AGREEMENT/CONTRACT N00001634C

Between the

ASSOCIATION OF UNIVERSITIES FOR RESEARCH IN ASTRONOMY, INC.

Operating the National Solar Observatory (NSO)

And

TBD

For the

The DKIST INFRARED CAMERA SENSORS

For

THE DANIEL K. INOUYE SOLAR TELESCOPE (DKIST) HALEAKALĀ OBSERVATORY, MAUI, HAWAI'I"

DRAFT

ASSOCIATION OF UNIVERSITIES FOR RESEARCH IN ASTRONOMY, INC.

AGREEMENT NO. N00001634C

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ATTACHMENT A: STATEMENT OF WORK ATTACHMENT B: SPECIFICATIONS

ASSOCIATION OF UNIVERSITIES FOR RESEARCH IN ASTRONOMY, INC.

AGREEMENT NO. N00001634C

THIS CONTRACT is entered into as of [TBD] between the Association of Universities for Research in Astronomy, Inc., a nonprofit corporation (AURA), organized and existing under the laws of the State of Arizona and having its principal office in Washington, DC, acting through its National Solar Observatory (NSO) located at 950 North Cherry Avenue, Tucson, AZ 85719, and TBD hereinafter referred to as the "Parties."

RECITALS

Whereas: AURA is a consortium of universities funded by the National Science Foundation (NSF), an independent agency of the United States of America. AURA is engaged in the management and operation of world class observatories and related activities in the field of astronomy, including the National Solar Observatory and its Daniel K. Inouye Solar Telescope (DKIST), under Cooperative Agreement AST-0946422, CFDA #47.049, CSA AST-1400450.

Whereas: AURA has funding available for the development, design, analysis, procurement, fabrication, acceptance testing, packaging, transportation, delivery, and warranty of the **DKIST Infrared Camera Sensor** ("Sensor") and all included components, as specified by the attached Statement of Work, IRCAM.SENS.SOW-002 and as required by this document.

Whereas: AURA wishes to enter into a contract with Contractor to perform the Work and services as specified in the Statement of Work, and in accordance with the terms and conditions of this Agreement.

NOW, THEREFORE, in consideration of the mutual covenants contained herein, the Parties hereto mutually agree as follows:

Article 1.0 - Contract Documents

- 1.1 This Contract is made up of the following documents, which are hereby incorporated in this document by reference:
 - a) Main Document (this document, including Terms and Conditions)
- b) Statement of Work IRCAM.SEN.SOW-002 (Attachment A)
- c) Infrared Sensor Specification IRCAM.SEN.SPEC-004 (Attachment B)
- d) Proposal
- 1.2 The provisions of these documents shall be construed in a manner consistent with each other, and wherever possible, as provisions in addition to those set forth in the other portions of this Contract, rather than as substitute or conflicting provisions. In the event of an irreconcilable conflict between the provisions of any of the documents that make up this Contract, the terms of a document that appears higher on the numbered list immediately above shall control over the terms of a document that is lower on this list.

Article 2.0 - Points of Contact

2.1 AURA Contracts Officer. The initial AURA Contracts Officer, who is responsible for all administrative and legal issues related to this contract (see Terms and Conditions), is: Barbara Peterman: <u>bpeterman@aura-astronomy.org</u> Phone: (520) 318-8383

2.2 AURA Technical Representative. This term refers to the person who will serve as NSO's single point of contact for all technical and management matters related to the Work: [TBD]

2.3 Contractor Administrative Representative. This term refers to the person authorized by Contractor to handle administrative and financial matters related to this contract and to sign contracts and contract modifications for Contractor. The initial Contractor Administrative Representative shall be: [TBD]

2.4 Contractor Technical Representative. This term refers to the person who will manage the Work for Contractor and who will serve as Contractor's single point of contact for all technical and management matters related to the Work. The person serving as the Technical Representative may not be changed without the prior notification to the AURA Technical Representative. The initial Technical Representative shall be: [TBD]

Article 3.0 - Scope of Work.

Contractor shall perform the Work as described in the Statement of Work (SOW) titled **DKIST Infrared Camera Sensor.**

- 3.1 The detailed Statement of Work set forth in Attachment A sets forth obligations of the parties relative to
 - a) Purpose and Scope
 - b) Schedule
 - c) Management and Supervision
 - d) Technical Work
 - e) Reporting and Documentation
 - f) Deliverables

Article 4.0 - Period of Performance.

The Contractor shall commence the Work described in Article 3 above and Attachment A on the date the Contract is executed by both parties. Substantial completion of said Work shall be completed by (date). The foregoing time period (period of performance) may be extended beyond the completion time frame for reasons outside Contractor's control. Extensions to the Period of Performance will not be unreasonably withheld by AURA and will be specified by the mutual agreement of the parties, inwriting.

Article 5.0 - Schedule Milestones.

Key dates and milestones are described in Section 1.4 of the Statement of Work.

Phase	Deliverable	Month	
Phase 1:	Kick-off Meeting	1	
Planning and	Project Plan		
Development	Progress Report		
Phase 2:	Preliminary Design	7	
Preliminary	Documentation		
Design	Preliminary Design Review		
	Progress Report		
Phase 3:	Critical Design	16	
Critical Design	Documentation		
	Critical Design Review		
	Progress Report		
Phase 4:	Inspection and Test Reports	20	
Production	Warranty		
	Progress Report		
	Ten (10) Sensors		

Table 1. Phase Deliverables

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Article 6.0 - Contract Price.

