Subrecipient's compliance with the applicable rules, regulations, and orders.
  - i. If the OFCCP determines that the Subrecipient is not in compliance with this article or any rule, regulation, or order of the Secretary of Labor, this agreement may be canceled, terminated, or suspended in whole or in part and the Subrecipient may be declared ineligible for further U.S. Government awards under the procedures authorized in Executive Order 11246, as amended. In addition, sanctions may be imposed and remedies invoked against the Subrecipient as provided in Executive Order 11246, as amended, the rules, regulations, and orders of the Secretary of Labor, or as otherwise provided by law.
  - j. The Subrecipient shall include the terms and conditions of subparagraph 2.a. through 2.k. of this article in every subcontract or purchase order that is not exempted by the rules, regulations, or orders of the Secretary of Labor issued under Executive Order 11246, as amended, so that these terms and conditions will be binding upon each subcontract or vendor.
  - k. The Subrecipient shall take such action with respect to any subcontract or purchase order as the National Science Foundation may direct as a means of enforcing these terms and conditions, including sanctions for noncompliance provided that, if the Subrecipient becomes involved in, or is threatened with, litigation with a subcontract or vendor as a result of any direction, the Subrecipient may request the United States to enter into the litigation process to protect the interests of the United States.
3. Notwithstanding any other article in this Agreement, disputes relative to this article will be governed by the procedures in 41 CFR 60-1.1.

Article 17.       NONDISCRIMINATION

- 1. The Subrecipient and its subcontractors are subject to the provisions of Title VI of the Civil Rights Act of 1964 (PL 88-352) and the regulations issued pursuant thereto by the Foundation (45 CFR 611). No person on the basis of race, color, sex, national origin, or handicap shall be excluded from participation in, be denied benefits of, or otherwise be subjected to discrimination under the Agreement. In addition, if the project involves an education activity or program, as defined by Title IX of the Education Amendments of 1972 (PL-318) 20 USC 1681-1686), no person on the basis of sex shall be excluded from participation in the project. Further, by acceptance of the Agreement, the Subrecipient ensures NRAO and the National Science Foundation that it will comply with Section 504 of the Rehabilitation Act of 1973 (29 USC 794) and the Foundation's implementing regulations (45 CFR 605) effective March 1, 1982.
- 2. The Subrecipient shall provide to NRAO within thirty (30) days of award an Assurance of Compliance with Title VI of the Civil Rights Act of 1964. Civil Rights Act assurances may be filed with NRAO in one of two ways: (1) by written notification that the appropriate Assurance of Compliance form has been executed and filed either with the U.S. Department of Health and Human Services; or (2) by executing and filing with NRAO an NSF Assurance of Compliance Form.
- 3. The Subrecipient agrees to comply with the Age Discrimination Act of 1975 as implemented by the Department of Health and Human Service regulations at 45 CFR 90 and the regulations of the Foundation at 45 CFR 617.

4. The Subrecipient, by virtue of its acceptance of this Agreement, ensures NRAO, the National Science Foundation, and the U.S. Department of Labor that it is compliant pursuant to Section 504 of the Rehabilitation Act of 1973.

Article 18. USE OF NAME.

The Subrecipient agrees that it will not use the name of NRAO in any advertising or publicity material, or make any form of presentation or statement in relation to research or testing done at NRAO which would constitute an express or implied endorsement by NRAO of any commercial product or service, and that it will not authorize others to do so, without first having obtained written approval from NRAO. Similarly, NRAO agrees that it will not use Subrecipient's corporate name without its prior written concurrence.

Article 19. ASSIGNMENT

Except for a successor in interest, neither this Agreement nor any interest therein, or claim thereunder, shall be assigned or transferred by the Subrecipient except with the prior written approval of NRAO. NRAO may assign this Agreement in whole or in part to the U.S. Government and in the event of such assignment this Agreement shall continue in full force and effect, notwithstanding the termination of the Cooperative Agreement between the U.S. Government and NRAO. The Subrecipient agrees to look solely to the U.S. Government for payment of the part so assigned; subject to such assignment and acceptance by the U.S. Government this Agreement does not bind or purport to bind the National Science Foundation or the U.S. Government.

Article 20. INDEPENDENT CONTRACTOR

1. In the conduct of the work hereunder the Subrecipient is acting in the capacity of an independent contractor and is not an agent or employee of AUI in the performance of the work. NRAO, however, shall have general direction of the work and the right to control the final result sought to be obtained.
2. The Subrecipient will hold harmless and indemnify the U.S. Government, the National Science Foundation, NRAO and their respective officers, agents and employees from and against any and all liability, including all losses and damages or negligence of the Subrecipient, arising out of or connected with the work.

Article 21. TERMINATION.

