



**LASER INTERFEROMETER GRAVITATIONAL WAVE OBSERVATORY (LIGO) COMMERCIAL ITEMS
OR SERVICES CONTRACT**

GENERAL PROVISIONS CALIFORNIA INSTITUTE OF TECHNOLOGY "INSTITUTE"

GENERAL PROVISION TITLE

1. Offer and Contract
2. Time of Delivery
3. Improper Delivery
4. Assignment
5. Authority of Institute Representative and Required Notices
6. Changes
7. Force Majeure
8. Existing Commercial Computer Software – Licensing
9. Export Licenses
10. Disputes and Governing Law
11. Inspection and Acceptance
12. Insurance
13. Indemnification
14. New Material
15. Order of Precedence
16. Payment
17. Use of Name
18. Title and Risk of Loss
19. Government Title to Property Purchased or Fabricated with Contract Funds
20. Taxes
21. Termination
22. Warranty
23. Audit and Records
24. Site Visits
25. Nondiscrimination
26. Whistleblower Protection
27. Equal Employment Opportunity
28. Anti-Kickback Enforcement Act of 1986
29. Clean Air Water
30. Debarment and Suspension
31. Byrd Anti-Lobbying Amendment
32. Copeland "Anti-Kickback" Act
33. Davis Bacon Act
34. Surety Bonds
35. Rights to Inventions
36. Patent Rights - Bayh-Dole Act
37. Stop Work
38. Copyrightable Work
39. Participant Support Costs
40. Contract Assignment
41. Travel
42. Telecommunications or Surveillance Equipment Systems or Service
43. Digital Accessibility Requirements

APPLICABILITY OF INDIVIDUAL GENERAL PROVISIONS

APPLICABLE TO ALL TRANSACTIONS IN THE UNITED STATES

The term United States includes the several States of the United States, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, American Samoa, Guam, Wake Island, the Canal Zone, and all other territories and possessions of the United States, and the term States includes any one of the forgoing.

- | | |
|--|---|
| 1. Offer and Contract | 17. Use of Name |
| 2. Time of Delivery | 18. Title and Risk of Loss |
| 3. Improper Delivery | 19. Government Title to Property Purchased or Fabricated with Contact Funds |
| 4. Assignment | 20. Taxes |
| 5. Authority of Institute Representatives and Required Notices | 21. Termination |
| 6. Change | 22. Warranty |
| 7. Force Majeure | 23. Audit and Records |
| 8. Existing Commercial Computer Software-Licensing | 24. Site Visits |
| 10. Disputes and Governing Law | 25. Nondiscrimination |
| 11. Inspection and Acceptance | 26. Whistleblower Protection |
| 13. Indemnification | 27. Equal Employment Opportunity |
| 14. New Material | 29. Clean Air and Water |
| 15. Order of Precedence | 37. Stop Work |
| 16. Payment | 40. Contract Assignment |

TAXES

20. The applicability of State sales tax is addressed on the face of the Purchase Order
[For imports] Value Added Tax (VAT) is addressed on the face of the Purchase Order

APPLICABLE IN SPECIAL CIRCUMSTANCES ACCORDING TO THEIR TERMS

- 9. **[For exports]** Export Licenses
- 12. **[Suppliers Working on Site]** Insurance
- 28. **[For Contracts in excess of \$100,000]** Anti-Kickback Enforcement Act of 1986
- 30. **[For Contracts in excess of \$25,000]** Debarment and Suspension
- 31. **[For Contracts of \$100,000 or More]** Byrd Anti-Lobbying Amendment
- 32. **[For designated Construction/Repair Contracts in excess of \$2,000]** Copeland “Anti-Kickback” Act
- 33. **[For designated Construction/Repair Contracts in excess of \$2,000]** Davis-Bacon Act
- 34. **[For designated Construction/Repair Contracts in excess of \$500,000]** Surety Bonds
- 35. **[For designated Experimental, Development or Research Work]** Rights to Inventions
- 36. **[For designated Experimental, Development or Research Work]** Patent Rights - Bayh-Dole Act
- 38. **[For designated Experimental, Development or Research Work]** Copyrightable Work
- 39. **[For Contracts Associated with Travel and Conference Activity]** Participant Support Costs
- 41. **[For Contracts Associated with Travel]** Travel
- 42. **[For Contracts Associated with Telecommunications]** Telecommunications or Surveillance Equipment Systems or Service
- 43. **[For Contracts Associated with Digital Goods and/or Services]** Digital Accessibility Requirements

APPLICABLE TO ALL TRANSACTIONS IN THE UNITED STATES

These provisions **do not apply to foreign suppliers** performing outside the United States.

- | | |
|------------------------------|----------------------------------|
| 25. Nondiscrimination | 27. Equal Employment Opportunity |
| 26. Whistleblower Protection | 29. Clean Air and Water |

This agreement is a subcontract pursuant to a National Science Foundation (NSF) Cooperative Agreement (CA) between the NSF and Caltech hereafter identified as Caltech, [PHY-2309200 \(LIGO Operations CY24-28\)](#).