In exchange for satisfactory performance and completion of all the Work, AURA will pay Contractor the fixed price of USD xxxxxxxx (The "Contract Price"), upon successful completion of the statement of work. This amount includes the following:

- a) Labor
- b) Equipment/parts
- c) Overhead/indirect costs

Article 7.0 - Invoicing and Payments to the Contractor.

The Contractor shall be entitled to invoice AURA for the Contract Price upon successful completion of the following:

Milestone	Month	Value (\$ or %)	Cumulative Value
1-			
2-			
3-			
4-			

Invoices should be submitted upon completion of each Phase of Work, as described in the SOW. Invoices shall be submitted by email to the AURA Contracts Officer. To be considered complete, the invoice shall: (1) reference AURA Agreement No. N00001634C; (2) state the time period covered by the invoice; (3) set forth the milestone for which Contractor is requesting payment; and (4) give a brief description of the actual tasks or steps accomplished during such time. Only a complete invoice shall be processed for payment.

Each invoice presented for payment must bear the following certification:

"We acknowledge that the above statement is just and correct to the best of our knowledge and belief; that payment therefore has not been received; that it has been prepared from the books of account and records of the Contractor and unencumbered title to the material and work completed represented herein rests in the Contractor."

TERMS & CONDITIONS

Article 8.0 - COMMUNICATION

All communications concerning administration of this Agreement must be furnished solely to the AURA Contracts Officer at the address given in this Agreement. Communications of a technical nature only may be directed to the AURA Technical Representative designated by the AURA Contracts Officer.

Article 9.0 - ELECTRONIC AND FAX SIGNATURES.

WRITTEN COMMUNICATIONS

- 9.1 Documents relating to this Agreement may be effectively signed by either: (1) Electronically signing a PDF file using the Adobe Acrobat Digital Signature Tool; (2) Signing a hard copy and then either faxing it to the recipient or scanning it and emailing it to the recipient as a scanned document; or (3) Sending an original hard copy.
- 9.2 When this Agreement requires that something be "in writing," an email communication is sufficient to meet this requirement.

Article 10.0 - PUBLICITY

Contractor shall not publicize or advertise in any manner anything relating to this Agreement without obtaining prior written approval from AURA for each publicity/advertising item. AURA may require acknowledgements of its sponsors as a condition of approval.

Article 11.0 - PUBLICATIONS

- 1. The Contractor is responsible for assuring that an acknowledgment of NSF support is made:
- In any publication (including World Wide Web pages) of any material based on or developed under this contract, in the following terms: "This material is based upon work supported by the National Science Foundation under Cooperative Agreement No. AST- 0946422."
- 3. NSF support also must be verbally acknowledged during all news media interviews, including popular media such as radio, television, and newsmagazines.
- 11.2 The Contractor 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."
- 11.3 The Contractor is responsible for assuring that two copies of every publication of material based on or developed under this award, clearly labeled with the cooperative agreement number and other appropriate identifying information, are sent to the cognizant NSF Program Officer promptly after publication. The Program Officer's name and email address can be requested from the AURA ContractOfficer.
- 11.4 All reports and publications resulting from this Contract are encouraged to use the metric system of weights and measures.

Article 12.0 - COPYRIGHTABLE MATERIAL

12.1 The term "Subject Writing" refers to any copyrightable material which is produced by

Contractor in the course of performing the Work under this Agreement or which otherwise arises out of the Work and which is either delivered to AURA or is distributed to any persons other than Contractor's personnel and agents. Subject Writings include such items as reports, books, journal articles, software, databases, sound recordings, photographs, artwork, and videotapes.

- 122 Except as otherwise specified in this Agreement, the Contractor may own or permit others to own the copyright in all Subject Writings. Contractor agrees that if it or anyone else does own copyright in a Subject Writing, then for each Subject Writing: AURA, and any subsequent organization operating AURA, shall have nonexclusive, transferable, irrevocable, royalty- free license to exercise throughout the world all rights provided by copyright for research purposes. These licenses, however, will not include the right to sell copies of the copyrighted works to the public.
- 123 Contractor agrees to acquire, through written agreement or an employment relationship, the ability to comply with the requirements of the preceding paragraphs. The Contractor 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 section.
- 124 Any and all Information furnished to Contractor by or on behalf of AURA shall remain the sole property of AURA and shall be used by Contractor only in connection with Contractor's performance of Work under this Agreement. Contractor shall not, without the prior express written consent of AURA, disclose or reveal such Information or any portion thereof to any person not employed by Contractor in performance under this Agreement (except designated authorized representatives of AURA) or utilize such Information for any purpose other than such performance; provided, however, that such restriction on disclosure shall not apply to Information which:
 - 1. was or becomes part of the public domain otherwise than through any act or omission on the part of Contractor.
 - 2. was already in the possession of the Contractor at the time of its receipt of such Information without any restrictions on disclosure; or
 - 3. was acquired by Contractor from a third party (other than from a representative of AURA) without any undertaking of confidentiality imposed on or by the disclosing party. Contractor shall take all precautions reasonably desirable and necessary to safeguard the Information and comply with the provisions of the preceding sentence. Upon the earlier of termination of this Agreement for any reason, or as requested by AURA at any time, Contractor shall promptly deliver all Information to AURA that has been provided to Contractor by or on behalf of AURA.
- 125 Contractor may retain the entire right, title, and interest of any and all Information first developed, acquired, or produced by Contractor related to the Work or this Agreement, including design documents developed as part of the project; provided, however, that with respect to any Information in which Contractor retains title:

- 1. AURA, or any organization that succeeds it as the Managing Organization, shall have a nonexclusive, non-transferable, irrevocable, paid-up license to use or have used on their behalf, for all purposes throughout the world, and
- 2. each of the Parties shall have a non-exclusive, non-transferable, irrevocable, paid-up license to use or have used on their behalf such Information throughout the world for research purposes. AURA, any organization that succeeds it as the Managing Organization, may translate, duplicate, reproduce, distribute, and disclose in any manner and for any purpose all such Information.
- 126 Proprietary information acquired, developed, or produced by Contractor prior to the date of this Agreement that was not acquired, developed, or produced by Contractor for any purposes related to this project, shall not be deemed to be "Information" under this Agreement. To the extent that Contractor incorporates any Proprietary Information into the Work, Contractor hereby grants AURA a non-exclusive, non-transferable, irrevocable, paid-up license to use or have used on their behalf, for all purposes, such Proprietary Information throughout the world. Information shall only be considered "Proprietary Information" if it is clearly marked as such by Contractor. Unless otherwise specified in this Agreement, AURA or any organization that succeeds it as the Managing Organization may translate, duplicate, reproduce, distribute, and disclose in any manner and for any purpose all of such Proprietary Information.

Article 13.0 - PATENT AND COPYRIGHT INFRINGEMENT, USE, AND CONSENT

- 13.1 Contractor shall report to the Contracts Officer, 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 Contractor has knowledge. In the event of any claim or suit against AURA on account of any alleged patent or copyright infringement arising out of the performance of the Work or out of the use of any supplies furnished or Work performed hereunder, Contractor shall furnish to AURA, when requested by the Contract Officer, all evidence and information in possession of the Contractor pertaining to such suit or claim.
- 13.2 The Government of the United States has given its authorization and consent for all use and manufacture of any invention described in and covered by a patent of the United States in the performance of this Agreement or any part hereof or any amendment hereto or any sub-contract hereunder (including any lower-tier subcontract).
- 13.3 Contractor shall pay all royalties and license fees related to this Agreement.

Article 14.0 - PRICES AND PAYMENT LIMIT

Except as specifically noted, the prices given in this Agreement include all charges related to the goods or services provided, including, but not limited to storage, packing, transportation, taxes, overhead, indirect costs, etc. AURA shall not be obligated to reimburse Contractor for any costs in addition to the agreed price unless such costs are specifically listed in this agreement.

Article 15.0 - COMPUTATION OF TIME

Except as expressly provided otherwise in this Contractor Agreement, references to "days" or "weeks" or "months" shall mean calendar days, weeks, or months, respectively, and time periods specified in this Contractor Agreement shall be measured in calendar days, weeks, and months. Whenever the date for the exercise of any right, privilege, remedy, or the discharge of any duty under this Contractor Agreement falls upon a Saturday, Sunday, or any public or legal holiday, the party having the right, privilege, remedy, or duty shall have the time extended until 5:00 p.m., MST on the next succeeding day that is not a Saturday, Sunday, or holiday.

Article 16.0 - INDEPENDENT CONTRACTOR

In performing services under this Agreement, the Contractor shall be deemed an independent contractor and shall not act as nor be an agent or employee of AURA. As an independent contractor, the Contractor will be solely responsible for determining the means and methods of performing the professional and/or technical services described in Article 1 of the Contract and shall have complete charge and responsibility for persons employed by Contractor and engaged in the performance of the specified Work. All the Contractor's activities will be at its own risk, and Contractor is hereby given notice of this responsibility for making arrangements to guard against physical, financial, and other risks as appropriate. Contractor shall observe and abide by all applicable laws and regulations, including, but not limited to, those of AURA relative to conduct on its premises.

Article 17.0 - SMALL AND SMALL DISADVANTAGED SUBCONTRACTING

It is AURA policy that small business concerns and small socially and economically disadvantaged business concerns be given the maximum practicable opportunity to compete for subcontracts in order to assure maximum small business participation consistent with fulfilling AURA's contractual obligations in an efficient and economical manner.

Article 18.0 - INDEMNITY AND INSURANCE

18.1 Contractor shall at all times keep AURA free and clear from all claims, liens, and encumbrances asserted by any person or other entity for any reason whatsoever arising from the furnishing of services under this Agreement. To the fullest extent permitted by law, Contractor shall indemnify, defend, and hold harmless AURA, its directors, officers, employees, agents, representatives, and affiliates (hereinafter collectively referred to as "Indemnified Parties") for, from, and against any and all claims, demands, actions or causes of action, costs, damages, liabilities, injuries, expenses, or losses of any nature whatsoever to which any of the Indemnified Parties may become subject under any theory of liability whatsoever ("Claims") insofar as such Claims (or actions in respect hereof) arise from, are connected with, or are related to: (i) any inaccuracy in or breach of any of Contractor's representations and warranties set forth in this Agreement; or (ii) any intentional misconduct, negligent acts, errors, mistakes, or omissions of Contractor, its officers, employees, agents, or any tier of subcontractor in performing the obligations and the work covered by this Agreement. To the fullest extent permitted by law, AURA shall be responsible for its own negligent acts, omissions, and mistakes, and those of its employees and sub-consultants. Although

Contractor shall defend AURA, in the event of a final determination of joint negligence or other breach of duty between Contractor and AURA, Contractor's total indemnity liability to AURA shall be the percentage determined to be Contractor's share of liability. Every obligation of this indemnification paragraph shall survive the completion of the Work hereunder and the termination of this Agreement.