1. Termination For Convenience: This Agreement or any work negotiated hereunder may be terminated in whole or in part by NRAO or the Subrecipient at any time upon thirty (30) days prior written notice. In the event of such termination, the Subrecipient shall be paid for any effort accepted by NRAO and approved for payment prior to such termination. No payment shall be paid for services performed after the termination date.
2. Termination For Default: NRAO may terminate this Agreement in whole or in part in the event that the Subrecipient fails or refuses to perform the effort detailed in Appendix A within the time provided, or otherwise violates any of the conditions of this Agreement. Prior to any such decision, NRAO will send a Cure Notice letter to the Subrecipient identifying the deficiencies and requiring a plan to cure them within 10 days. The Subrecipient's response will be reviewed by the NRAO Contracts representative to determine if it's acceptable and whether any adjustments need to be made to the terms of the Agreement. If no remedy can be achieved, NRAO will submit a Termination letter to the Subrecipient, detailing the reasons for termination and its effective date. In case of Termination for Default, the Subrecipient shall be paid for all approved costs incurred prior to notice of termination, as invoiced by the Subrecipient and reviewed and approved by NRAO.

Article 22. DISPUTES.

Any controversy or claim arising out of or relating to this Agreement, or the breach thereof, shall be settled by mediation to occur in Virginia. Pending the final decision of any dispute under or in connection with this Agreement that may arise prior to the completion of performance hereunder, the Subrecipient shall diligently proceed with the performance of its undertakings.

Article 23. NSF'S CA FINANCIAL & ADMINISTRATIVE TERMS AND CONDITIONS (CA-FATC).

This Agreement is subject to Article 8.a.4 of the current and future NSF Cooperative Agreement Financial & Administrative Terms and Conditions (CA-FATC), which requires the inclusion of the following provisions:

1. Consultant Services

Costs of consultants, including those who are members of a particular profession or possess a special skill and who are not officers or employees of the performing organization, are allowable when reasonable in relation to the services rendered. While NSF appropriations no longer identify a limitation on payments to consultants under NSF awards (and subawards), payments should be comparable to the normal or customary fees charged and received by the consultant for comparable services, especially on non-government contracts, grants, and cooperative agreements.

2. Participant Support Costs

- A. Participant support costs are direct costs for items such as stipends or subsistence allowances, travel allowances and registration fees paid to or on behalf of participants or trainees (but not employees) in connection with meetings, conferences, symposia or training projects. (See also NSF Award and Administration Guide (AAG) Chapter V.C.5.) Subrecipient organizations must account for participant support costs separately. Note: No indirect costs normally may be charged against participant support costs. (See AAG Chapter V.D.1b.)
- B. Funds provided for participant support may not be used by Subrecipient for other categories of expense without the specific prior written approval of the NRAO.

3. Procurement Standards

Whether or not approval of a procurement is required under CA-FATC ARTICLE 8.a, where appropriate, the Subrecipient (including commercial organizations) is responsible for compliance with the procurement standards identified in 2 CFR §§ 215.40 through .48. The Subrecipient also is responsible for ensuring that the appropriate NSF and NRAO conditions from this award (including the Audit and Records article) are made a part of any contract or other arrangement whose award amount exceeds the simplified acquisition threshold (currently \$100,000).

4. Travel

A. Allowability of Travel Expenses

- (1) Expenses for transportation, lodging, subsistence and related items incurred by project personnel and by outside consultants employed on the project (see AAG Chapter V.B.4) who are in travel status on business related to an NRAO-supported project are allowable as prescribed in the governing cost principles and in accordance with NRAO Travel policies and procedures.
- (2) Except as provided in the governing cost principles, the difference between economy airfare and a higher-class airfare is unallowable. A train, bus or other surface carrier may be used in lieu of, or as a supplement to, air travel at the lowest first-class rate by the transportation facility used. If such travel, however, could have been performed by air, the allowance will not normally exceed that for jet economy airfare.

B. Travel Support for Dependents of Key Project Personnel

Travel support for dependents of key project personnel is allowable only under the following conditions:

- (1) the individual is a key person who is essential to the project on a full-time basis;
- (2) the individual's residence away from home and in a foreign country is for a continuous period of six months or more and is essential to the effective performance of the project; and

- (3) the dependents' travel allowance is consistent with the policies of the organization administering the award.