1. **OFFER AND CONTRACT** - The following terms, with such terms, plans, specifications or other documents as attached or incorporated by reference on the face of this purchase order (“Order”), constitute the offer of Caltech to the Supplier and shall, when accepted, constitute the entire agreement (“Contract”) between Caltech and Supplier. Caltech gives notice of its objection to any different or additional terms. This Contract is valid only as written. If any proposal is incorporated by reference into the Contract only the technical specification aspects of it are incorporated and not any terms and conditions. If price, terms, shipping date or other expressed condition of this contract are not acceptable. Caltech must be notified and any variation must be accepted in writing prior to shipment or delivery. This contract shall be deemed to have been accepted (a) absent written notification of non-acceptance by the Supplier within a reasonable time, or (b) upon timely delivery of the products identified to the shipping address specified on the face of the Order.

Supplier will provide the goods and services to be furnished under the Contract (“Services”) as an independent contractor and furnish all equipment, personnel and material sufficient to provide the Services expeditiously and efficiently. Supplier will devote only its best-qualified personnel to work under the contract. Should Caltech inform Supplier that anyone providing the Services is not working to this standard, Supplier will immediately remove such personnel from providing Services and he or she will not again, without Caltech’s written permission, be assigned to provide Services. At no time will Supplier or Supplier’s employees, sub-suppliers, subcontractors, agents, or assigns be considered employees of Caltech for any purpose, including but not limited to workers’ compensation provisions.

2. **DELIVERY** – If delivery dates cannot be met, Supplier shall notify Caltech immediately. Such notification shall not, however, constitute a change to the terms of this Contract except as the Order may be modified in writing by Caltech.
3. **IMPROPER DELIVERY** – In addition to other remedies provided by law, Caltech reserves the right to refuse any goods or services and to cancel all or any part of this Contract if Supplier fails to deliver all or any part of the goods or services under this Contract. Acceptance of any part of this Order shall not bind Caltech to accept any future shipments nor deprive it of the right to return goods already accepted.
4. **ASSIGNMENT** - The Supplier shall have no right to assign this Contract or any benefits from this Contract without prior written consent of Caltech.
5. **AUTHORITY OF INSTITUTE REPRESENTATIVES AND REQUIRED NOTICES; FACSIMILE AND ELECTRONIC SIGNATURES ACCEPTABLE** - (a) No order, notice, release of liability or direction received by the Supplier shall be binding, unless issued or ratified in writing by Caltech Purchasing Agent, the Director of Procurement Services, or by representatives designated in writing by either of them. (b) Facsimile (fax) or electronic signature copies of contract documents are just as binding as originally executed documents.
6. **CHANGES** - Caltech may, by a written order to the Supplier, make changes within the general scope of this Contract in: (a) drawings, designs, or specifications; (b) method of shipment or packing; and (c) place of delivery. If any such change causes an increase or decrease in the cost of, or the time required

for, the performance of any part of the work under this Order, an equitable adjustment shall be made in the price or delivery schedule or both, and the Order shall be modified in writing accordingly. Any claim by Supplier for adjustment under this Article must be asserted within thirty (30) days from receipt by Supplier of the notification of change; provided, however, that Caltech, if it decides that the facts justify such action, may receive and act upon any such claim asserted prior to final payment. Nothing in this clause shall excuse Supplier from proceeding with this Order as changed.

7. FORCE MAJEURE - Neither party shall be liable for damages arising out of failure to perform or delay in performance caused by strikes, lockouts, fires, war, or acts of God. In such instances, the parties shall make all commercially reasonable efforts to mitigate their failure of or delay in performance. The parties shall notify the other in writing as soon as possible after upon knowledge of such failure or delay.

8. EXISTING COMMERCIAL COMPUTER SOFTWARE – LICENSING (This Article is applicable to the acquisition of any existing commercial computer software under this Contract, including Commercial-off-the shelf (COTS) software. This Article does not apply to the development of software.)

(a) If the Supplier proposes its standard commercial software license, only those applicable portions that comply with the provisions of this Contract are incorporated into and made a part of this Contract.

(b) If the Supplier does not propose its standard commercial software license until after this Contract has been issued, or at or after the time the computer software is delivered, such license shall nevertheless be deemed incorporated into and made a part of this Contract under the same terms and conditions as in paragraph (a) above. To receive updates, correction notices, consultation, and similar activities on the computer software, any authorized user may acknowledge receipt of a registration form or card and return it directly to the Supplier; however, such signing shall not add to or alter any of the terms and conditions of this Contract regardless of any notations on the form or card to that effect.

(c) If the specified computer software is shipped or delivered to the Caltech, the Supplier agrees that it has unconditionally accepted the terms and conditions set forth in this Article, and that the terms of this Contract (including the incorporated license) constitute the entire agreement between the parties concerning rights in the computer software.