- 18.2 Contractor shall, at its own expense, during the course of this Agreement, maintain in force at all times insurance to cover its obligations under this Agreement, and such policy shall contain an endorsement to eliminate any exclusions that might operate to prohibit the policy's coverage of the types of claims covered by this Agreement, and such endorsement shall specially cover the terms of this Agreement. Contractor shall name AURA as an additional insured under such Contract of insurance. If self-insured, Contractor will provide a Statement of Self-Insurance. In addition, Contractor shall, at its sole cost and expense, maintain in force at all times during the period of performance the types of insurance designated below with the limits of liability specified. The insurance carrier must be approved by AURA and have an A.M. Best rating of A- or better. If self-insured, Contractor will provide a Statement of Self-Insurance.
 - Workers' Compensation: Statutory limits
 - Comprehensive General Liability: \$1,000,000 each occurrence/\$3,000,000
 - Annual aggregate (including contractual liability)
 - Products/Completed Operations \$X00,000 each occurrence (equal to contract value)

For worked performed under this Agreement on AURA's premises, Contractor will also provide the following coverage (If self-insured, Contractor will provide a Statement of Self-Insurance, including limits, if any):

- Automobile Liability:
- Bodily Injury \$1,000,000 each occurrence
- Property Damage \$1,000,000 each occurrence

Should Contractor take possession of property belonging to AURA that at any time will be in transit, or at a location other than AURA, additional proof of insurance for "personal property of others in the care, custody, and control" shall be provided to AURA. The limit of such coverage will be valued at replacement cost of such property as determined by AURA.

The amount and type of insurance coverage requirements set forth in this Agreement or Statement of Self-Insurance shall in no way be construed as limiting the scope of the indemnity in this Article or be construed to limit Contractor's obligations or liability under this Agreement. Such indemnity shall be required by Contractor from its subcontractors on behalf of AURA.

- 18.3 A Certificate of Insurance or Statement of Self-Insurance evidencing each of the above coverages and requirements shall be delivered to AURA within fifteen (15) days following the date that Contractor receives a fully executed original of this Agreement, or prior to commencement of the Work, whichever occurs first. The certificate(s) shall name AURA, its officers, agents, and employees as additional insureds, and shall provide a forty-five (45) day notice of cancellation. Requests to modify coverage will be delivered to AURA forty-five (45) days prior to the effective date of change, and such modification will require approval by AURA. Certificates shall not be canceled, materially changed, or allowed to expire until forty-five (45) days' prior written notice has been given to AURA.
- 18.4 AURA shall promptly notify the Contractor in writing of any Claim(s) brought against AURA for which Contractor may be responsible under this provision. Upon its receipt of notification of Claim(s) by AURA, Contractor shall promptly take over and defend any such Claim(s) by tendering the Claim(s) to its insurance company for handling. Such insurance coverage shall be primary and shall be used for purposes of satisfying Contractor's obligations hereunder. In the event said Claim(s) is/are not covered by insurance or such insurance is exhausted, Contractor shall directly fulfill its obligations to indemnify, defend, and hold harmless under this provision and take over and defend any such Claim(s). If Contractor fails to assume or maintain control of the defense of any Claim(s) (either through its insurance company or directly), AURA shall have the right to control such defense. In addition, AURA shall have the right and option to represent itself in defense of any such Claim(s) at any time if AURA, in its sole discretion, determines that its rights are not being appropriately defended by Contractor. If AURA controls such defense, Contractor agrees to pay to AURA, promptly upon demand, all reasonable attorneys' fees and other costs and expenses of defense. If Contractor assumes control of such defense and AURA reasonably concludes that Contractor and AURA have conflicting interests or different defenses available with respect to such proceeding, then the reasonable fees and expenses of counsel and the associated costs of such proceeding to AURA shall be considered and included as "expenses" for purposes of this Agreement.
- 18.5 Neither Party hereto shall agree to any settlement of, or the entry of any judgment arising from, any third-party claim involving the other without the prior written consent of the other, which shall not be unreasonably withheld, delayed, or conditioned.

Article 19.0 - WARRANTY

- 19.1 Contractor warrants that the equipment and parts delivered to AURA hereunder meet and satisfies all of AURA's requirements set forth in the Statement of Work (Attachment A).
- 19.2 Contractor warrants that the equipment delivered to AURA hereunder, including all hardware and software will, upon completion of the contract, be free from defects in material or workmanship for two years after delivery and installation. Further, Contractor warrants all labor related to the installation, for a period of five years after installation. Products that are not manufactured by Contractor, but that are purchased by Contractor will be subject to the warranty provisions provided by the equipment manufacturer of such product(s), unless Contractor notifies AURA of any additional warranty provisions

in writing. The obligation of Contractor under this warranty is the repair or replacement of any defective or malfunctioning parts with new or refurbished parts. If Contractor fails to replace or repair such parts, AURA's remedy shall be a refund of the price charged by the manufacturer of the part (whether that be Contractor or a third party) to its dealers for such parts as are proven to be defective. To obtain service under this warranty, AURA must bring the malfunction to the attention of Contractor or one of its authorized dealers during the two-year warranty period.