C. Use of U.S.-Flag Air Carriers

- (1) In accordance with the Fly America Act (49 USC 40118), any air transportation to, from, between, or within a country other than the U.S. of persons or property, the expense of which will be assisted by NRAO funding, must be performed by or under a code-sharing arrangement with a U.S.-flag air carrier if service provided by such a carrier is available (see Comptroller General Decision B-240956, dated September 25, 1991). Tickets (or documentation for electronic tickets) must identify the U.S. flag air carrier's designator code and flight number.
- (2) For the purposes of this requirement, U.S.-flag air carrier service is considered available even though:
  - (a) comparable or a different kind of service can be provided at less cost by a foreign-flag air carrier;
  - (b) foreign-flag air carrier service is preferred by, or is more convenient for, NRAO or traveler; or
  - (c) service by a foreign-flag air carrier can be paid for in excess foreign currency.
- (3) The following rules apply unless their application would result in the first or last leg of travel from or to the U.S. being performed by a foreign-flag air carrier:
  - (a) a U.S.-flag air carrier shall be used to destination or, in the absence of direct or through service, to the farthest interchange point on a usually traveled route.
  - (b) if a U.S.-flag air carrier does not serve an origin or interchange point, a foreign-flag air carrier shall be used only to the nearest interchange point on a usually traveled route to connect with a U.S. flag air carrier.

D. Use of Foreign-Flag Air Carriers

There are limited circumstances under which use of a foreign-flag air carrier is permissible. These circumstances are outlined below

- (1) Airline "Open Skies" Agreements: A foreign flag air carrier may be used if the transportation is provided under an air transportation agreement between the United States and a foreign government, which the Department of Transportation has determined meets the requirements of the Fly America Act. For example, in 2008, the U.S. entered into an "Open Skies" Agreement with the European Union. This Agreement gives European Community airlines (airlines of Member States) the right to transport passengers and cargo on flights funded by the U.S. government, when the transportation is between a point in the United States and any point in a Member State or between any two points outside the United States. In accordance with the Agreement, however, a U.S.-flag air carrier must be used if: (a) transportation is between points for which there is a city-pair contract fare in effect for air passenger transportation services; or (b) transportation is obtained or funded by the Secretary of Defense or the Secretary of a Military Department. The conditions for use of a Member State airline apply to non-Federal employees as well (e.g., Subrecipients). So, even though Subrecipients are ineligible for city-pair contract fares, they must still use a U.S.-flag air carrier if a city-pair contract fare exists. For information on other "open skies" agreements in which the United States has entered, please refer to GSA's website at <http://www.gsa.gov/portal/content/103191>.

- (2) Involuntary Rerouting: Travel on a foreign-flag carrier is permitted if a U.S.-flag air carrier involuntarily reroutes the traveler via a foreign-flag air carrier, notwithstanding the availability of alternative U.S.-flag air carrier service.
- (3) Travel To and From the U.S. - Use of a foreign-flag air carrier is permissible if the airport abroad is:
  - (a) the traveler's origin or destination airport, and use of U.S.-flag air carrier service would extend the time in a travel status by at least 24 hours more than travel by a foreign-flag air carrier; or
  - (b) an interchange point, and use of U.S.-flag air carrier service would increase the number of aircraft changes the traveler must make outside of the U.S. by two or more, would require the traveler to wait four hours or more to make connections at that point, or would extend the time in a travel status by at least six hours more than travel by a foreign-flag air carrier.
- (4) Travel Between Points Outside the U.S. Use of a foreign-flag air carrier is permissible if:
  - (a) travel by a foreign-flag air carrier would eliminate two or more aircraft changes en route;
  - (b) travel by a U.S.-flag air carrier would require a connecting time of four hours or more at an overseas interchange point; or
  - (c) the travel is not part of the trip to or from the U.S., and use of a U.S.-flag air carrier would extend the time in a travel status by at least six hours more than travel by a foreign-flag air carrier.
- (5) Short Distance Travel. For all short distance travel, regardless of origin and destination, use of a foreign-flag air carrier is permissible if the elapsed travel time on a scheduled flight from origin to destination airport by a foreign-flag air carrier is three hours or less and service by a U.S.-flag air carrier would double the travel time.

5. Rearrangements and Alterations

- A. Rearrangement and alteration costs that do not constitute construction (i.e., rearrangements and alterations aggregating less than \$25,000) to adapt space or utilities within a completed structure to accomplish the objectives of the award, are allowable and approved, provided the:
  - (1) building has a usable life consistent with project purposes and is architecturally suitable for conversion;
  - (2) rearrangements and alterations are essential to the project; and
  - (3) space involved will be occupied by the project.
- B. Rearrangements and alterations (construction) aggregating \$25,000 or over require the prior written approval of the NRAO Contracts representative.