(d) The computer software may be: (1) Used, or copied for use, in or with any computer owned or leased by, or for Caltech. Any restrictions on use of the software or distribution of the software to multiple such computers shall be void unless explicitly agreed to by Caltech. (2) Reproduced for safekeeping (archives) or backup purposes; (3) Modified, adapted, or combined with other computer software, provided that the modified, combined, or adapted portions of the derivative software incorporating restricted computer software shall be subject to the same restricted rights; and (4) Disclosed and reproduced for use by Caltech designees under this Article.

(e) The software may be used by Caltech in support and furtherance of Caltech's obligations to the US Government or other funding organization.

(f) Supplier warrants that it has the right to sell, license, or transfer the license for the software furnished to Caltech under this Contract.

9. EXPORT COMPLIANCE – (a) LICENSES. The Supplier shall comply with all U.S. export control laws and regulations, including the International Traffic in Arms Regulations (ITAR), 22 CFR Parts 120 through

130, and the Export Administration Regulations (EAR), 15 CFR Parts 730 through 799. Absent license exemptions/exceptions, the Supplier shall obtain the appropriate licenses or other approvals, if required, for exports of hardware, technical data, and software, or for the provision of technical assistance. (b) IDENTIFICATION OF EXPORT CONTROLLED ITEMS. The Supplier shall notify Caltech in writing prior to delivery if it will provide any items under this Contract controlled under ITAR (i.e., hardware, software, technology, components, accessories, etc.). Any such item(s) or its packaging shall be properly marked to alert Caltech of the ITAR restrictions upon delivery to Caltech.

10. DISPUTES AND GOVERNING LAW - (a) Any dispute or claim arising out of, in connection with, or relating to this Contract shall be submitted for resolution to ascending levels of management of the parties. If the dispute cannot be resolved after such negotiations, either party may pursue any appropriate legal recourse not inconsistent with the provisions of this Contract. (b) Pending any decision, judgement or settlement of any dispute, Supplier agrees to proceed diligently with performing the Contract. (c) This Contract and any document to which it is appended shall be construed and enforced in accordance with the laws of the State of California. Disputes will be adjudicated in Los Angeles, California. Each party shall be responsible for paying its own attorney's fees.

11. INSPECTION AND ACCEPTANCE - Caltech may inspect the work and activities of the Supplier under this Contract in a reasonable and appropriate manner. Final inspection shall be at Caltech's premises unless otherwise agreed in writing. Items rejected as not conforming to this Order shall be, at Caltech's option, returned at Supplier's expense, including transportation and handling fees, or corrected or replaced by Supplier. Unless the Supplier removes, corrects, or replaces the goods or services within the delivery schedule, Caltech may require its delivery and make an equitable price reduction. Caltech may also choose a refund of the amount paid under this Contract.

12. INSURANCE - (This Article is applicable when the Supplier will be entering Institute-controlled premises.)

(a) The Supplier shall purchase from and maintain in a company and admitted in the State of California and maintaining during the policy term a minimum A.M. Best Rating Requirement of at least A-XIII or better, such insurance as will protect the Supplier from claims set forth below which may arise out of or result from the Supplier's operations under the Contract and for which the Supplier may be legally liable, or by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable. All policies for such insurance shall include, in addition to the Supplier's interest, the respective interests of Caltech by naming them as additional insured by way of endorsement under all coverages described below except Workers' Compensation and Employer's Liability. Such additional insured shall not be obligated to pay any amounts including, but not limited to, deductibles, self-insured retentions, co-pays and the like. The Supplier required policies and provisions are:

(1) Workers' Compensation and Employer's Liability Insurance (WC 00 00 00 C or its equivalent) providing coverage for the Supplier as required by applicable Federal and State workers' compensation and occupational disease statutes where the Work is performed and Employer's Liability insurance on an "occurrence" basis with an aggregate policy limit of not less than: Bodily Injury by Accident, One Million Dollars (\$1,000,000) each accident; Bodily Injury by Disease, One Million Dollars (\$1,000,000) each employee; Bodily Injury by Disease, One Million Dollars

(\$1,000,000) annual aggregate. The workers compensation policy shall include a waiver of subrogation in favor of Caltech.

(2) Commercial General Liability Insurance (CG 0001 04 13 or its equivalent) including coverage for products, completed operations, premises liability, personal and advertising injury, liquor liability when alcohol is being served, and contractual liability, with limits not less than One Million Dollars (\$1,000,000) per occurrence and Two Million Dollars (\$2,000,000) aggregate for all deaths, bodily injury, sickness or disease, and property damage arising per occurrence and Two Million Dollars (\$2,000,000) aggregate for all deaths, bodily injury, sickness or disease, and property damage for any incident which occurs during the policy period, regardless of when the claim is filed.