- 19.3 The Implied Warranty of Merchantability and the Implied Warranty of Fitness for a Particular Purpose under the Arizona Uniform Commercial Code are hereby implied in and applicable to the construction of the instrument by Contractor hereunder to AURA.
- 19.4 Contractor warrants that its performance of the work, including the selection of the equipment to meet AURA's needs and the labor performed in the installation of said equipment, will be carried out with that standard of care, skill, and diligence normally provided by a professional organization in the performance of similar services. Contractor further warrants that the performance of subcontractors at any tier, or any other person assigned by it under this Agreement, shall be in accordance with sound practice and professional standards of its trade and the requirements of this Agreement.

If any portion of the services supplied fails to comply with this warranty, and Contractor is so notified in writing within one (1) calendar year after completion of this Agreement, Contractor will correctly perform such portion of the services at its own expense or, at AURA's option, will refund the amount of the compensation paid for such portion.

Article 20.0 - TERMINATION; SUSPENSION OF WORK; EVENTS UPON TERMINATION

20.1 Termination for Convenience.

AURA shall have the right to terminate performance under this Agreement, in whole or in part, at any time for convenience, by notifying the Contractor in writing at least thirty (30) days in advance of the effective date of termination specified in such notice. The 30- day notice requirement will not apply to an agreement terminated pursuant to Article 1 of the main contract.

- 20.1.1 Upon the termination of this Agreement for convenience, Contractor shall:
 - a. stop work as specified in the notice.
 - b. terminate all subcontracts to the extent they relate to the work terminated.
 - c. settle all outstanding liabilities in conjunction with the termination of subcontracts.
 - d. return to AURA any and all information, documentation, software programs, database tables, configuration files, unit tests, component integration tests, and other items and materials provided by AURA to Contractor.
 - e. make available to AURA for pick up or shall transfer to AURA electrically, as may be applicable, all documents and documentation, information, data, databases, software, source code, parts, goods, materials, equipment, and general intangibles (including all Contractor intellectual property licensed to AURA) purchased, developed, prepared, or provided by Contractor for the purpose of performing the Work;
 - f. take any action that may be necessary for the protection and preservation of the

property related to this Contract that is in the possession of Contractor (including AURA personal Property); and

In the event of termination for convenience, Contractor will be paid for all work incurred as of the date of termination pursuant to the terms set forth above and for all non- cancelable commitments entered into by Contractor in accordance with the terms of this Agreement prior to the date of termination.

20.2 Termination for Default.

20.21 Curable defaults by Contractor. AURA shall have the right to terminate performance under this Agreement at any time for Contractor's default of the terms and conditions of this Agreement by notifying Contractor in writing and giving Contractor thirty (30) days' prior written notice of such default and the opportunity to cure such default. If Contractor fails to cure such default(s), AURA may terminate this Agreement after the expiration of the cure period upon sending written notice of termination to Contractor.

20.22 Curable defaults by AURA. Contractor shall have the right to terminate performance under this Agreement at any time for AURA's default of the terms and conditions of this Agreement, by notifying AURA in writing and giving AURA thirty (30) days' prior written notice of such default and the opportunity to cure such default. If AURA fails to cure such default(s), Contractor may terminate this agreement after the expiration of the cure period upon sending written notice of termination toAURA.

20.23 Suspension of NSF Funding; Termination.

Performance of the Work under this Agreement may be suspended by AURA in the event the NSF suspends funding to AURA. AURA shall suspend this Agreement by providing written notice of such suspension to Contractor. In the event of such suspension, AURA shall be responsible for paying Contractor for all Work incurred as of the date of the suspension of the Work. In the event that the Work is suspended for more than one year, AURA may terminate this Agreement upon written notice to Contractor.

20.24 Error in Termination for Default results in Termination for Convenience. If, after termination of this Agreement due to Contractor's default, it is determined for any reason that the Contractor was not in default under the provisions of this clause, or that the delay was excusable, the rights and obligations of the parties shall be the same as if the notice of termination had been issued pursuant to the termination for convenience clause set forth above.

20.25 Events upon Termination. In addition to any provisions above which specify events upon termination, the following shall be applicable to the termination of this Agreement in accordance with this Article.

In the event of termination of this Agreement for any reason, Contractor will be paid for all Work incurred as of the date of termination pursuant to the terms above and for all noncancelable commitments entered into by Contractor in accordance with the terms of this Agreement prior to the date of termination. In no event shall the liability of AURA exceed the Contract Sum. Notwithstanding the foregoing, AURA may withhold amounts due to Contractor as AURA deems to be necessary to reimburse itself for the excess costs incurred in curing, completing, or procuring similar goods and services and excess costs incurred in AURA's operation because of the breach.