6. Allowable Costs

- A. The allowability of costs and cost allocation methods for work performed under this award, up to the amount specified in the award, shall be determined in accordance with the applicable Federal cost principles in effect on the effective date of the award. and the terms and conditions of the award terms and conditions of this Agreement are subject to applicable law and regulations, the terms and conditions of the prime agency, and to OMB Circulars A-110 (2 CFR Part 215), A-122 and A-133, as appropriate.
- B. The Federal cost principles applicable to specific types of Subrecipients are contained in:

- (1) 2 CFR Part 220, Cost Principles for Educational Institutions (OMB Circular A-21);
- (2) 2 CFR Part 225, Cost Principles for State, Local, and Indian Tribal Governments (OMB Circular A-87);
- (3) 2 CFR Part 230, Cost Principles for Nonprofit Organizations (OMB Circular A-22);
- (4) Federal Acquisition Regulation 31.2 (48 CFR § 31.2) for commercial firms and those non-profit organizations specifically exempted from the provisions of OMB Circular A-122; and
- (5) 45 CFR Part 74, Appendix E, “*Principles for Determining Costs Applicable to Research and Development Under Grants and Contracts with Hospitals,*” for hospitals.

C. Subrecipient will submit Fiscal Year audit report copies to NRAO.

- (1) Subrecipient further agrees to provide awarding institution with copies of any of the independent auditors’ reports which present instances of non-compliance with federal law and regulations that bear directly on the performance or administration of this Agreement. In cases of non-compliance, Subrecipient will provide copies of responses to the auditors’ reports and a plan for corrective action. All reports prepared in accordance with the requirements of OMB Circular A-133 shall be available for inspection by representatives of government appointed designee during normal business hours.

7. Information Collection

Information collection activities performed under this Agreement are the responsibility of the NRAO and Subrecipient, and NRAO support of the project does not constitute NRAO approval of the survey design, questionnaire content or information collection procedures. The Subrecipient shall not represent to respondents that such information is being collected for or in association with the National Science Foundation or any other Government agency without the specific written approval of such information collection plan or device by the Foundation and NRAO. This requirement, however, is not intended to preclude mention of NSF and NRAO support of the project in response to an inquiry or acknowledgment of such support in any publication of this information.

8. Responsible Conduct of Research

In accordance with Section 7009 of the America Creating Opportunities to Meaningfully Promote Excellence in Technology, Education, and Science (COMPETES) Act (42 U.S.C. 1862o-1) NRAO requires that Subrecipient must have a plan in place to provide appropriate training and oversight in the responsible and ethical conduct of research (RCR) to undergraduates, graduate students, and postdoctoral researchers who will be supported by NRAO to conduct research. Training plans are subject to review, upon request.

Subrecipient must designate one or more persons to oversee compliance with the RCR training requirement. Subrecipient is responsible for verifying that undergraduate students, graduate students, and postdoctoral researchers supported by NRAO to conduct research have received training in the responsible and ethical conduct of research, in accordance with the plan the Subrecipient has put in place for their organization.

Subrecipient shall ensure that these RCR requirements flow down, or are otherwise appropriately addressed in the subaward instrument.

9. Program Income

- A. Definition. Program income means gross income earned by the Subrecipient that is directly generated by a supported activity or earned as a result of the Agreement. Program income includes, but is not limited to, income from fees for services performed, the use or rental of real or personal property acquired under the Agreement, the sale of commodities or items fabricated under the Agreement, license fees and royalties on patents and copyrights, and interest on loans made with award funds. Interest earned on advances of Federal funds is not program income.

Program income does not include the receipt of principal on loans, rebates, credits, discounts, etc., or interest earned on any of them.

- B. **Standard Treatment.** Unless otherwise specified in the Agreement, program income (except as noted in (1) below) received or accrued to the Subrecipient during the period of this Agreement shall be retained and added to the funds committed to the project by NRAO and used to further project objectives. Also, unless otherwise specified, the Subrecipient shall have no obligation to NRAO with respect to: (1) license fees and royalties for copyrighted material, patents, patent applications, trademarks, and inventions received or accrued at any time; or (2) program income received beyond the period of this Agreement.
- C. **Records Retention.** The Subrecipient is required to retain appropriate financial and other records relating to project income earned during the Agreement period and for three years (3) beyond the end of the Agreement period.

## 10. Cost Sharing and Cost Sharing Records

### a. *General*

1. The Subrecipient must cost share in accordance with any amount specified on the award budget. Cost sharing participation in other projects may not be counted towards meeting the specific cost sharing requirements of the award, and must come from nonfederal sources.
2. Should the Subrecipient become aware that it may be unable to provide the cost sharing of at least the amount identified on the award budget, it must: a) immediately provide written notification to the Contracts representative of the situation; and b) indicate steps it plans to take to secure replacement cost sharing; or c) indicate the plans it has to either continue or phase out the project in the absence of cost sharing.
3. Should NRAO agree to the organization's proposed plans, the NRAO Contracts representative will modify the award accordingly, including, if appropriate, reducing the amount of NRAO support. Should the organization's plans be unacceptable to NRAO, the award may be subject to termination. NRAO modifications to proposed cost sharing revisions are made on a case-by-case basis.
4. Failure by the organization to notify NRAO, in accordance with paragraph 2. above, may result in the disallowance of some or all of the costs charged to the award; the subsequent recovery by NRAO of some or all of the NRAO funds provided under the award; possible termination of the award; and may constitute a violation of the terms of the award so serious as to provide grounds for subsequent suspension or debarment.