(3) Commercial Automobile Liability Insurance (CA 00 01 10 13 or its equivalent) covering all hired, owned and non-owned vehicles used by or on behalf of the Supplier with combined single limits of Two Million Dollars (\$2,000,000) per accident.

(4) For Professional Service Providers, they shall maintain Errors and Omissions Insurance, including coverage for personal injury, death, property damage, and contractual liability for a combined coverage limit of not less than Two Million Dollars (\$2,000,000) for each occurrence (Five Million Dollars (\$5,000,000) in the aggregate.) Said insurance shall be maintained for the statutory period during which the professional may be exposed to liability. Supplier shall require that the aforementioned professional liability insurance coverage language also be incorporated into its contract with any other entity with which it contracts for professional services.

(b) Insurance Certificates and Endorsements. Without prejudice to Supplier's liability to indemnify Caltech as stated in the Indemnification provision, before commencing work under this Contract, the Supplier shall, at its own expense, furnish (i) certificates of insurance for the coverages specified in paragraph (a) above, and (ii) an additional insured endorsement naming Caltech, its employees, officers and directors as additional insureds to the Contract for the coverage specified above in (a)(2) and (a)(3), and (a)(4), including waiver of subrogation. Such certificates and the endorsement shall provide that any cancellation or material change shall not be effective during the Contract. Such certificates and the endorsement shall (i) cover contractual liability assumed under this Contract, and (ii) be primary and non-contributing to any insurance procured by Caltech. The Supplier agrees to permit Caltech to examine its original policies.

13. INDEMNIFICATION - (a) Supplier agrees to indemnify and to hold Caltech, its trustees, agents, officers, employees, and students, harmless against all costs, claims, liability, loss, damage, and expenses including attorney's fees, arising from or due to any actual or claimed trademark, patent, or copyright infringement, and any litigation based thereon, regarding any part of the goods and work covered by this purchase order. Supplier shall defend any such litigation brought against Caltech, provided that Caltech notifies Supplier promptly of any such suit. Caltech retains the right to participate in the defense against any such claim or action, and the right to consent to any settlement, which consent will not be unreasonably withheld. Supplier's obligations shall survive acceptance of the goods and payment by Caltech.

(b) Supplier agrees it will be responsible to Caltech for, and will indemnify, immediately defend, and hold harmless Caltech, its trustees, agents, officers, employees, and students, from any loss, cost, damage, expense or liability, including attorney's fees, or any suit therefore, by reason of actual or alleged claims of any kind, including but not limited to, property damage or personal injury of whatever

kind of character relating to the performance of the work by the Supplier or its lower-tier subcontractors, however caused, including any resulting from any alleged or actual negligent act or omission, regardless of whether such act or omission is active or passive, but excepting only a duty to indemnify to the extent such loss, cost damage, expense or liability is:

- (1) Under any construction contract, attributable to the active negligence or willful misconduct of Caltech, its trustees, agents, officers, or employees; or
- (2) Under any other contract for either goods or services, attributable to the sole negligence or willful misconduct of Caltech, its trustees, agents, officers, or employees.

Caltech retains the right to participate in the defense against any such claim or action, and the right to consent to any settlement, which consent will not unreasonably be withheld. Supplier's obligations shall survive acceptance of the goods and payment by Caltech.

14. NEW MATERIAL - Unless this Contract specifies otherwise, the Supplier represents that the supplies are new. If the Supplier believes that furnishing other than new material will be in Caltech's interest, the Supplier shall so notify the Purchasing Agent in writing and request authority to use such material.

15. ORDER OF PRECEDENCE - To the extent there is inconsistency among any documents relating to this Order, the inconsistency will be resolved in the following order of priority:

- (a) The details specified on the Caltech Order;
- (b) The General Provisions;
- (c) Any other documents the parties agree to incorporate by reference.

16. PAYMENT - (a) An invoice shall be submitted to the attention of Caltech's Accounts Payable Department, unless otherwise specified, and shall contain this information:

- (1) Contract number,
- (2) Item number,
- (3) Description of supplies or services,
- (4) Size,
- (5) Quantity,
- (6) Unit price,
- (7) Extended totals and
- (8) Any other information which may be specified on the face of this Contract. Any state sales or use taxes or Federal excise taxes shall be shown separately on the invoice.

(b) Caltech shall pay the Supplier, upon the submission of proper invoices, the prices stipulated in this Contract for supplies delivered and accepted, or services rendered and accepted, less any deductions provided in this Contract.

(c) Caltech shall make its best effort to make payments within the net period specified in the Contract, measured from the date of receipt of the goods or services at the destination or the date of receipt of the invoice, whichever is later. Discount time periods will be measured from the same date. Payment shall be deemed to have been made on the date the check is delivered or on the date on which an

electronic funds transfer was made. Caltech will not be liable for or pay a surcharge, interest, or any penalty because of Caltech's payment not being made within the net period, specified in the Contract or the date of payment by electronic funds transfer.