In the event of termination of this Agreement for any reason and upon payment of all sums owed pursuant to this Article, Contractor shall: (i) shall make available to AURA for pick up at Contractor's place of business and/or transfer to AURA electronically all AURA personal property provided to Contractor by AURA, as well as all portions of the Work for which AURA has paid, including, but not limited to all documents and documentation, information, data, data bases, software, source code, parts, goods, materials, equipment and general intangibles (including all Contractor intellectual property licensed to AURA) developed or provided by Contractor for use with or integration into the Project and for which Contractor has been paid by AURA; (ii) provide to AURA all Contractor intellectual property licensed to AURA hereunder; and provide AURA with copies of all documentation prepared in accordance with the Statement of Work.

Article 21.0 - FORCE MAJEURE

Neither Contractor nor AURA shall be liable for failure to fulfill its obligations herein or for delays in performance or delivery, as applicable, due to causes beyond its reasonable control, including, but not limited to: acts of God, natural disasters, acts or omissions of other parties, acts or omissions of civil or military authority, Government shut downs (total or partial), the termination, lapse, or delay in government funding, changes in governmental priorities, changes in law, material shortages, fire, strikes, floods, epidemics, COVID-19, quarantine restrictions, riots, war, or acts of terrorism (hereinafter collectively or singularly referred to as force majeure event). Where there is an event of force majeure, the Party prevented from or delayed in performing its obligations under this contract must immediately notify the other Party giving full particulars of the event of force majeure and the reasons for the event of force majeure preventing that Party from or delaying that Party in performing its obligations under this contract. That Party must use its reasonable efforts to mitigate the effect of the event of force majeure upon its performance of the contract and to fulfill its obligations under the contract.

Upon completion of the event of force majeure, the Party affected must as soon as reasonably practicable recommence performance of its obligations under this contract. In the event of such delay, the date of performance or of delivery shall be extended for a period equal to the time lost by reason of said delay on written approval of AURA.

Contractor shall maintain a log of time lost and the reasons therefore for the periodic review by the Technical Representative. This Agreement shall be amended in writing to reflect a change in the period of performance due to delay. An event of force majeure does not relieve a Party from liability for an obligation that arose before the occurrence of that event. In the event the force majeure event exists for a year or more, either Party hereto may seek to terminate this Agreement without further liability. All costs, including fees, incurred by Contractor as a result of such termination shall be reimbursable including, without limitation, all non-reimbursable costs and non-cancelable commitments incurred prior to the receipt of the termination notice.

Article 22.0 - LABOR DISPUTES

If the Contractor has knowledge that any actual or potential labor dispute is delaying or threatens to delay the timely performance of this agreement, the Contractor shall immediately give written notice, including all relevant information, to AURA. This provision shall be included in all subcontracts issued by Contractor related to the work.

Article 23.0 - ASSIGNMENT

This Agreement shall inure to the benefit of and shall be binding upon the respective successors and assigns of the Parties hereto, but may not be voluntarily assigned in whole or in part by either Party without the prior written consent of the other Party, provided, however, that AURA may assign this Agreement to the United States of America without the permission of the Contractor. Further, unless this Agreement is assigned to the Government, it does not bind or purport to bind the National Science Foundation or the United States of America. AURA may assign its rights under this agreement to either the National Science Foundation or to an organization succeeding it as the operator of the National Solar Observatory.

Article 24.0 - ACCESS TO RECORDS

AURA, the NSF, the Comptroller General of the United States, or any of their duly authorized representatives, shall have access to any books, documents, papers and records of the contractor which are directly pertinent to this agreement for the purpose of making audits, examinations, excerpts and transcriptions.

Article 25.0 - AUDIT AND AVAILABILITY OF RECORDS

AURA is responsible for ensuring that Contractor is in compliance with applicable laws and regulations and other award conditions. AURA, the NSF, the Comptroller General of the United States, or any of their duly authorized representatives shall have access to any books, documents, papers, and records of the Contractor that are directly pertinent to this agreement. Financial reports, supporting documents, and other records pertinent to this agreement shall be retained by Contractor for a period of three (3) years from the date of final payment except that records related to audits, appeals, litigation, or the settlement of claims arising out of performance of this agreement shall be retained until such audits, appeals, litigation, or claims have been resolved.

Notwithstanding any other conditions of this Agreement, the records and financial statements of Contractor shall be made available upon request, at the Contractor's regular place of business, for examination by AURA or their duly authorized representative(s).

Article 26.0 - ARBITRATION

Any controversy or claim arising out of or relating to this Agreement, or the breach thereof, shall be settled by arbitration administered by the American Arbitration Association under its Construction Industry Arbitration Rules, and judgment on the award rendered by the arbitrator(s) may be entered in any court having jurisdiction thereof. All matters within the scope of the Federal Arbitration Act of the United States (9 U.S.C. §§1 et seq.) shall be governed by it. The place of arbitration shall be Tucson, Arizona. The arbitrator shall have the

right to award or include in its award any relief that he or she deems proper in the circumstances, including without limitation, money damages (with interest on unpaid amounts from date due), specific performance, and injunctive relief. The arbitrators shall not have the authority to award exemplary, punitive, or special damages. The award and decision of the arbitrator shall be conclusive and binding upon all parties hereto, and judgment upon the award may be entered in any court of competent jurisdiction. Notwithstanding anything to the contrary contained herein, each Party hereto shall have the right in a proper case to obtain temporary restraining orders and temporary or preliminary injunctive relief from a court of competent jurisdiction, provided, however, that the Parties agree to contemporaneously submit their dispute for arbitration on the merits as provided herein. Both Parties shall share the cost of the dispute resolution process equally; however, personal attorneys and witnesses or specialists are the direct responsibility of each Party, and their fees and expenses shall be the responsibility of the individual Parties.