### b. *Cost Sharing Records*

The Subrecipient must maintain records of all project costs that are claimed by the Subrecipient as cost sharing as well as records of costs to be paid by the Government. Such records are subject to audit. Acceptable forms of cost sharing contributions are those that meet the criteria identified in [2 CFR § 215.23](#). Unless otherwise specified in the award, approval is given to include unrecovered indirect costs (also known as facilities and administrative costs for colleges and universities) as part of cost sharing or matching contributions. If the Subrecipient's cost participation includes in-kind contributions, the basis for determining the valuation for volunteer services and donated property must be documented.

### c. *Cost Sharing Reports*

Unless otherwise required by the award or requested by NRAO, the actual cost participation by the Subrecipient, while subject to documentation and audit, need not be reported to NRAO. In cases, however, where the cost-sharing amount reflected on Line M of the cumulative award budget is \$500,000 or more, the amount of cost sharing must be documented (on an annual and final basis) and certified by the Authorized Organizational Representative via use of the Notification and Request Module in the NSF FastLane System. Such notifications must be submitted at least 90 days:

1. prior to the end of the current budget period to meet the annual notification requirement; and
2. following the expiration of the award to meet the final notification requirement.



11. Audit and Records

a. Financial records, supporting documents, statistical records, and other records pertinent to this award shall be retained by the Subrecipient for a period of three years from submission of the final project and expenditure reports specified in other articles.

1. Records that relate to audits, appeals, litigation or the settlement of claims arising out of the performance of the project shall be retained until such audits, appeals, litigation or claims have been disposed of.
2. Records relating to projects subject to special project income provisions shall be retained until three years from the end of the Subrecipient's fiscal year in which the award requirement for reporting income expires.

b. Unless court action or audit proceedings have been initiated, the Subrecipient may substitute microfilm copies of original records.

c. The Director of the National Science Foundation and the Comptroller General of the U.S., or any of their duly authorized representatives, shall have access to any pertinent books, documents, papers and records of the Subrecipient organization and of the performing organization, if different, to make audits, examinations, excerpts and transcripts. Further, any negotiated contract in excess of the simplified acquisition threshold (currently \$100,000) made by the Subrecipient shall include a provision to the effect that the Subrecipient, the Director of the National Science Foundation, the Comptroller General of the U.S., or any of their duly authorized representatives, shall have access to pertinent records for similar purposes.

d. In order to avoid duplicate record keeping, NRAO may make special arrangements with the Subrecipient to retain any records that are needed for joint use. NRAO may request transfer to its custody of records not needed by the Subrecipient when it determines that the records possess long-term retention value. When the records are transferred to, or maintained by NRAO, the three-year retention requirement is not applicable to the Subrecipient. In the rare event that this provision is exercised, NRAO will negotiate a mutually agreeable arrangement with the Subrecipient regarding reimbursement of costs.

e. "Awardees that are States, Local Governments or Non-Profit Organizations," such as NRAO, shall arrange for the conduct of audits as required by OMB Circular A-133 "*Audits of States, Local Governments, and Non-Profit Organizations*" (including colleges and universities). They shall provide copies of the reports of these audits to the cognizant Federal audit agency. Any Federal Audit of this project deemed necessary by NRAO shall build upon the results of such audit(s). NRAO must ensure that subrecipients expending \$500,000 or more in Federal awards during the subrecipient's fiscal year have met audit requirements in accordance with OMB Circular A-133. Failure by the Subrecipient to submit the audit report or documents required by OMB Circular A-133 may result in withholding of funding or delay in award until audit requirements are met. NRAO will issue a management decision on any audit findings within six months after receipt of the Subrecipient's audit report and ensure that the Subrecipient takes appropriate and timely corrective action. Subrecipient will permit NRAO and auditors to have access to the audit records and financial statements as necessary for NRAO to comply with OMB Circular A-133.

12. Site Visits

NRAO, through authorized representatives, has the right, at all reasonable times, to make site visits to review project accomplishments and management control systems and to provide such technical assistance as may be required. If any site visit is made by NRAO on the premises of the Subrecipient or a contractor under an award, the Subrecipient shall provide and shall require its contractors to provide all reasonable facilities and assistance for the safety and convenience of the Government representatives in the performance of their duties. All site visits and evaluations shall be performed in such a manner that will not unduly delay the work.

13. Nondiscrimination

- A. The Agreement is subject to the provisions of Title VI of the Civil Rights Act of 1964 [42U.S.C. § 2000d], Title IX of the Education Amendments of 1972 [20 USC §§ 1681 *et seq.*], the Rehabilitation Act of 1973 [29 U.S.C. § 794], the Age Discrimination Act of 1975 [42 U.S.C. §§ 6101 *et seq.*], and all regulations and policies issued by NRAO pursuant to these statutes.