(d) Payment for goods or services under this paragraph will not waive or otherwise affect the right of Caltech to inspect such goods or services or to reject, or revoke acceptance of, nonconforming goods.

(e) Overpayments. If the Supplier becomes aware that Caltech has overpaid on an invoice payment, the Supplier shall:

(1) Remit the overpayment along with a description of the overpayment to Caltech's Accounts Payable Department including the:

- (i) Circumstances of the overpayment (e.g., duplicate payment, erroneous payment, liquidation errors, date(s) of overpayment);
- (ii) Affected contract number and delivery order number, if applicable;
- (iii) Affected contract line item or subline item, if applicable; and
- (iv) Supplier point of contact.

(2) Provide a copy of the remittance and supporting documentation to Caltech Purchasing Agent.

17. USE OF NAME – Supplier agrees not to use the name, logos or trademarks of Caltech or any member of its staff or any sponsor in sales promotional work or advertising, or in any form of publicity, without the prior written permission of Caltech.

18. TITLE AND RISK OF LOSS - (a) Unless otherwise provided in Section 19 or elsewhere in this Contract, title to tangible property (property of any kind except intangible property and debt instruments) furnished under this Contract shall pass to Caltech upon formal acceptance by Caltech, regardless of when or where Caltech takes physical possession, unless the Contract specifically provides for earlier passage of title.

(b) Risk of loss shall not pass to Caltech until the tangible property called for in this Contract has been actually received and accepted by Caltech at the destination specified. Supplier assumes all responsibility for packing, crating, marking, transportation, and liability for loss or damage in transit, notwithstanding any agreement by Caltech to pay freight, express, or other transportation charges. Supplier agrees to trace lost or delayed shipments at the request of Caltech.

19. GOVERNMENT TITLE TO PROPERTY PURCHASED OR FABRICATED WITH CONTRACT FUNDS - Title to tangible property shall vest in the Government upon acquisition when the tangible property is intended to be installed at, incorporated into, built, or necessary for the construction or operation of either the Hanford or Livingston Observatories. All Government property acquired in accordance with this Section 19 shall be subject to the requirements set forth below:

1. Title.

(a) Tangible Property means property of any kind except intangible property and debt instruments. Title to all tangible property procured with funds provided through this Contract, and subject to this Section 19, shall vest in the Government as follows:

(1) If this Contract contains a provision directing the Supplier to purchase material which the Government will reimburse as a direct item of cost under Caltech's primary Award, title to

property shall pass to and vest in the Government upon delivery of such property to the Government, to Caltech, to the Supplier, to any subcontractor, or to any agent of the Government, of the Supplier, or of any subcontractor; and

(2) Title to all other property shall pass to and vest in the Government upon the earliest to occur of the following:

- (i) Issuance of the property for use in contract performance pursuant to this Contract;
- (ii) Commencement of processing of the property or its use in contract performance pursuant to this Contract; or
- (iii) Reimbursement of the cost of the property by Caltech on behalf of the Government.

2. Legal title to all tangible property furnished by the NSF or acquired from other Government agencies shall remain with the Government, unless otherwise specified in this Contract.
3. Title to Government property shall not be affected by the incorporation or attachment thereof to any property not owned by the Government, nor shall any Government property lose its identity by reason of affixation to any reality.
4. All subcontracts issued or awarded with respect to the performance of this Contract shall include provisions regarding the determination of title to tangible property acquired by the subcontractor in accordance with Sections 18 and 19.
5. Should Supplier purchase tangible property pursuant to this Contract and subject to this Section 19, Supplier shall be a limited agent of the NSF solely for the purpose of transferring and vesting title to such tangible property in the Federal Government. The agent shall be solely responsible for the payment of the purchase price of tangible property acquired, and the agent shall have no authority to bind or obligate Caltech, NSF, or the Federal Government for payment of the purchase price to any third party. Such agents shall be and shall remain liable for the risk of loss of, destruction of, or damage to tangible property acquired until such tangible property is transferred to the possession of the Government or acceptance by Caltech.

20. TAXES - (a) **Except as may be otherwise provided in this Order**, the contract price includes all applicable Federal, State, and local taxes and duties. Regarding transactions for which Caltech may be exempt from any tax or duty, Caltech will provide, upon request, evidence to support its claim to such exemption.

(b) Caltech will comply with all Federal and State income tax laws regarding withholding and year-end tax reporting.

(c) The Internal Revenue Service (IRS) requires Caltech to have on file a Taxpayer Identification Number (TIN) for every US person or US business that receives a payment, regardless if the payment is tax reportable or not. This information is on IRS Form W-9. US Citizens and Resident Aliens must complete a Form W-9 before receiving any payments from Caltech. A TIN can be: a Social Security Number (SSN), an Individual Taxpayer Identification Number (ITIN), or an Employer Identification Number (EIN). Failure to provide a TIN will result in delay of payment and/or backup withholding.