Article 27.0 - PRESENCE ON AURA PREMISES

- 27.1 The Contractor agrees that all persons working for or on behalf of the Contractor whose duties bring them upon AURA's premises shall obey the rules and regulations that are established by AURA and shall comply with the reasonable directions of AURA's officers.
- 27.2 The Contractor shall be responsible for the acts of its employees, subcontractor(s), or agents while on AURA's premises. Accordingly, the Contractor agrees to take all necessary measures to prevent injury and loss to persons or property located on AURA's premises. The Contractor shall be responsible for all damages to persons or property caused by the Contractor, its subcontractors, or any of its agents or employees. The Contractor shall promptly repair, to the specifications of AURA, any damage that it, its subcontractor(s), or its employees or agents may cause to AURA's premises or equipment. If the Contractor fails to repair such damage, AURA may repair or have repaired the damage, and the Contractor shall reimburse AURA promptly for the cost of the repair. Alternatively, AURA may deduct the cost of the repair from any amounts owed to Contractor under this Agreement and seek reimbursement for any unpaid amount of the cost of repair fromContractor.
- 27.3 Contractor must comply with Safety Regulations as promulgated by the Occupational Safety and Health Act of 1970 as amended.
- 27.4 The Contractor agrees that, in the event of an accident of any kind, Contractor will immediately notify the Technical Representative designated herein and thereafter furnish a full written report of such accident.
- 27.5 The Contractor shall perform the services described in this Agreement without interfering with the activities of AURA, which will be coordinated with AURA.

Article 28.0 - USE OF AURA'S FACILITIES

The Contractor, its employees, subcontractors, or agents shall have the right to use only those facilities of AURA that are necessary to perform services under this Agreement and shall have no right of access to any other facilities of AURA.

Article 29.0 - AURA REPRESENTATIVE PLACED AT CONTRACTOR'S FACILITY

From time to time, the Technical Representative may choose to have an AURA representative placed at the facility where Contractor is performing the Work. Contractor will provide this representative with an office or cubicle, desk, telephone, and internet or email access, and will allow the AURA representative to attend all meetings and discussions regarding the Work.

Article 30.0 - GENERAL ACCESS BY AURA

Contractor will grant AURA personnel access at reasonable times to all places where the Work is being performed, including access to locations where subcontractors are performing any part of the Work, provided that access will be subject to site access rules. Contractor shall allow AURA to attend all meetings and teleconferences regarding the Work, both internal and with subcontractors. Contractor will promptly provide AURA copies of any materials (documents, drawings, models, source code, etc.) prepared in the course of the Work (whether by Contractor or subcontractor) at any time upon request by the Technical Representative, even if the materials are not part of the Contract Deliverables.

Article 31.0 - RISK OF LOSS

Contractor and its subcontractors shall have and bear the risk of loss of materials and equipment left or stored on AURA's premises. Contractor and its subcontractors shall properly insure such materials and equipment against loss, damage, or destruction or other casualty.

AURA shall not be responsible for loss, damage, or destruction of said materials and equipment while such materials are on AURA's premises. AURA will be responsible for loss, damage, or destruction of said materials and equipment after installation.

Article 32.0 - OSHA AND MSDS SHEETS

All equipment and materials used in the performance of this agreement must conform to the standards required by the William-Steiger Occupational Safety and Health Act of 1970. Proposers must furnish Material Safety Data Sheets (MSDS) for any regulated chemicals, equipment, or hazardous materials at the time of delivery.

Article 33.0 - GOVERNMENT PROPERTY

If AURA provides Contractor with any equipment or materials or finances their purchase, Contractor shall make sure that they are all marked as "U.S. Government Property," shall attach tracking labels if supplied by AURA, shall track their locations at all times, and shall maintain the same in good condition. Contractor shall return this property to AURA upon demand or at the conclusion of the work, whichever comes first

U.S. STATUTORY REOUIREMENTS

Article 34.0 - EQUAL EMPLOYMENT OPPORTUNITY

Contractor shall comply with Executive Order 11246, "Equal Employment Opportunity," as amended by E.O. 11375, "Amending Executive Order 11246 Relating to Equal Employment Opportunity," and as supplemented by regulations at 41 CFR part 60, "Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor."

Article 35.0 - DEBARMENT

No part of the work shall be subcontracted to Parties listed on the General Services Administration's List of Parties Excluded from Federal Procurement or Non-Procurement Programs in accordance with E.O.s 12549 and 12689, "Debarment and Suspension." By signing this contract or performing this purchase order contractor certifies that neither it nor any of its principle employees is on this debarred list. Contractor shall require a similar certification from all firms awarded subcontracts over \$25,000.

Article 36.0 - ASSIGNMENT/SUBCONTRACTING

AURA may assign its rights under this agreement to either the National Science Foundation or to an organization succeeding it as the operator of the National Solar Observatory. Contractor shall not assign or delegate its rights/responsibilities under this agreement without prior written permission from AURA, and any assignment without such permission shall be void. Any assignment with AURA's permission shall not relieve contractor of responsibility for successful performance of the work. Contractor may not subcontract any portion of the work, not including purchases of commercially available items, without prior written permission from AURA.