Specifically, in accordance with these statutes, regulations, and policies, no person on the basis of race, color, national origin, sex, disability, or age shall be excluded from participation in, be denied the benefits of, or otherwise be subjected to discrimination under the award.

- B. By electronically signing a proposal, the Authorized Organizational Representative is providing the requisite Certification of Compliance with National Science Foundation Nondiscrimination Regulations and Policies. This Nondiscrimination Certification sets forth the nondiscrimination obligations with which all Subrecipients must comply.<sup>5</sup> These obligations also apply to Subrecipient and subcontractors under the award. The Subrecipient, therefore, shall obtain the NSF Nondiscrimination Certification from each organization that applies to be or serves as a Subrecipient, sub awardee or subcontractor under the award (for other than the provision of commercially available supplies, materials, equipment or general support services) prior to entering into the subaward arrangement.

14. Reporting Classifiable Information

NRAO awards are intended for unclassified, publicly releasable research. The Subrecipient will not be granted access to classified information. NRAO not expect that the results of the research project will involve classified information. If, however, in conducting the activities supported under an Agreement, the PI is concerned that any of the research results involve potentially classifiable information that may warrant Government restrictions on the dissemination of the results, the PI should promptly notify the cognizant NRAO Contracts representative.

15. Animal Welfare

- A. Any Subrecipient performing research on vertebrate animals shall comply with the Animal Welfare Act [7 U.S.C. § 2131 et seq.] and the regulations promulgated thereunder by the Secretary of Agriculture [9 CFR §§ 1.1-4.11] pertaining to the humane care, handling, and treatment of vertebrate animals held or used for research, teaching or other activities supported by Federal awards. The Subrecipient is expected to ensure that the guidelines described in the National Academy of Science (NAS) Publication, “*Guide for the Care and Use of Laboratory Animals*” (1996) are followed and to comply with the *Public Health Service Policy and Government Principles Regarding the Care and Use of Animals* (included as Appendix D to the NAS Guide).
- B. In the event the Subrecipient’s multi-project Assurance is cancelled or lapses, the Subrecipient must immediately notify the cognizant Grants and Agreements Officer identified in the award.

NOTE: The Subrecipient may request registration of its facility and a current listing of licensed dealers from the Regional Office of the Animal and Plant Health Inspection Service (APHIS), United States Department of Agriculture, for the region in which its research facility is located. The location of the nearest APHIS Regional Office, as well as information concerning this and other APHIS activities, may be obtained at <http://www.aphis.usda.gov/>.

16. Research Involving Recombinant DNA Molecules

If this award supports research involving recombinant DNA molecules, the Subrecipient agrees to comply with the requirements of AAG Chapter VI.B.2.

17. Clean Air and Water

(Applicable only if the Agreement exceeds \$100,000, or a facility to be used has been the subject of a conviction under the Clean Air Act [42 U.S.C. § 7413(c)(1)] or the Clean Water Act [33 U.S.C. § 1319(c)] and is listed by the Environmental Protection Agency (EPA), or the Agreement is not otherwise exempt.)

The Subrecipient agrees as follows:

- A. To comply with all the requirements of Section 114 of the Clean Air Act [42 U.S.C. §7414] and Section 308 of the Clean Water Act [33 U.S.C. § 1318], respectively, relating to inspection, monitoring, entry, reports and information, as well as other requirements specified in Section 114 and Section 308 of the Clean Air Act and the Clean Water Act, respectively, and all regulations and guidelines issued thereunder before this Agreement.

- B. That no portion of the work required by the Agreement will be performed in a facility listed on the Environmental Protection Agency List of Violating Facilities on the date that the award was awarded unless and until EPA eliminates the name of such facility or facilities from such listing.
- C. To use its best efforts to comply with clean air standards and clean water standards at the facility in which the Agreement is being performed.
- D. To insert the substance of the provisions of this article into any nonexempt subcontract.

18. Human Research Subjects

The Subrecipient is responsible for the protection of the rights and welfare of any human subjects involved in research, development and related activities supported by this award. The Subrecipient agrees to comply with the NSF regulation, entitled, "*Protection of Human Subjects* [45 CFR Part 690]."

19. Investigator Financial Disclosure Policy

If the Company employs more than 50 persons, the Subrecipient shall maintain an appropriate written and enforced policy on conflict of interest consistent with the provisions of AAG Chapter IV.A.

20. State Sales and Use Taxes

Subrecipients are reminded that each set of cost principles cited in the Allowable Costs Article limits the allowability of taxes to those the organization is required to pay. Subrecipients must avail themselves of any tax exemptions for which any activities supported by Federal funds may qualify, including any applicable exemptions from state or local sales and use taxes on the purchase of goods and services made with NRAO award funds.