(d) Foreign businesses providing services in the US for Caltech must provide the appropriate IRS Form W-8 (i.e., Form W-8BEN, W-8ECI, or W-8IMY).

(e) Foreign individuals providing services in the US for Caltech must provide an IRS Form W-8BEN or IRS Form 8233 depending on the appropriate tax withholding treatment.

21. TERMINATION - (a) For Cause. Caltech may terminate this Contract, or any part of it, for cause if any default occurs by the Supplier, or if the Supplier violates any Contract terms and conditions, or fails to provide Caltech, upon request, with adequate assurances of future performance. In the event of termination for cause, Caltech shall not be liable to the Supplier for any amount for supplies or services not accepted, and the Supplier shall be liable to Caltech for such damages as would give Caltech the benefit of the bargain, put Caltech in the same position that it would have been in if the Supplier had not breached the Contract, and any and all rights and remedies provided by law. If it is determined that Caltech improperly terminated this Contract for cause, such termination shall be deemed a termination for convenience.

(b) For Convenience. Caltech reserves the right to terminate this Contract, or any part, for its sole convenience. If such termination occurs, the Supplier shall immediately stop all work and shall immediately cause any and all of its subcontractors to cease work. Subject to the terms of this Contract, the Supplier shall be paid a percentage of the Contract price reflecting the percentage of the work performed prior to the notice of termination, plus reasonable charges the Supplier can demonstrate to the satisfaction of Caltech, using its standard record keeping system, have resulted from the termination. The Supplier shall not be paid for any work performed or costs incurred which reasonably could have been avoided.

(c) Survival. Upon expiration or termination of this Contract, the following provisions will survive: EXPORT COMPLIANCE; DISPUTE AND GOVERNING LAW; WARRANTIES; COPYRIGHTABLE WORK; INDEMNIFICATION; USE OF NAME; AND CONFIDENTIALITY.

22. WARRANTY - In addition to the warranties set forth in the Contract, Supplier makes the following warranties. Supplier acknowledges that failure to comply with any of the warranties in the Contract will constitute a material breach of the Contract and Caltech by mutual agreement will have the right to terminate the Contract without damage, penalty, cost, or further obligation.

(a) General Warranties. Supplier agrees that the Services furnished under the Contract will be covered by the most favorable warranties Supplier gives to any customer for the same or substantially similar services, or such other more favorable warranties as specified in the Contract. The rights and remedies so provided are in addition to and do not limit any rights afforded to Caltech by any other provision of the Contract. Supplier expressly warrants all goods and services delivered under this Contract to be free from defects in material and workmanship and to be of the quality, size, and dimensions ordered. This express warranty shall not be waived by reason of the acceptance of the goods or services or payment by Caltech. The Supplier shall provide Caltech with a copy of any standard warranty, which is normally offered on a commercial product deliverable under this Contract. The commercial product warranty shall be deemed to be incorporated by reference and Caltech shall be entitled to all rights under such warranty.

(b) Permits and Licenses. Supplier agrees to procure all necessary permits and licenses and abide by all applicable laws, regulations, and ordinances of the United States and of the state, territory, and political subdivision or any other country in which the Services are provided.

(c) Warranty and Use Right. Supplier warrants that Supplier has the right to use all intellectual property

that will be needed to provide Services.

- 23. AUDIT AND RECORDS** - Financial records, supporting documents, statistical records, and other records pertinent to this Contract shall be retained by the Supplier for a period of three years from acceptance by Caltech. Supplier agrees that Caltech, 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 Supplier, which are directly pertinent to this Contract, for the purpose of making audits, examinations, excerpts, and transcriptions.
- 24. SITE VISITS** - NSF, 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 NSF on the premises of Caltech or a subrecipient under a contract, Caltech shall provide and shall require its subrecipients to provide all reasonable facilities and assistance for the safety and convenience of the NSF 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.
- 25. NON-DISCRIMINATION** - a. The contract is subject to the provisions of Title VI of the Civil Rights Act of 1964 [42 USC §§ 2000d et seq.], Title IX of the Education Amendments of 1972 [20 USC §§ 1681 et seq.], the Rehabilitation Act of 1973 [29 USC § 794], the Age Discrimination Act of 1975 [42 USC §§ 6101 et seq], Equal Employment Opportunity [E.O. 11246], Limited English Proficiency (LEP) [E.O. 13166] and all regulations and policies issued by NSF 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, be denied the benefits of, or otherwise be subjected to discrimination under the contract.
- 26. WHISTLEBLOWER PROTECTION** - Suppliers are notified of the applicability of 41 USC § 4712, as amended by P.L. 112-239, providing protection for whistleblowers.
- 27. EQUAL EMPLOYMENT OPPORTUNITY** - This Contract is subject to the requirements of Executive Orders 11246 and 11375 and the rules and regulations of the Secretary of Labor (41 CFR Chapter 60) in promoting Equal Employment Opportunities.
- 28. ANTI-KICKBACK ENFORCEMENT ACT OF 1986** - This Contract is subject to the provisions of the Anti-Kickback Enforcement Act of 1986, Public Law 99-634 (41 U.S.C. 51-58). By accepting this Order, Supplier certifies that it has not paid kickbacks directly or indirectly to any Caltech employee to obtain this or any other Caltech Contract or to obtain favorable treatment in a Caltech matter.
- 29. CLEAN AIR AND WATER** - (Applicable only if the contract exceeds \$150,000, or a facility to be used has been the subject of a conviction under the Clean Air Act [42 USC § 7413(c)(1)] or the Clean Water Act [33 USC § 1319(c)] and is listed by the Environmental Protection Agency (EPA), or the contract is not otherwise exempt.)