Article 37.0 - CLEAN AIR AND WATER ACTS

Contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401 et seq.) and the Federal Water Pollution Control Act as amended (33 U.S.C. 1251 et seq.). Violations shall be reported to the Federal awarding agency and the Regional Office of the Environmental Protection Agency (EPA).

Article 38.0 - BYRD ANTI-LOBBYING AMENDMENT

By signing this contract Contractor certifies that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of AURA, any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining this contract or any Federal contract, grant or any other award covered by 31 U.S.C. 1352. Each tier shall also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to

tier, up to AURA.

Article 39.0 - COPELAND ANTI-KICKBACK ACT

Contractors and subcontractors on public building or public work financed in whole or in Part by Loans or Grants from the United States in excess of \$2,000.00 shall comply 18 USC 874. The Act provides that each contractor or sub-recipient shall be prohibited from inducing, by any means, any person employed in the construction, completion, or repair of public work, to give up any part of the compensation to which he is otherwise entitled. AURA shall report all suspected or reported violations to the Federal awarding agency.

Article 40.0 - CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

In performing the work Contractor shall comply with Sections 102 and 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 327-333), as supplemented by Department of Labor regulations (29 CFR part 5). Under Section 102 of the Act, each contractor shall be required to compute the wages of every mechanic and laborer on the basis of a standard work week of 40 hours. Work in excess of the standard work week is permissible provided that the worker is compensated at a rate of not less than 1½ times the basic rate of pay for all hours worked in excess of 40 hours in the work week. Section 107 of the Act is applicable to construction work and provides that no laborer or mechanic shall be required to work in surroundings or under working conditions which are unsanitary, hazardous or dangerous.

Article 41.0 - NONDISCRIMINATION

- 41.1 This agreement is subject to the provisions of Title VI of the Civil Rights Act of 1964 (42 U.S.C. 2000d), the regulations issued pursuant thereto by NSF (45 CFR 611), and the Assurance of Compliance which the Contractor has filed with NSF. No person on the basis of race, color, national origin, or handicap shall be excluded from participation in, be denied benefits of, or otherwise be subjected to discrimination under this agreement. In addition, if the project involves an education activity or program, as defined by Title IX of the Education Amendments of 1972 (20 U.S.C. 1681-1686), no person on the basis of sex shall be excluded from participation in the project.
- 41.2 By signing this agreement, Contractor certifies that it has filed an Assurance of Compliance with Title VI of the Civil Rights Act of 1964 document with either the NSF or U.S. Department of Health and Human Services, as is required under the NSF Grant General Conditions (GC-1). If Contractor has not filed such an Assurance of Compliance, please contact the AURA Contracts Officer for the required form.
- 41.3 Contractor certifies that during the term of this contract it will comply with Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. 794) and NSF's implementing regulations (45 CFR 605).
- 41.4 Contractor agrees to comply with the Age Discrimination Act of 1975 (42 U.S.C. 6101 et seq.) as implemented by the Department of Health and Human Service regulations at 45 CFR 90 and the regulations of NSF at 45 CFR 617.

Article 42.0 - DAVIS-BACON, as amended (40 U.S.C. 276a to a-7) (applicable to contracts for construction exceeding \$2,000.):

42.1 All purchase orders for construction shall comply with the provision titled "Davis-Bacon Act (40 U.S.C. 276A to a-7) and as supplemented by the Department of Labor regulations (29 CFR part 5, "Labor Standards Provisions Applicable to Contracts Governing Federally Financed and Assisted Construction"). Under this Act, the contract shall be required to pay wages to labor and mechanics at a rate not less than the minimum wages specified in a wage determination made by the Secretary of Labor. In addition, Seller shall be required to pay wages not less than once a week. The Seller shall place a copy of the current prevailing wage determination issued by the Department of Labor in each solicitation and the award of a subcontract or purchase order shall be conditioned upon the acceptance of the wage determination. The Seller shall report all suspected or reported violations to AURA.

Article 43.0 -STATUTORY AND ADMINISTRATIVE REQUIREMENTS

- 43.1 By signing this Contract, the Contractor certifies that it will comply with all applicable clauses from the Cooperative Agreement (CA) AST 0946422, and Cooperative Agreement Financial & Administrative Terms and Conditions (CA-FATC) Effective November 12, 2020 as incorporated herein.
- 432 The Contractor shall ensure that the applicable clauses of AST 0946422, and CA-FATC's, are appropriately addressed and flow down to all subcontractors.
- 433 In the event that AURA determines that the Contractor has failed to comply with any applicable provision, the Contractor will receive notice of the non-compliance and have thirty (30) days from the receipt of such notice to cure the non-compliance and provide AURA with evidence of compliance.

Article 44.0 - APPLICABLE LAW

- 44.1 This Agreement shall be governed, interpreted, and construed in accordance with the laws of the Arizona without regard to its conflict of law rules.
- 44.2The work performed by the Contractor must comply with federal law and any other laws and/or ordinances that may be applicable to the work to be performed.

IN WITNESS WHEREOF, this Contract is executed by the parties hereto as of the date first written above.

For ASSOCIATION OF UNIVERSITIES FOR RESEARCH IN ASTRONOMY, INC.

By:	Date
For CONTRACTOR	
By:	Date:

ATTACHMENT A: STATEMENT OF WORK