21. Debarment and Suspension

Subrecipient shall fully comply with the requirements stipulated in Subpart C of 45 CFR Part 620, entitled "*Responsibilities of Participants Regarding Transactions.*" The Subrecipient is responsible for ensuring that any lower tier covered transaction, as described in Subpart B of 45 CFR Part 620, entitled "*Covered Transactions,*" includes a term or condition requiring compliance with Subpart C. The recipient also is responsible for further requiring the inclusion of a similar term or condition in any subsequent lower tier covered transaction. The recipient acknowledges that failing to disclose the information required under 45 CFR § 620.335 may result in the termination of the Agreement, or pursuance of other available remedies, including suspension and debarment. Subrecipient may access the Excluded Parties List System at [www.sam.gov](http://www.sam.gov).

22. Sharing of Findings, Data, and Other Research Products

- A. NRAO expects significant findings from research and education activities it supports to be promptly submitted for publication, with authorship that accurately reflects the contributions of those involved. It expects investigators to share with other researchers at no more than incremental cost and within a reasonable time, the data, samples, physical collections and other supporting materials created or gathered in the course of the work. It also encourages Subrecipients to share software and inventions or otherwise act to make the innovations they embody widely useful and usable.
- B. Adjustments and, where essential, exceptions may be allowed to safeguard the rights of individuals and subjects, the validity of results, or the integrity of collections or to accommodate legitimate interests of investigators.

23. Partnerships with Foreign Collaborators

- A. The Subrecipient shall provide written notification to the cognizant NRAO Contracts representative prior to entering into formal arrangements with foreign collaborators. In the notification, the Subrecipient should specify: the projects and individuals involved; the purpose of the cooperative program; the proposed duration; location; and, the magnitude of the proposed activity.
- B. This provision is not intended to require notifications to the NRAO of the routine use of Subrecipient services and facilities by foreign investigators or foreign students, or the routine use of foreign facilities by project staff in accordance with the Subrecipient's standard policies and procedures.

24. Government Permits and Activities Abroad

- A. For Agreements that include activities requiring permits from appropriate Federal, state, or local government authorities, the Subrecipient should obtain any required permits prior to undertaking the proposed activities.
- B. The Subrecipient must comply with the laws and regulations of any foreign country in which research is to be conducted. Areas of potential concern include: (1) requirements for advance approval to conduct research or surveys; (2) special arrangements for the participation of foreign scientists and engineers; and (3) special visas for persons engaged in research or studies. NRAO and NSF do not assume responsibility for Subrecipient compliance with the laws and regulations of the country in which the work is to be conducted.
- C. The Subrecipient also should assure that activities carried on outside the U.S. are coordinated as necessary with appropriate U.S. and foreign government authorities and that necessary licenses, permits or approvals are obtained prior to undertaking the proposed activities.

25. Sense of the Congress on Use of Funds

Recent Acts making appropriations to NSF provide “It is the sense of the Congress that, to the greatest extent practicable, all equipment and products purchased with funds made available in this Act should be American-made” and require NRAO to notify Subrecipient of that statement.

26. Increasing Seat Belt Use in the United States

In accordance with Executive Order 13043, *Increasing Seat Belt Use in the United States*, dated April 16, 1997, “[Subrecipients] are encouraged to adopt and enforce on-the-job seat belt policies and programs for their employees when operating company-owned, rented, or personally owned vehicles.”

Article 24. GENERAL.

1. This Agreement constitutes the entire and only agreement between the parties relating to the work that is covered by the attached Statement of Work and supported with funds provided by this Agreement, and all prior negotiations, representations, agreements and understandings are superseded hereby.
2. No agreements altering or supplementing the terms hereof may be made except by means of a written document signed by the duly authorized representatives of the parties.
3. **LIABILITY AND INSURANCE:** Each party shall be acting as independent contractors in the performance of this work, and shall be responsible for the payment of claims for loss, personal injury, death, property damage, or otherwise arising out of any act or omission of their respective employees or agents in connection with the performance of this work for which they may be held liable under applicable law. Each party shall maintain at its sole expense adequate insurance or self-insurance coverage to satisfy its obligations under this Agreement.