The supplier agrees as follows:

- a. To comply with all the requirements of Section 114 of the Clean Air Act [42 USC § 7414] and Section 308 of the Clean Water Act [33 USC § 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 the issuance of the contract.

b. That no portion of the work required by the contract will be performed in a facility listed on the Environmental Protection Agency List of Violating Facilities on the date that the contract was issued 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 contract is being performed.

d. To insert the substance of the provisions of this article into any nonexempt subaward.

30. DEBARMENT AND SUSPENSION - (a) Supplier shall fully comply with the requirements stipulated in 2 CFR Part 180, as modified by 45 CFR 620.330 and shall ensure that any lower tier covered transaction, as described in 2 CFR 180.220 and modified by 45 CFR 620.200 and 620.220 includes a term or condition requiring compliance with these requirements. The Supplier acknowledges that failing to disclose the information required under 45 CFR § 620.335 may result in the termination of the Contract, or pursuance of other available remedies, including suspension and debarment. Supplier may access the System for Award Management (SAM) at <https://www.sam.gov/portal/SAM/##11>. (b) No contract at any tier shall be made to parties listed on SAM in accordance with E.O.s 12549 and 12689, "Debarment and Suspension." This list contains the names of parties debarred, suspended, or otherwise excluded by agencies, and contractors declared ineligible under statutory or regulatory authority other than E.O. 12549. Supplier, whose Contract exceeds the small purchase threshold, shall provide the required certification regarding its exclusion status and that of its principal employees.

31. [FOR CONTRACTS OF \$100,000 OR MORE] BYRD ANTI-LOBBYING AMENDMENT - Supplier warrants that Supplier has applied or bid on a Contract of \$100,000 or more and has filed the required certification. Each subcontracting tier must certify to the tier above 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 any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining 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 the recipient.

32. [FOR CONSTRUCTION/REPAIR CONTRACTS >\$2000] COPELAND "ANTI-KICKBACK" ACT (18 U.S.C. 874 AND 40 U.S.C. 276C) - Supplier shall comply with the Copeland "Anti-Kickback" Act (18 U.S.C. 874), as supplemented by Department of Labor regulations (29 CFR part 3, "Contractors and Subcontractors on Public Building or Public Work Financed in Whole or in Part by Loans or Grants from the United States").

33. [FOR CONSTRUCTION/REPAIR CONTRACTS >\$2000] DAVIS-BACON ACT, AS AMENDED (40 U.S.C. 276A TO A-7) - Supplier shall comply with the Davis-Bacon Act (40 U.S.C. 276a to a-7) and as supplemented by Department of Labor regulations (29 CFR part 5, "Labor Standards Provisions Applicable to Contracts Governing Federally Financed and Assisted Construction").

- 34. [FOR CONSTRUCTION/REPAIR CONTRACTS >\$500,000] SURETY BONDS** - If so directed, the Supplier shall furnish separate bid guarantees, performance and payment bonds to Caltech. Each bond shall set forth a penal sum in an amount not less than the Contract Price. Each bond furnished by the Supplier shall incorporate by reference the terms of this Contract as fully as though they were set forth verbatim in such bonds. In the event the Contract Price is adjusted by Change Order executed by the Contractor, the penal sum of both the performance bond and the payment bond shall be deemed increased by like amount. The performance and payment bonds furnished by the Supplier shall be in a form suitable to Caltech and shall be executed by a surety, or sureties, reasonably acceptable to Caltech.
- 35. [FOR DESIGNATED EXPERIMENTAL, DEVELOPMENT OR RESEARCH WORK] RIGHTS TO INVENTIONS** - For non- profit organizations and small business firms, patent rights shall be governed by 37 CFR part 401, titled "Rights to Inventions Made by Non-Profit Organizations and Small Business Firms under Government Grants, Contracts and Cooperative Agreements".
- 36. [FOR DESIGNATED EXPERIMENTAL, DEVELOPMENT OR RESEARCH WORK] PATENT RIGHTS** - Bayh-Dole Act [35 U.S.C. 200 et seq.]
- 37. STOP WORK** - (a) Caltech may, at any time, by written order to the Supplier, require the Supplier to stop all, or any part, of the work called for by this Contract for a period of 90 days after the order is delivered and for any further period to which the parties may agree. The order shall be specifically identified as a stop-work order issued under this clause. Upon receipt of the order, the Supplier shall immediately comply with its terms and take all reasonable steps to minimize the incurrence of costs allocable to the work covered by the order during the period of work stoppage. Within a period of 90 days after a stop-work order is delivered to the Supplier, or within any extension of that period to which the parties shall have agreed, Caltech shall either:
- (1) Cancel the stop-work order; or
 - (2) Terminate the work covered by the order as provided in the termination for cause or termination for convenience provisions of paragraph 21. Termination.
- (b) If a stop-work order issued under this clause is canceled or the period of the order or any extension thereof expires, the Supplier shall resume work. Caltech shall make an equitable adjustment in the delivery schedule or contract price, or both, and the Contract shall be modified, in writing, accordingly, if (1) The stop-work order results in an increase in the time required for, or in the Supplier's cost properly allocable to, the performance of any part of this contract; and (2) The Supplier asserts its right to the adjustment within 30 days after the end of the period of work stoppage; provided, that, if Caltech decides the facts justify the action, Caltech may receive and act upon a proposal submitted before final payment under this Contract. (c) If a stop-work order is not canceled and the work covered by the order is terminated for the convenience of Caltech, Caltech shall allow reasonable costs resulting from the stop-work order in arriving at the termination settlement. (d) If a stop-work order is not canceled and the work covered by the Order is terminated for default, Caltech shall allow, by equitable adjustment or otherwise, reasonable costs resulting from the stop-work order.
- The Supplier shall comply with all applicable laws, including those pertaining to customer records, privacy, OSHA, and discrimination.

- 38. COPYRIGHTABLE WORK** - Supplier assigns to Caltech the entire copyright, title and interest in copyrightable work generated in the performance of this Contract.
- 39. PARTICIPANT SUPPORT COSTS** - Participant support costs as defined in 2 CFR § 200.75 are direct costs for items such as stipends or subsistence allowances, travel allowances, and registration fees paid to or on behalf of participants (but not employees) in connection with NSF-sponsored conferences.
- 40. CONTRACT ASSIGNMENT** – NSF reserves the right to assign contracts to a third party should a successor to Caltech be selected.

Flow down of appropriate provisions of the applicable cooperative agreement Financial and Administrative Terms and Conditions (CA-FATCs), and any special conditions included in the agreement must be included in the contract(s).

41. 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 PAPPG Chapter II.C.2.g(iv)) who are in travel status on business related to an NSF-supported project are allowable as prescribed in the governing cost principles. Except as noted in paragraph b. below, the requirements for NSF prior written approval specified in 2 CFR § 200.474 are waived.

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 conditions outlined in 2 CFR § 474(c)(2). NSF prior written approval is required for travel costs for dependents and must be requested via use of NSF's electronic systems. NSF approval of such changes will be by an amendment to the Contract.

c. Use of US-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 US of persons or property, the expense of which will be assisted by NSF funding, must be performed by or under a code-sharing arrangement with a US-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 US flag air carrier's designator code and flight number.

2. For the purposes of this requirement, US-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, NSF 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 US being performed by a foreign-flag air carrier:

(a) a US-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 US-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 US flag air carrier.

d. Use of Foreign-Flag Air Carriers

There are certain 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 information on "open skies" agreements in which the United States has entered, please refer to the General Services Administration's (GSA) website at <http://www.gsa.gov/portal/content/103191>.

42. TELECOMMUNICATIONS OR SURVEILLANCE EQUIPMENT SYSTEMS OR SERVICE - Pursuant to section 889(a)(1)(A) & (B) of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Pub. L. 115-232), Supplier shall not provide nor cause Caltech to use any telecommunications or surveillance equipment, system, or service (or a component thereof) from Huawei Technologies Company, ZTE Corporation, Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, Dahua Technology Company (or any subsidiary or affiliate of such entities), or an entity owned, controlled by, or connected to The People's Republic of China, as determined by the Secretary of Defense. For additional information about Section 889, please see FAR Clause 52.204-25 (48 CFR 52.204-25).

43. DIGITAL ACCESSIBILITY REQUIREMENTS - As applicable to the good and/or services being provided under this Contract, Supplier warrants that (1) it complies with California and federal disability laws and regulations, including Title II of the American with Disabilities Act (ADA) and Section 504 of the Rehabilitation Act of 1973; and (2) the goods and/or services will conform to the accessibility requirements of WCAG 2.1 (minimum Level AA conformance), or its current version. Supplier agrees to, and will be responsible for, promptly resolving and remediating any complaint regarding accessibility of its goods and/or services.