**NO WARRANTIES: THIS RESEARCH IS EXPERIMENTAL IN NATURE. EXCEPT AS EXPRESSLY SET FORTH IN THIS AGREEMENT, NRAO MAKES NO REPRESENTATIONS AND EXTENDS NO WARRANTIES OF ANY KIND, EITHER EXPRESS OR IMPLIED WITH REGARD TO THE RESEARCH. THERE ARE NO EXPRESS OR IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR THAT SUBRECIPIENT USE OF THE RESEARCH DELIVERABLES OR INTELLECTUAL PROPERTY WILL NOT INFRINGE ANY THIRD PARTY PATENT, COPYRIGHT, TRADEMARK, OR OTHER THIRD PARTY RIGHTS. NRAO MAKES NO REPRESENTATION AS TO THE USEFULNESS OF RESEARCH DELIVERABLES OR INTELLECTUAL PROPERTY. IF SUBRECIPIENT CHOOSES TO EXPLOIT RESEARCH DELIVERABLES OR INTELLECTUAL PROPERTY IN ANY MANNER WHATSOEVER, SUBRECIPIENT DOES SO AT ITS OWN RISK.**

4. **UNAUTHORIZED REPRESENTATIONS:** NRAO and Subrecipient shall incur no obligations pertaining to this Agreement as a result of any promise, representation, or statement by anyone without the actual authority to do so.

5. **MODIFICATIONS AND NEGOTIATIONS:** No waiver, alteration or modification of the provisions in this Agreement shall be binding unless in writing and mutually agreed upon. This Agreement may be executed by Facsimile. The parties agree that Facsimile copies of signatures have the same effect as original signatures.
6. **APPLICABLE LAWS:** This Agreement shall be governed in all respects by the laws of the Commonwealth of Virginia and applicable Federal laws, rules and regulations. Any legal action involving this Agreement or the Research will be adjudicated in the Commonwealth of Virginia.
7. NRAO and Subrecipient shall not make any claims against each other for a failure to observe any condition herein made binding in the event that such condition is contrary to or inconsistent with any law, rule or regulation of the United States, the NSF Cooperative Agreement or the Commonwealth of Virginia.
8. **FORCE MAJEURE:** Neither party will be liable for any failure to perform as required by this Agreement if the failure to perform is caused by circumstances reasonably beyond its control, such as labor disturbances or labor disputes of any kind, accidents, failure of any governmental approval required for full performance, civil disorders or commotions, acts of aggression, acts of God, energy or other conservation measures, explosions, failure of utilities, mechanical breakdowns, material shortages, disease, thefts, or other such occurrences.
9. **SEVERABILITY:** Each paragraph and provision of this Agreement is severable from the entire Agreement; and if any provision is declared invalid, the remaining provisions shall nevertheless remain in effect.
10. **ASSIGNMENT:** Neither this Agreement nor any right, remedy, obligation or liability arising hereunder or by reason hereof shall be assigned by NRAO or Subrecipient without the prior written consent of the other.
11. **WAIVER:** No failure or successive failures on the part of either party to enforce any covenant or agreement, and no waiver or successive waivers of any condition of this Agreement, shall operate as a discharge of such covenant, agreement, or condition, or render the same invalid, or impair the right of either party to enforce the same in the event of any subsequent breach or breaches. No failure on the part of either party to this Agreement to exercise, and no delay in exercising, any right, power, or remedy under this Agreement shall operate as a waiver thereof, nor shall any single or partial exercise of any right under this Agreement preclude any other or further exercise thereof or the exercise of any other right.
12. **RIGHTS AND OBLIGATIONS:** Subrecipient agrees to comply, and do all things necessary for NRAO to comply, with all applicable Federal, State and local laws, regulations and ordinances, insofar as they relate to the support.

Article 25. **NOTICES.** All notices or other administrative documents shall be directed as follows:

To: **NAME OF UNIVERSITY**  
**ADDRESS LINE 1**  
**ADDRESS LINE 2**  
**Attn: ADMIN CONTACT**  
**Phone: NUMBER**  
**Email: EMAIL OF ADMIN POC**

To: Associated Universities, Incorporated  
National Radio Astronomy Observatory  
Contracts and Procurement Office  
520 Edgemont Road  
Charlottesville, VA 22903-2475  
Phone: (434) 296-0279  
Fax: (434) 296-0226

**ENTIRE AGREEMENT:** This Agreement, together with any attachments hereto and any amendment or modification that may hereafter be agreed to by the parties, constitute the entire understanding between the parties with respect to the subject-matter hereof and supersede any and all prior understandings and agreements, oral or written, relating hereto.

**NAME OF UNIVERSITY**

BY: \_\_\_\_\_

NAME: \_\_\_\_\_

TITLE: \_\_\_\_\_

DATE: \_\_\_\_\_

NATIONAL RADIO ASTRONOMY  
OBSERVATORY, on behalf of ASSOCIATED  
UNIVERSITIES, INC.

BY: \_\_\_\_\_

NAME: \_\_\_\_\_

TITLE: \_\_\_\_\_

DATE: \_\_\_\_\_

EXHIBIT 1

Statement of Work

**Student Observing Support research, award number AWARD NO.**

**Requesting Investigator**

Name:

**Student**

Name of student:

DESCRIPTION OF WORK

## EXHIBIT 2

### Budget